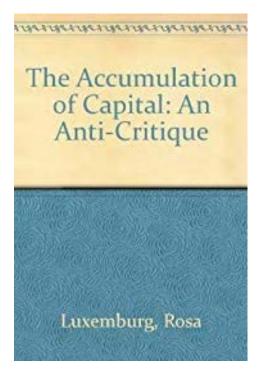
The Accumulation of Capital - An Anti-critique

The Accumulation of Capital, or What the Epigones Have Made of Marx's Theory

BY
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THE QUESTIONS AT ISSUE

Habent sua fata libelli - books have their fates. When I wrote my Accumulation a thought depressed me from time to time: all followers of Marxist doctrine would declare that the things I was trying to show and carefully substantiate were self-evident. Nobody would voice a different opinion; my solution of the problem would be the only possible one imaginable. It turned out very differently: a number of critics in the Social Democratic press declared that the book was totally misguided to start with and that such a problem calling for solution did not exist at all. I had become the pitiful victim of a pure misunderstanding. There were events connected with the publication of my book which must be called rather unusual. The 'review' of the Accumulation which appeared in Vorwärts* of 16 February 1913 was striking in tone and content even to the less involved reader; and all the more astonishing since the criticized book is purely theoretical and strictly objective, and directed against no living Marxist. Not enough. Against those who had published a positive review of the book a high-handed action was taken by the central organ. A quite unique and somehow funny event - a purely theoretical study on an abstract scientific problem was censured by the entire staff of a political daily paper (of whom probably two at the most may have read the book). They did this by denying to men like Franz Mehring† and J. Karski‡ any expert knowledge of

[* Vorwärts was the central daily newspaper of the Social Democratic Party of Germany, SPD, published in Berlin.]

[† Franz Mehring (1846-1919). Biographer of Karl Marx and close collaborator of Rosa Luxemburg in her anti-war propaganda, 1914-18. Joined the SPD at the age of forty-six and was a brilliant contributor to its newspapers and journals. With Luxemburg and Liebknecht, he helped to found the Spartakus League in 1919 which was the immediate forerunner of the KPD (Communist Party of Germany).]

[‡ J. Karski, pseudonym for Julian Marchlewski. He was one of the leaders of the SDKP (Social Democracy of the Kingdom of Poland). Karski worked for many years in Germany as an SPD journalist. In 1919 he went to Russia and became an active member of the Bolshevik party. Died in 1925.]

economics, but allowed only those who pulled my book to pieces to be 'experts'. Such a fate has happened to no other party publication as far as I know and over the decades Social Democratic publishers have certainly not produced all gold and pearls. All these events clearly indicate that there have been other passions touched on, one way or another, than 'pure science'. But to judge that properly one has first to know at least the main points of the material in question.

What is this so vehemently opposed book about?

To the reading public some external accessories like frequently used mathematical formulae seem to be a great deterrent. In the criticism of my book these formulae are especially the focus. Some of the esteemed critics have undertaken to teach me a lesson by constructing new and even more complicated formulae. The sheer sight of them brings quiet horror to the ordinary mortal. We shall see that my critics' preference for the formulae is not a matter of chance, but linked very closely to their points of view on the subject. Yet the problem of accumulation is itself purely economic and social; it does not have anything to do with mathematical formulae and one can demonstrate and comprehend it without them. Marx uses constructed mathematical models in the section on reproduction of the gross social capital in his Capital, so did Quesnay, the founder of the physiocratic school of economics* as an exact science a hundred years before. But that was simply to help in explaining and clarifying their theories. It also assisted Marx as well as Quesnay to illustrate that the economic processes of bourgeois society are as much determined by strict laws as the processes of physical nature, in spite of superficial confusion and the apparent rule of individual caprice. My writings are partly based on Marx, partly critical of him - especially where he does not go any further into the question of accumulation than to devise a few models and suggest an analysis. This is where my critique begins, and so I must naturally use Marx's formulae with Marx's models. I could not arbitrarily omit them and I wanted especially to show the insufficiency of his line of argument.

[* Physiocrats. Eighteenth-century school of economists. The main strand in their theories was that only agricultural labour was productive. For elaboration and criticism see Karl Marx, *Theories of Surplus Value*, pt 1 (Moscow).]

Let us now try to understand the problem in its simplest form: the capitalist form of production is governed by the profit motive. Production only makes sense to the capitalist if it fills his pockets with 'pure income', i.e. with profit that remains after all his investments; but the basic law of capitalist production is not only profit in the sense of glittering bullion, but constantly growing profit. This is where it differs from any other economic system based on exploitation. For this purpose the capitalist – again in contrast to other historical types of exploiters – uses the fruits of exploitation not exclusively, and not even primarily, for personal luxury, but more and more to increase exploitation itself. The largest part of the profits gained is put back into capital and used to expand production. The capital thus mounts up or, as Marx calls it, 'accumulates'.

As the precondition as well as the consequence of accumulation, capitalist production widens progressively. To do this, the goodwill of the capitalist is not sufficient. The process is tied to objective social conditions which can be summed up as follows. Primarily, there must be a sufficient labour force. Historically, once capitalist production is functioning and fairly consolidated, capital ensures this through its own mechanisms:

- (a) by just enabling the worker to support himself for further exploitation and for reproduction;
- (b) by forming a constantly available reserve army of the industrial proletariat by the proletarianization of the middle class as well as by facing the worker with the competition of machines.

After this condition is fulfilled, i.e. the proletariat is securely available for exploitation and the mechanisms of exploitation itself are governed by the wage system, a new basic condition of capital accumulation emerges – the possibility of selling the goods produced by the workers to recover, in money, the capitalist's original expenses as well as the surplus value stolen from the labour forces. 'The first condition of accumulation is that the capitalist must have contrived to sell his commodities, and to reconvert into capital the greater part of the money so received.'* A steadily increasing possibility of selling the commodities is indispensable in order to keep the accumulation a continuous

^{*} Karl Marx, Capital (Foreign Language Publishing House, Moscow, 1965), Vol. I, p. 564.

process. Capital itself (as we see) creates the basic condition for exploitation. The first volume of Marx's Capital analysed and described this process in detail. But what about the opportunities of realizing the fruits of this exploitation; what about the market? What do they depend on? Can capital itself, or its production mechanisms, expand its market according to its needs, in the same way that it adjusts the number of workers according to its demand? Not at all. Here capital depends on social conditions. Capitalist production has this in common with all other historical forms of production, in spite of fundamental differences between them. Objectively it has to fulfil the material needs of society. although subjectively only the profit motive matters. This subjective aim can only be reached so long as capital fulfils its objective task. The goods can be sold and the incoming profit turned into money only if these goods satisfy the requirements of society. So the continuous expansion of capitalist production, i.e. the continuous accumulation of capital, is linked to the equally continuous growth of social requirements. But what are the requirements of society? Can they somehow be more closely defined, measured, or must we depend only on this vague term? In fact, they seem intangible if one surveys the surface of day-today economic life from the standpoint of the individual capitalist. A capitalist produces and sells machines. His customers are other capitalists, who buy his machines to produce more goods. The one can sell more of his goods as the others expand their production. He can accumulate faster if others accumulate faster in their branches of production. This would be the 'requirements of society' on which our capitalist is dependent: the need of other capitalists is the precondition for the expansion of production. Another capitalist produces and sells the means of subsistence to the workers. The more workers are employed by other capitalists (and by himself), the more goods he can sell and the more capital he can accumulate. But how can the 'others' expand their plants? Obviously through the other capitalist; for example, the producers of machines, or means of subsistence, buying their goods in increasing measure.

So the social requirement, on which the accumulation of capital depends, seems at a closer look to be the accumulation of capital itself.

The more capital accumulates, the more it accumulates; it is all reduced to this blatant tautology, a dizzy circle. One cannot make out where it begins, or where the impelling force is. We are turning round in circles and the problem eludes our grasp. But it does so only for as long as we approach it from this superficial viewpoint, or examine it from the popular platform of vulgar economics, individual capital.

The pattern immediately takes shape if we approach it from the standpoint of total capital, once we see the process of capitalist production as a whole. This is the only relevant and right way. It is the standpoint Marx develops systematically for the first time in the second volume of *Capital*, and on which he bases his whole theory.

The self-sufficient existence of the individual capital is indeed only an external form, the surface of economic life, which only the vulgar economists use as their sole source of knowledge. Beneath that surface and through all contradiction of competition there remains the fact that all individual capitals in society form a whole. Then existence and movement are governed by common social laws which, with the unplanned nature and anarchy of the present system, only work behind the back of the individual capitalist. When one looks at capitalist production as a whole, then social requirements become a measurable quantity which can be divided into sections.

Let us imagine that all goods produced in capitalist society were stacked up in a big pile at some place, to be used by society as a whole. We will then see how this mass of goods is naturally divided into several big portions of different kinds and destinations.

Always, in any form of society, production has to provide two things. First it has to feed society, clothe it and satisfy cultural needs through material goods, i.e. it must produce the means of subsistence in the widest sense of the word for all classes and ages. Secondly, each form of production must replace used up raw materials, tools, factories and so on to allow the continued existence of society and the provision of work. Without the satisfaction of these two major requirements of any human society, cultural development and progress would be impossible. Even capitalist production with all its anarchy, and without

injuring the profit motive, must meet these demands. Accordingly we will find in this aggregate of capitalist commodities produced, a large proportion for replacing the means of production used up in the year before. These are the raw materials, machinery, buildings, etc. (what Marx calls constant capital) which various capitalists must produce for each other and then exchange, so that production can be kept up in all branches. According to our assumption so far, it is capitalist business that provides all the necessary means for the work process. The exchange of commodities on the market is an internal or family matter between capitalists. The required money for this process, of course, comes out of the capitalists' pockets — as every employer must lay out the money capital in advance — and returns into the pockets of the capitalist class after the exchange on the market has taken place.

As we only assume the replacement of the means of production to its former extent, the same amount of money will suffice to keep this periodic process going and let the money return into the capitalists' pockets for a period of rest. A second large department of commodities must contain means of subsistence for the population, as in every society. But how is the population structured in capitalist society, and how does it get its means of subsistence?

Two basic structures are characteristic of the capitalist mode of production. Firstly, a general exchange of goods, i.e. nobody receives anything from the social stock of commodities without the means of purchase - money. Secondly, the capitalist wage system, i.e. the majority of the working population, must exchange its labour power with capital to acquire means of purchase, while the propertied class receives its means of subsistence only by exploiting this relationship. Thus capitalist production presupposes two great classes: capitalists and workers, who differ entirely in their acquisition of means of subsistence. The workers must be fed to maintain their labour power for further exploitation, however little their individual fates concern the capitalist. From the total quantity of commodities produced by the workers, a certain share is assigned to them by the capitalists, in direct proportion to their usefulness in production. The workers receive wages in money form to purchase these goods. By means of exchange the working class thus receives a certain sum of money

every year. With this they buy their provisions from the social stock of commodities, which are, of course, the property of the capitalist; these provisions are allotted to them according to their cultural level and the stage of the class struggle. The money that initiates this second big exchange again comes out of the capitalists' pockets. Every capitalist must advance the necessary monev capital to purchase his labour force - what Marx calls 'variable capital' - in order to keep his enterprise going. But this money returns, down to the last penny, into the pockets of the capitalists as a class, after the worker has bought his means of subsistence (and every worker must do so to maintain himself and his family) - since it is the capitalists who sell means of subsistence to the workers as commodities. But what about their own consumption? The means of subsistence already belong to the capitalists in the form of the commodity stock before exchange, by virtue of capitalist relations, according to which all commodities - except for labour-power - come into this world as the property of the capitalist. Of course, precisely because they are commodities, the 'better' class of provisions come into being as the property of many individual private capitalists. Therefore, as with constant capital, a general exchange must take place between capitalists before they can enjoy their own means of subsistence. This exchange, too, must be conducted with money, and the capitalist himself has brought the necessary amount into circulation. Once again, as with the renewal of constant capital, this is an internal, family arrangement of the employing class. Once more, this money returns whence it began - into the pockets of the capitalists as a class.

The same mechanism of capitalist exploitation which regulates the wage system ensures that the necessary amount of goods and luxuries is produced for the capitalists. If the workers only produced as much as they actually needed, then from the standpoint of capital it would be pointless to employ them. It begins to make sense when the worker provides enough to maintain his employer, over and above what he needs for himself – i.e. his wage: when he produces what Marx calls surplus value. And this surplus value has to provide, among other things, the provisions and luxuries required by the capitalists, as by any other exploiters in the course of history. All that is left for the capitalists to do is to go to the

frightful bother of mutual exchange and to obtain the necessary money-means, in order to maintain the hard and spartan existence of their class and ensure its natural reproduction.

So far we have dealt with two big portions of the aggregate quantity of commodities in society: means of production to repeat the work process and means of subsistence to maintain the population, i.e. the working class and the capitalists.

Of course, what we have described could easily seem to be a creation of fancy. What living capitalist knows or cares what and how much is necessary to replace the used-up gross capital and to feed the entire population? Is it not the case that every capitalist goes blindly on producing, competing with others, and hardly sees what is happening in front of his nose? But there must obviously be invisible rules which somehow work in all this chaos of competition and anarchy, otherwise capitalist society would have been in ruins long ago. And it is the whole purpose of political economy as a science (and particularly of Marx's economic studies) to trace these hidden laws which organize the whole of society in the midst of the confusion of private enterprise. We have now to trace these objective invisible rules of capitalist accumulation - the amassing of capital through progressive extension of production. The laws which we expound here are not authoritative for the conscious actions of individual capitals; indeed, no general institution exists in society that would consciously construct and operate these laws Consequently, production today is like a lurching drunkard, fulfilling its tasks through all these gluts and dearths, price instability and crises. But price instability and crises have only one function in society: to integrate chaotic private production into its broad general context, without which it would soon disintegrate. Let us here try to sketch, with Marx, the relation between total capitalist production and social needs. We will omit the specific capitalist methods of price fluctuation and crises, and concentrate on the basics.

There must be more than those two big portions of the social stock of commodities which we have dealt with so far. If the exploitation of the workers were only to permit a luxurious life for the exploiters, we would have a kind of modernized slave system of medieval feudalism, but not the modern rule of capital. Its aim and goal in life is profit in the form of money and accumu-

lation of money capital. So the actual historical purpose of production only begins when exploitation aims beyond that. The surplus value must not only allow the capitalist class a living 'befitting their rank', but must also contain a part destined for accumulation. This actual purpose is so important that workers are only employed if they produce this profit and if there is the expectation that it can be accumulated in money-form.

In our assumed total stock of commodities in capitalist society we must accordingly find a third portion, which is destined neither for the renewal of used means of production nor for the maintenance of workers and capitalists. It will be a portion of commodities which contains that invaluable part of the surplus value that forms capital's real purpose of existence: the profit destined for capitalization and accumulation. What sort of commodities are they, and who in society needs them?

Here we have come to the nucleus of the problem of accumulation, and we must investigate all attempts at solution. Could it really be the workers who consume the latter portion of the social stock of commodities? But the workers have no means beyond the wages covering bare necessities which they receive from their employers. Beyond that there is no possible chance of their being consumers of capitalist commodities, however many unsatisfied needs they may have. It is also in the interest of the capitalist class to make this portion of the gross social product and means of purchase as scarce as possible. According to the standpoint of the capitalists as a class - it is important to see this standpoint in opposition to the abstruse ideas of the individual capitalist workers are not, like others, customers for their commodities, but simply the labour force, whose maintenance out of part of its own produce is an unfortunate necessity, reduced to the minimum society allows.

Could the capitalists themselves perhaps be the customers for that latter portion of commodities by extending their own private consumption? That might be possible, although there is enough for the ruling class in any case, even with its luxurious whims. But if the capitalists themselves were to spend the total surplus value like water there would be no accumulation. That would mean, from the standpoint of capital, a fantastic relapse into a sort of modernized slave economy, or feudalism. Of course, this is

conceivable and even practised occasionally in reverse: we could discern capitalist accumulation with forms of slavery and serfdom up until the sixties of the last century in the United States, still today in Rumania and various overseas colonies. But the other way, modern exploitation with a free wage system followed by ancient or feudal squandering of the surplus value, neglecting accumulation, this deadly sin against the spiritus sanctus of capital is unthinkable. Again, the standpoint of total capital differs basically from that of the individual employer. For the individual, the luxury of 'high society' is a desirable expansion of sales, i.e. a splendid opportunity for accumulation. For all capitalists as a class, the total consumption of the surplus value as luxury is sheer lunacy, economic suicide, for it is the destruction of accumulation at its roots.

Who then could be the buyer and consumer of that portion of commodities whose sale is only the beginning of accumulation? So far as we have seen, it can be neither the workers nor the capitalists.

But are there not all sorts of strata in society like civil servants, military, clerics, academics and artists which can neither be counted among the workers nor the employers? Must not all these categories of the population satisfy their needs, and could they not be the wanted purchasers of the surplus commodities? Once more: yes, they could for the individual capitalist! It is different again if we take the employers as a class, if we consider gross social capital. In capitalist society all those strata are economically only the hangers-on of the capitalist class. If we ask where the civil servants, clerics, officers, artists, etc., receive their means of purchase, we see that it is partly maintained out of the pockets of the capitalists, partly out of the wages of labour (via the indirect tax system). Economically these groups cannot be a special class of consumers, as they do not have any independent sources of purchasing power, but are included as parasites in the consumption of the two major classes, workers and capitalists.

So we still do not see any customers for the latter portion of commodities, who could initiate the process of accumulation.

In the end, the solution of the problem is quite simple. Perhaps we are acting like the rider who is desperately looking for the nag he is sitting on. Perhaps the capitalists are mutual customers for

the remainder of the commodities – not to use them carelessly, but to use them for the extension of production, for accumulation. Then what else is accumulation but extension of capitalist production? Those goods which fulfil this purpose must not consist of luxurious articles for the private consumption of the capitalists, but must be composed of various means of production (new constant capital) and provisions for the workers [variable capital].

All right, but such a solution only pushes the problem from this moment to the next. After we have assumed that accumulation has started and that the increased production throws an even bigger amount of commodities on to the market the following year, the same question arises again: where do we then find the consumers for this even greater amount of commodities? Will we answer: well, this growing amount of goods will again be exchanged among the capitalists to extend production again, and so forth, year after year? Then we have the roundabout that revolves around itself in empty space. That is not capitalist accumulation, i.e. the amassing of money capital, but its contrary: producing commodities for the sake of it; from the standpoint of capital an utter absurdity. If the capitalists as a class are the only customers for the total amount of commodities, apart from the share they have to part with to maintain the workers - if they must always buy the commodities with their own money, and realize the surplus value, then amassing profit, accumulation for the capitalist class, cannot possibly take place.

They must find many other buyers who receive their means of purchase from an independent source, and do not get it out of the pocket of the capitalist like the labourers or the collaborators of capital, the government officials, officers, clergy and liberal professions. They have to be consumers who receive their means of purchase on the basis of commodity exchange, i.e. also production of goods, but taking place outside of capitalist commodity production. They must be producers, whose means of production are not to be seen as capital, and who belong to neither of the two classes – capitalists or workers – but who still have a need, one way or another, for capitalist commodities.

But where are those buyers? Apart from the capitalists with their entourage of hangers-on, there are no other classes or strata in society today.

Here we get down to the heart of the problem. Marx, in the second volume of *Capital*, as in the first, presupposes that capitalist production is the sole and exclusive mode of production. He says in the first volume

Here we take no account of export trade, by means of which a nation can change articles of luxury either into means of production or means of subsistence, and vice versa. In order to examine the object of our investigation in its integrity, free from all disturbing subsidiary circumstances, we must treat the whole world as one nation, and assume that capitalist production is everywhere established and has possessed itself of every branch of industry.*

And in the second volume: 'Apart from this class, according to our assumption – the general and exclusive domination of capitalist production – there is no other class at all except the working class.'†

Under this condition, there are only capitalists cum hangers-on and workers in society; other classes, other producers and consumers are nowhere to be found. In that case, capitalist production is faced with the insoluble question which I tried to point out above.

You can twist and turn it as you wish, but so long as we retain the assumption that there are no other classes but capitalists and workers, then there is no way that the capitalists as a class can get rid of the surplus goods in order to change the surplus value into money, and thus accumulate capital.

But Marx's assumption is only a theoretical premise in order to simplify investigation. In reality, capitalist production is not the sole and completely dominant form of production, as everyone knows, and as Marx himself stresses in *Capital*. In reality, there are in all capitalist countries, even in those with the most developed large-scale industry, numerous artisan and peasant enterprises which are engaged in simple commodity production. In reality, alongside the old capitalist countries there are still those even in Europe where peasant and artisan production is still strongly predominant, like Russia, the Balkans, Scandinavia and Spain. And finally, there are huge continents besides capitalist Europe

^{*} Capital, Vol. I, p. 581, footnote 1.

and North America, where capitalist production has only scattered roots, and apart from that the people of these continents have all sorts of economic systems, from the primitive Communist to the feudal, peasantry and artisan. Not only do all these social and productive forms co-exist, and co-exist locally with capitalism, but there is a lively intercourse of a specific kind. Capitalist production as proper mass production depends on consumers from peasant and artisan strata in the old countries, and consumers from all countries; but for technical reasons, it cannot exist without the products of these strata and countries. So there must develop right from the start an exchange relationship between capitalist production and the non-capitalist milieu, where capital not only finds the possibility of realizing surplus value in hard cash for further capitalization, but also receives various commodities to extend production, and finally wins new proletarianized labour forces by disintegrating the non-capitalist forms of production.

This is only the bare economic content of the relationship. Its concrete design in reality forms the historic process of the development of capitalism on the world stage in all its colourful and moving variety.

First, the exchange relation of capital with its non-capitalist environment confronts the difficulties of a barter economy, secure social relations and the limited demand of patriarchal peasant economy and artisan production. Here capital uses 'heroic means', the axe of political violence. Its first act in Europe is the revolutionary conquest of the feudal barter economy. Overseas, it begins with the subjugation and destruction of traditional communities, the world historical act of the birth of capital, since then the constant epiphenomenon of accumulation. Through destruction of the primitive barter relations in these countries, European capital opens the doors to commodity exchange and production, transforms the population into customers of capitalist commodities and hastens its own accumulation by making mass raids on their natural resources and accumulated treasures. Since the beginning of the nineteenth century, accumulated capital from Europe has been exported along these lines to non-capitalist countries in other parts of the world, where it finds new customers and thus new opportunities for accumulation on the ruins of the native forms of production.

Thus capitalism expands because of its mutual relationship with non-capitalist social strata and countries, accumulating at their expense and at the same time pushing them aside to take their place. The more capitalist countries participate in this hunting for accumulation areas, the rarer the non-capitalist places still open to the expansion of capital become and the tougher the competition; its raids turn into a chain of economic and political catastrophes: world crises, wars, revolution.

But by this process capital prepares its own destruction in two ways. As it approaches the point where humanity only consists of capitalists and proletarians, further accumulation will become impossible. At the same time, the absolute and undivided rule of capital aggravates class struggle throughout the world and the international economic and political anarchy to such an extent that, long before the last consequences of economic development, it must lead to the rebellion of the international proletariat against the existence of the rule of capital.

This, in brief, is my conception of the problem and its solution. At first glance it may appear to be a purely theoretical exercise. And yet the practical meaning of the problem is at hand - the connexion with the most outstanding fact of our time: imperialism. The typical external phenomena of imperialism: competition among capitalist countries to win colonies and spheres of interest. opportunities for investment, the international loan system, militarism, tariff barriers, the dominant role of finance capital and trusts in world politics, are all well known. Its connexion with the final phase of capitalism, its importance for accumulation, are so blatantly open that it is clearly acknowledged by its supporters as well as its enemies. But Social Democracy refuses to be satisfied with this empirical knowledge. It must search for the precise economic rules behind appearances, to find the actual roots of this large and colourful complex of imperialist phenomena. As always in these cases, only precise theoretical knowledge of the problem at its roots can provide our practical struggle against imperialism with security, aim and force - essential for the politics of the proletariat. Before Marx's Capital appeared, the fact that there was exploitation, surplus labour and profits, was well known. But only the precise theory of surplus value, the wage laws and the industrial reserve army, as Marx bases them in

his theory of value, have given a strong foundation for the practical class struggle, on which the German and, in its footsteps, the international labour movement developed until the World War [First World War]. That theory alone is not enough; that one can sometimes connect the best theory with the worst practice is shown by the present collapse of German Social Democracy. This collapse did not occur as a result of Marxist theory, but in spite of it, and it can only be overth rown by bringing the practice of the labour movement into harmony with its theory. In the class struggle as a whole, as in each important part of it, we can only gain a secure foundation for our position from Marx's theory, from the buried treasures found in his fundamental works.

There is no doubt that the explanation for the economic roots of imperialism must be deduced from the laws of capital accumulation, since, according to common empirical knowledge, imperialism as a whole is nothing but a specific method of accumulation. But how is that possible, if one does not question Marx's assumptions in the second volume of *Capital* which are constructed for a society in which capitalist production is the only form, where the entire population consists solely of capitalists and wage labourers?

However one defines the inner economic mechanisms of imperialism, one thing is obvious and common knowledge: the expansion of the rule of capital from the old capitalist countries to new areas, and the economic and political competition of those countries for the new parts of the world. But Marx assumes, as we have seen in the second volume of *Capital*, that the whole world is one capitalist nation, that all other forms of economy and society have already disappeared. How can one explain imperialism in a society where there is no longer any space for it?

It was at this point that I believed I had to start my critique. The theoretical assumption of a society of capitalists and workers only – which is legitimate for certain aims of investigation (as in the first volume of *Capital*, the analysis of individual capital and its practice of exploitations in the factory) – no longer seems adequate when we deal with the accumulation of gross social capital. As this represents the real historical process of capitalist development, it seems impossible to me to understand it if one abstracts it from all conditions of historical reality. Capital accumulation as the historical process develops in an environment

of various pre-capitalist formations, in a constant political struggle and in reciprocal economic relations. How can one capture this process in a bloodless theoretical fiction, which declares this whole context, the struggle and the relations, to be non-existent?

Here especially it seems necessary, in the spirit of Marxist theory, to abandon the premise of the first volume, and to carry out the inquiry into accumulation as a total process, involving the metabolism of capital and its historical environment. If one does this, then the explanation of the process follows freely from Marx's basic theories, and is consistent with the other portions of his major works on economics.

Marx himself only posed the question of the accumulation of gross capital, but his answer went no further. As a basis for his analysis, he first selected that pure capitalist society; but not only did he not take this analysis to its conclusion, he also broke off at just this central question. In order to illustrate his conception he constructed some mathematical models, but hardly had he started on their significance for practical social possibilities and their verification from this standpoint when sickness and death forced him to stop writing. It was clearly left to his pupils to solve this problem (like many others), and my Accumulation was intended as an attempt in this direction.

The solution I proposed might have been judged as correct or incorrect; it could have been criticized, contested, supplemented; or another solution could have been produced. None of this happened. What followed was quite unexpected: the 'experts' explained that there was no problem to be solved! Marx's illustrations in the second volume of *Capital* were a sufficient and exhaustive explanation of accumulation; the models there proved quite conclusively that capital could grow excellently, and production could expand, if there was no other mode of production in the world than the capitalist one; it was its own market, and only my complete inability to understand the ABC of Marx's models could persuade me to see a problem here.

THE CRITICS

Just consider: it is a fact that the controversies in political economy over the problem of accumulation and the possibility of the realization of surplus value have gone on for a century; in the twenties, in Sismondi's disputes with Say, Ricardo and MacCulloch,* in the eighties and nineties between the Russian 'Populists'† and Marxists. The most distinguished political economists in France, England, Germany and Russia aired the question repeatedly, both before and after the appearance of Marx's Capital. Wherever, under the impact of sharp social criticism, active intellectual life pulsated through political economy, the problem left no peace for the researchers. It is a fact that the second volume of Capital is not really a complete work, like the first, but only a torso, a loose collection of more or less finished fragments and drafts such as a researcher writes down for his own understanding, the elaboration of which was repeatedly held back and interrupted by illness. In particular, the analysis of the accumulation of gross capital, with which we are dealing here, came off worst, being the last chapter of the manuscript: out of a volume of 523 pages it accounts for a scanty thirty-five pages and breaks off in mid-flow.

It is a fact that this last section of the volume, as Engels testifies, seemed to Marx himself to be 'in urgent need of revision' and

^{[*} Sismondi, Say, Ricardo and MacCulloch, economists of the early nineteenth century. For exposition and criticisms of their respective ideas see Marx, Capital, Vols. I, II, and III, also Theories of Surplus Value. For a concise account see Eric Roll, A History of Economic Thought (Faber & Faber, London, 1962). See also Rosa Luxemburg, The Accumulation of Capital.]

^{[†} Populists or Narodniks. A group from the Russian intelligentsia who, in the 1870s, were active in attempting to arouse the peasants against the Tzar. This revolutionary activity was known as 'going to the people'. It was largely a failure, and the most determined elements of the movement then resorted to acts of terrorism. They assassinated Tzar Alexander II on 1 March 1881. Thereafter the movement declined.]

remains, according to the same testimony, 'only a preliminary treatment of the subject'. As Marx, in the process of his analysis, dealt again and again with the problem of the realization of surplus value, his doubts appeared in ever different forms, and thus he certainly bore witness himself to the difficulty of the problem.

It is a fact that there are blatant contradictions between the premises of the short fragment at the end of the second volume, where Marx deals with accumulation, and the illustrations of the third volume, where he describes the 'total movement of capital'. The same is true of many important laws in the first volume, which I refer to in detail in my book.

It is a fact that, since its first appearance on the stage of history, capitalist production has demonstrated its enormous attraction towards non-capitalist countries. It runs like a red thread throughout its development, grows ever more important until, in the last twenty-five years, in the epoch of imperialism, it appears directly as the determining and dominant factor in social life.

It is a fact that everyone knows that there never has been, nor does there exist at present, a country with exclusively capitalist production, where there are only capitalists and wage-earners. The society for which the premises of the second volume of *Capital* were designed does not exist anywhere in concrete reality.

And, despite all this, the official 'experts' of Marxism explain that there is no problem of accumulation, that everything has already been solved once and for all by Marx! They have never been disturbed by the remarkable precondition of accumulation in the second volume, they even failed to notice it as anything peculiar! And now that the situation has been pointed out to them they find this very strangeness quite in order. They cling doggedly to this idea and violently attack anyone who thinks he sees a problem where official Marxism has been nothing but self-satisfied for decades!

This is such a blatant case of 'epigonism' that it can only be compared with an anecdotal event from the realms of pettifogging academics: the well-known story of the so-called 'Blattversetzung' of Kant's *Prolegomena*.

For a century, the philosophical world argued passionately about the various problems of Kantian theory, and about the

Prolegomena in particular; the meaning of Kant's theory gave rise to whole schools which fought bitterly among themselves. But then Professor Vaihinger* cleared up one of the most obscure of these problems in the simplest possible way - by pointing out that a part of paragraph 4 of the Prolegomena, which is in fact completely unrelated to the rest of the chapter, belonged in paragraph 2: it had just been detached by a printing error in the original edition and been put in the wrong place. And anyone who now reads the text straightforwardly can immediately see this. But not the cliquish academics who for a century had been constructing profound theories upon a printing error. And there actually was a pedantic academic, a professor in Bonn, who demonstrated in four indignant articles in the Philosophische Monatshefte that the 'alleged "Blattversetzung" 'did not exist, that it was precisely this printing error which expressed the sole correct and unadulterated Kant, and that whoever dared to locate a printing error there had not understood the smallest grain of Kant's philosophy.

This is the sort of way in which the 'experts' now cling on to the premises of the second volume of Marx's Capital and the mathematical models which are built upon it. The main doubt of my critique is directed towards the fact that, on the question of accumulation, mathematical models can prove absolutely nothing, since their historical premise is untenable. The reply is: but the models work out exactly, so the problem of accumulation is solved – it simply doesn't exist.

Here is an example of the orthodox cult of formulae.

In Neue Zeit Otto Bauer† embarks on an investigation of the

[* Hans Vaihinger (1854-1933). German philosopher of the 'as if'. Founded the journal Kant-Studien. Main work The Philosophy of 'As If', English translation C. K. Ogden (New York, 1924). See also W. Del Negro, 'Hans Vaihinger's Philosophisches Werk mit besonderer Berucksichtigung seiner Kantforschung', in Kant-Studien (1934), pp. 316-27.]

[† Otto Bauer (1881–1938). Born in Vienna. In 1907 became Secretary to the Parliamentary Group of the Austro-Hungarian Social Democratic Party. Became one of the party's leading theorists after the publication of *The Question of Nationalities and Austrian Social Democracy*, and was a frequent contributor to *Der Kampf*, the theoretical journal of the Austrian SDP. Served as a conscript in the Austro-Hungarian army after August 1914. Was captured in the autumn of 1914 by the Russians and spent the rest of the war

question I posed – how is surplus value realized – in the following fashion. He constructs four large tables of figures in which Roman letters alone, such as Marx used for the abbreviated annotation of variable and constant capital, are not enough. Bauer adds on a few Greek letters. This makes his tables look even more intimidating than all the models in Marx's Capital. With this contraption he then tries to show how the capitalists, after renewing the used capital, dispose of the excess commodities which contain the surplus value which is to be turned into capital for them: 'And furthermore (after replacing the old means of production), the capitalists want to use the surplus value accumulated in the first year to enlarge existing operations or establish new ones. If in the next year they want to use capital which has grown by 12,500 they must build new workshops, buy new machines and increase their supply of raw materials, etc., etc., this year.'*

Thus the problem is said to be solved. If 'the capitalists want' to expand production, then of course they need more means of production than before and so act mutually as their own consumers. At the same time, they need more workers and more provisions for these workers, which they make themselves anyway. This deals with the entire surplus of means of production and provisions, and accumulation can begin. As one can see, everything depends on whether the capitalists 'want' to undertake an expansion of production. And why not? Well, of course, 'they want to'. 'Consequently, the entire productive value of both spheres, thus also the entire surplus value, is realized,' Bauer explains triumphantly, and from this he concludes:

as a prisoner until he was repatriated in August 1917. Whilst in Russia he learned to speak Russian. He was sympathetic to the Martov-Internationalist wing of the Mensheviks but was a critical supporter of the Bolshevik revolution in 1917. After the fall of the Hapsburg monarchy Bauer served as a Foreign Secretary in the Social Democratic government. In the 1920s he attempted to bridge the gulf between Social Democracy and the new Communist Parties, seeking to re-unite the workers' parties nationally and internationally. Before 1914 Bauer was also a frequent contributor to Neue Zeit (see next note) and influenced the German party, particularly on the national question.]

^{*} Neue Zeit, 1913, No. 24, p. 863. [Neue Zeit was the central theoretical journal of the German Social Democratic Party (SPD). Edited by Karl Kautsky.]

'Similarly, Table IV clearly shows that the total productive value of both spheres is disposed of without any trouble and the total surplus value is realized, not only in the first year, but in each subsequent year. Comrade Luxemburg is thus incorrect in her assumption that the accumulated part of surplus value cannot be realized.'*

Bauer has simply not noticed that he did not need nearly such long and detailed calculations with four tables, with wide, lengthy, oval-bracketed and four-storeyed formulae to reach this brilliant conclusion. The conclusion which Bauer has reached does not even follow from his tables; he simply takes it as given. Bauer simply assumes what was to be proven – that is all his whole 'proof' consists of.

If the capitalists want to enlarge production by as much as they possess in surplus capital, then all they have to do is put this surplus capital into their own production (providing, of course, that they produce absolutely all the necessary means of production and provisions themselves!) – then they are left with no unsaleable commodity surplus. Can anything be more simple, and are any nonsensical formulae with Roman and Greek letters needed actually to 'prove' something so obvious?

But then the question arose as to whether the capitalists, who of course always 'want' to accumulate, can also do so, that is, whether they can find a continually expanding market for expanded production, and where such a market is to be found? And the answer to that cannot come from any arithmetical operations with fictitious numbers on the paper, but only from an analysis of the socio-economic relations of production.

If one asks the 'experts': 'Yes, all well and good, the capitalists "want" to expand production, but then who are they going to sell their increased amount of commodities to?' they answer: 'The capitalists will always consume this increasing amount of commodities themselves, because they always "want" to expand production.'

'And the models show who buys the products,' the *Vorwärts* reviewer, G. Eckstein, explains.†

^{*} ibid., p. 886.

[†] Vorwärts, 16 February 1913. Likewise A. Pannekoek [see below] in the Bremer Bürgerzeitung of 19 January 1913: 'The model itself gives the answer

To be brief: each year the capitalists expand by exactly as much as they have 'saved up' in surplus value; they are their own consumers and thus the market does not bother them. This assumption is the starting-point of the whole 'proof'. But a mathematical formulation is both unnecessary for this assumption and completely incapable of proving it. The naïve idea that mathematical formulae could prove the main point here – the economic possibility of such an accumulation – is the amusing quid pro quo of the 'expert' custodians of Marxism. In itself it is enough to make Marx turn in his grave.

Marx himself never dreamed of presenting his own mathematical models as any sort of proof that accumulation was in fact possible in a society consisting solely of capitalists and workers. Marx investigated the internal mechanism of capitalist accumulation and established certain economic laws on which the process is based. He started roughly like this: if the accumulation of gross capital, that is, in the entire class of capitalists, is to take place, then certain quite exact quantitative relations must exist between the two large departments of social production: the production of means of production and the production of means of consumption. Progressive expansion of production and, at the same time, progressive accumulation of capital – which is the object of it all – can only proceed unhindered if such relations are maintained so that the one large department of production continuously works hand-in-hand with the other. Marx sketched a mathematical example, a model with imaginary numbers, to illustrate his

very simply, for all products find their market there (i.e. on the paper of the *Bremer Bürgerzeitung*). The capitalists and the workers themselves are the consumers. . . . There is, therefore, absolutely no problem to be solved.

[Gustav Eckstein. Austrian. Contributed to *Der Kampf* and *Neue Zeit*. Author of a book on the family, being a sociological study mainly based on Japanese family, traditions and law. This was published in *Marx-Studien* and Eckstein was considered to be one of the founders of the Austro-Marxist school (see note on p. 89).]

[Dr Anton Pannekoek. Dutch astronomer. Lectured at the Central Party School of the SPD before 1914 until the Prussian police threatened to deport him. After this, he became active in Bremen as a part of the Bremen SPD left. Was active in Dutch Communist affairs after 1918, again supporting the Dutch Communist left. Was an enthusiastic supporter of workers' control of production and of workers' councils as a form of government.]

thoughts clearly and exactly, and he uses it to show that if accumulation is to proceed, then the individual points in the model (constant capital, variable capital, surplus value) must behave in such and such a way to each other.

Clearly, for Marx, mathematical models are examples, illustrations of his economic thoughts, just as Quesnay's 'Tableau économique'* was for his theory, or as the maps from various ages are illustrations of what were then dominant astronomical and geographical concepts. Whether the laws of accumulation which Marx constructed, or more exactly indicated sketchily, are correct or not can obviously be proved only by economic analysis, comparison with other laws set up by Marx, consideration of various consequences to which they lead, examination of the premises from which they proceed, and so on. But what is one to think of 'Marxists' who reject any such criticism as lunacy, since the correctness of the laws is proven by the mathematical models! I doubt whether accumulation could proceed in a society composed solely of capitalists and workers, such as the one on which Marx's models are based, and I believe that the development of capitalist production cannot in general be fitted into a schematic relation between pure capitalist concerns at all. The answer of the 'experts' is: But it's certainly possible! That is demonstrated brilliantly 'by Table IV', 'and the models show . . .' - i.e. the fact that a row of numbers on a piece of paper thought up for the purpose of illustration can be added and subtracted at will!

In olden times people believed in the existence of all kinds of fabulous creatures: dwarfs, people with one eye, with one arm and leg, and so on. Does anybody believe that such creatures ever really existed? But we see them drawn in precisely on the old maps. Is that not *proof* that those conceptions of the ancients corresponded exactly with reality?

But let us take a dull example.

A costing is produced for the planned construction of a railway

[* Tableau économique, used by Quesnay to illustrate his views on the division of society into economic classes. These were the productive class which consisted of all those engaged in agriculture, the class which lived from the surplus, landlords, the Church, etc. and the sterile class which consisted of all those engaged in manufacturing industry. For a full exposition with diagrams see Paul M. Sweezy, The Theory of Capitalist Development.]

from town X to town Y; precise calculations are made as to how large the annual passenger and goods traffic has to be so that, apart from depreciation, running operational costs and the normal 'reserves', a 'reasonable' dividend can be distributed. shall we say first 5 per cent, then 8 per cent. Naturally, the central question for the founders of the railway company is whether they can expect the passenger and goods traffic on the proposed stretch which would ensure the profitability calculated in the costing. Clearly, the answer to this can only come from precise and basic facts about the previous traffic on the stretch, its importance for commerce and industry, the population growth of the adjacent towns and villages and other facts concerning economic and social relations. Now, what would one say to a man who exclaimed: You ask, where will the profit of the line come from? I beg your pardon, but that is down in black and white in the costing. You can read there that it comes from the passenger and goods traffic, and that the takings from this will provide first for a 5 per cent, then for an 8 per cent dividend. If you can't see that, gentlemen, then you have simply completely misunderstood the nature, aim and significance of the costing.*

In sober circles one would probably indicate, with a shrug of one's shoulders towards the know-all, that he belonged in the lunatic asylum or the nursery. But among the official custodians of Marxism such know-alls form the 'supreme court' of 'experts' who give reports on whether other people have understood or misunderstood the 'nature, aim and significance of Marx's models'!

What, then, is the essence of the argument which the models allegedly 'prove'? My objection was that, for accumulation to take place, it must be possible to sell commodities in increasing quantity in order to convert the profit inherent in them into money. Only then is it possible to continue expanding production, therefore to continue accumulation. Where do the capitalists as an entire class find this market? My critics answer that they form their own market. As they continually expand their own operations (or start new ones), they themselves need more and

^{* &#}x27;And the models show who buys the products': 'Comrade Luxemburg has simply basically misunderstood the nature, aim and significance of Marx's models.' Eckstein, *Vorwärts*, 16 February 1913, supplement.

more means of production for their factories and provisions for their workers. Capitalist production is its own market, thus the latter grows automatically with the growth of production. But from the standpoint of capital the main question is: can capitalist profit be obtained or accumulated in this way? Only then could there be any talk of capital accumulation.

Let us take another simple example: capitalist A produces coal, capitalist B manufactures machines, capitalist C makes food. Let us imagine that these three capitalists form the entirety of capitalist employers. If B makes more and more machines, A can sell him more and more coal and thus can buy more and more machines from him, which he uses for mining. Both need more and more workers, and these need more and more provisions, so C too finds an ever greater market and thus he in turn becomes an ever larger consumer of both coal and machines. The whole thing revolves in ever higher circles — as long as we are wandering about in thin air. But let us examine the subject more concretely.

To accumulate capital does not mean to produce higher and higher mountains of commodities, but to convert more and more commodities into money capital. Between the accumulation of surplus value there always lies a decisive leap, the salto mortale of commodity production, as Marx calls it: selling for money. Is this perhaps only valid for the individual capitalist, but not for the entire class, for society as a whole? Definitely not. For in the social observation of phenomena '... we must not,' says Marx, 'lapse into the manner copied by Proudhon* from bourgeois economy and look upon this matter as though a society with a capitalist mode of production, if viewed en bloc, as a totality, would lose this its specific historical and economic character. No, on the contrary. We have, in that case, to deal with the aggregate capitalist.'†

Now, the accumulation of profit as money profit is just such a specific and quite essential characteristic of capitalist production,

^{[*} Proudhon (1809-64). French socialist, mainly remembered today because of Marx's polemic against him, *The Poverty of Philosophy*. Although he died relatively young Proudhon was a prolific writer. For bibliography see Henri de Lubac, s.J., *The Un-Marxian Socialist*, Sheed & Ward, London, 1948.]

[†] Capital, Vol. II, p. 433.

and is as valid for the class as it is for the individual employer. Marx himself also emphasizes, precisely with the observation of the accumulation of gross capital, '. . . the formation of new money capital which accompanies actual accumulation and necessitates it under capitalist production . . .'* And in the process of his investigation he returns again and again to the question: how is it possible for the class of capitalists to accumulate money capital?

Let us now examine the intelligent conception of the 'experts' from this point of view. Capitalist A sells his commodities to B, and so receives surplus value in money from B. The latter sells his commodities to A and receives the money back from A, which converts his surplus value into money. Both sell their commodities to C and so also receive a sum of money for their surplus value from the same C. But where does the latter get his money from? From A and B. According to our premise there are no other sources for the realization of surplus value, i.e. no other commodity consumers. But can new money capital be formed in this way to enrich A, B and C? Let us for a moment assume that with all three the quantity of commodities for exchange grows, production expands uninterrupted, and therefore, the amounts of surplus value expressed in commodities can grow. Exploitation is complete, the possibility of enrichment, of accumulation, has come. But exchange, the realization of the increased surplus value in increased new money capital, has to take place in order for possibility to become reality. Notice that we do not ask here, as Marx often does in the second volume of Capital: where does the money for the circulation of surplus value come from? to answer finally: from the gold-miner. We ask rather: how does new money capital come into the pockets of the capitalists, since (apart from the workers) they are the only ones who can consume each other's commodities? Here money capital wanders continuously out of one pocket into the other.

But wait: perhaps such questions are putting us on quite the wrong track. Perhaps profit accumulation does take place in this ceaseless wandering from one capitalist's pocket into the other, in the successive realization of private profits, where the aggregate amount of money capital does not even have to grow, because

^{*} Capital, Vol. II, p. 507.

such a thing as the 'aggregate profit' of all capitalists does not exist outside of obscure theory?

But – oh dear – such an assumption would simply lead us to throw the third volume of Marx's Capital into the fire. For the doctrine of average profit, one of the most important discoveries of Marx's economic theory, is central to its argument. This alone gives concrete meaning to the theory of value in the first volume on which are based both the theory of surplus value and the second volume, so these would also have to find their way into the fire. Marx's economic theory stands and falls with the concept of gross social capital as a concrete amount, which finds its tangible expression in aggregate capitalist profit and its distribution, and whose invisible movement initiates all visible movements of individual sums of capital. Gross capitalist profit is, in fact, a much more material economic amount than, for instance, the total sum of paid wages at any given time. For the latter appears as a statistical number only after retrospective addition over a period of time, whilst aggregate profit, on the other hand, expresses itself in the economic mechanism as a whole, since competition and price fluctuation are always distributing it amongst individual sums of capital as average profit or as extra profit.

So the problem remains: gross social capital continually realizes an aggregate profit in money-form, which must continually grow for gross accumulation to take place. Now, how can the amount grow if its component parts are always circulating from one pocket to another?

It would appear that — as we have assumed up until now — at least the aggregate amount of commodities which contain the profit can grow in this way, and the only difficulty lies in supplying the money, which is perhaps only a technical question of money circulation. But only apparently, superficially. The aggregate amount of commodities will not increase, expansion of production cannot take place, because in capitalist production the essential precondition for this is conversion into money, the universal realization of profit. The sale of increasing amounts of commodities, and the realization of profit, from A to B, B to C and C back again to A and B can only take place if at least one of them can in the end find a market outside the closed circle. If this does not happen the roundabout will grind to a halt after only a few turns.

On the basis of this one can appreciate the profundity of my 'expert' critics when they exclaim:

When Comrade Luxemburg continues: We are clearly going round in circles. From the point of view of the capitalists it is absurd to produce more means of consumption just to maintain more workers, and to produce more means of production just to give this increased labour force something to do! – it is difficult to fathom the relevance of these words to Marx's models. The object of capitalist production is profit: this comes to the capitalists from the process described, and is therefore not the least bit absurd from the capitalist point of view; on the contrary, from this point of view it is the very embodiment of reason, i.e. of the striving after profit.*

In point of fact, it is 'difficult to fathom' which is greater here, the naïvely admitted complete incapability of going deeply into the basic Marxist theory of gross social capital as opposed to individual capital, or the complete lack of comprehension of the question I posed. I say: production to an ever greater extent for production's sake is, from the capitalist point of view, absurd, because in this way – according to the premise which the 'experts' cling to – it is impossible for the entire class of capitalists to realize profit, and therefore to accumulate. The answer is: But that is by no means absurd, because that is the way profit is accumulated! And how do you know that, oh experts? Now, it is shown . . . in the mathematical models that profit is in fact accumulated. In those models, into which we have arbitrarily written rows and rows of numbers, with which mathematical operations run faultlessly, and in which money capital is entirely neglected.

Clearly, all criticism must hopelessly shatter itself against these sturdy 'experts', because the experts simply look from the point of view of the individual capitalists, which is to some degree sufficient for the analysis of exploitation, i.e. of the process of production, and thus to understand the first volume of Capital, but is totally insufficient where the circulation and reproduction of capital are concerned. The second and third volumes of Marx's Capital, which are illumined by the basic concept of gross social capital, are for them dead capital, in which they have learnt letters, formulae, 'models', but have missed the essence. Marx himself was certainly no 'expert'. For he was not content with the arith-

^{*} Eckstein, Vorwärts, 16 February 1913, supplement.

metical 'process' of his models; again and again, he asked: how is it possible for general accumulation to take place, for new money capital to be formed in the class of capitalists? It has always been the privilege of the 'epigones' to take fertile hypotheses, turn them into rigid dogma, and be smugly satisfied, where a pioneering mind was filled with creative doubt.

The 'experts', point of view, however, leads to a string of intriguing consequences, which they have obviously not taken the trouble to think over.

First consequence: if capitalist production can act limitlessly as its own consumer, i.e. production and market are identical, it becomes totally impossible to explain the periodic appearance of crises. If production can, 'as the models show', accumulate at will by using its own growth for new expansion, it is puzzling how and why circumstances can arise where capitalist production cannot find a sufficient market for its commodities. According to the formula of the experts, all it has to do is swallow up the commodity surplus itself, and put it into production (partly as means of production, partly as provision for the workers), 'in each subsequent year' as Otto Bauer's 'Table IV' shows. The indigestible commodities would then be converted into the new blessing of accumulation and profit-making. At all events, it turns the specific Marxist concept of crisis into an absurdity, according to which crises come from the tendency of capital to outgrow each given limit to the market in ever shorter time. For how could production outgrow the market, since it is its own market, thus the market automatically grows as fast as production? In other words, how could capitalist production periodically outgrow itself? It could do it as easily as someone can jump over his own shadow. The capitalist crisis becomes an inexplicable phenomenon. Or there is only one explanation left for it: the crisis does not come from the incongruity between the ability of capitalist production and that of the market to expand, but only from the disproportionate relations between different branches of capitalist production. In themselves, these could be quite sufficient consumers for themselves, except that, as a result of anarchy, several things are not correctly proportioned, too much of one, too little of the other being produced. This would mean rejecting Marx and finally ending up with the man whom Marx ridiculed so

thoroughly, the patriarch of vulgar economics, of the Manchester theory and bourgeois harmony, the 'wretched man', Say, who in 1803 propounded the dogma: It is absurd to say that too much of all commodities can be produced, there can only be partial crises, but no general ones: if for this reason a country has too much of one kind of product, that only proves that it has produced too little of some other kind.

Second consequence: capitalist accumulation becomes (objectively) limitless once capitalist production has built a sufficient market for itself. As production will still grow, i.e. the productive forces will develop without limit, even when all mankind is divided into capitalists and proletarians, as there is no end to the economic development of capitalism, the one specifically Marxist foundation crumbles. According to Marx, the rebellion of the workers, the class struggle, is only the ideological reflection of the objective historical necessity of socialism, resulting from the objective impossibility of capitalism at a certain economic stage. Of course, that does not mean (it still seems necessary to point out those basics of Marxism to the 'experts') that the historical process has to be, or even could be, exhausted to the very limit of this economic impossibility. Long before this, the objective tendency of capitalist development in this direction is sufficient to produce such a social and political sharpening of contradictions in society that they must terminate. But these social and political contradictions are essentially only a product of the economic indefensibility of capitalism. The situation continues to sharpen as this becomes increasingly obvious. If we assume, with the 'experts', the economic infinity of capitalist accumulation, then the vital foundation on which socialism rests will disappear. We then take refuge in the mist of pre-Marxist systems and schools which attempted to deduce socialism solely on the basis of the injustice and evils of today's world and the revolutionary determination of the working classes.*

* Or else we are left with the somewhat oblique comfort provided by a little 'expert' from the *Dresdener Volkszeitung* who, after thoroughly destroying my book, explains that capitalism will eventually collapse 'because of the falling rate of profit'. One is not too sure exactly how the dear man envisages this – whether the capitalist class will at a certain point commit suicide in despair at the low rate of profit, or whether it will somehow declare that business is so bad that it is simply not worth the trouble, whereupon it will

Third consequence: when capitalist production builds itself a sufficient market and permits expansion of the total accumulated value, there appears another riddle of modern development: competition for the most distant markets and capital exports, the most dominant feature of modern imperialism. Indeed incomprehensible! Why all this fuss? Why conquer colonies, why the opium wars of the forties and sixties, why the squabble for swamps in the Congo, for Mesopotamian deserts? Capital should stay at home and earn an honest living. Krupp should go along and produce for Thyssen, Thyssen for Krupp, let them invest their capital in their own enterprises and expand them mutually, and so on and so on. The historical movement of capital, and with it modern imperialism, becomes quite incomprehensible.

But there is still Pannekoek's invaluable statement in the Bremer Bürgerzeitung: the search for non-capitalist markets is 'a fact, but not a necessity' – a real pearl of historical materialism, and he is dead right! According to the assumption of the 'experts', socialism as the final stage, with imperialism as its predecessor, ceases to be a historical necessity. The one becomes the laudable decision of the working class; the other is simply a vice of the bourgeoisie.

So the 'experts' are faced with having to choose between two alternatives. Either – as they deduce from Marx's models – capitalist production is identical with its market, and the historical materialist explanation for imperialism disappears, or capital accumulation can only take place in so far as customers can be found beyond capitalists and workers, in which case growing sales in non-capitalist strata and countries are the essential precondition for accumulation.

Despite my isolation I do have a truly non-suspect and also very 'expert' crown witness for the above consequences.

In 1902 a book was published by the Russian Marxist, Professor Michael V. Tugan-Baranovsky, *The Theory and History of Crises*

hand the key over to the proletariat? However that may be this comfort is unfortunately dispelled by a single sentence by Marx, namely the statement that 'large capitals will compensate for the fall in the rate of profit by mass production'. Thus there is still some time to pass before capitalism collapses because of the falling rate of profit, roughly until the sun burns out.

in England. Tugan revised Marx by gradually replacing his theory with the clichéd wisdoms of bourgeois vulgar economists. Amongst other paradoxes, he claims that crises are merely the result of maladjustments, not of the ability of production to expand faster than the ability of the population to consume. What was so novel and astonishing about this wisdom (which he borrowed from Say) was that he used Marx's models of social reproduction in the second volume of Capital to prove it!

'It is only possible', says Tugan, 'to expand social production if the productive forces are sufficiently developed. Thus, demand must also undergo a similar expansion in the proportional division of social production, since under these conditions every newly produced commodity represents new purchasing power for the acquisition of other commodities' (p. 25). The 'proof' for this comes from Marx's models, which Tugan has only reproduced with different figures, and which lead him to conclude: 'The object of the above models is to prove something which in itself is very simple, but is frequently objected to be due to an insufficient understanding of the process of the reproduction of social capital, to prove in fact the basic thesis that social production creates its own market.' (My emphasis, R. L.)

Carried along by his preference for paradoxes Tugan-Baranovsky arrives at the conclusion that capitalist production is 'in a certain sense' quite independent of human consumption. Anyway, we are not interested here in Tugan's jokes, but only in the 'actually very simple basic principle' on which he constructs all that follows. And there we have to note:

What my 'expert' critics are holding against me now was said by Tugan-Baranovsky, word for word, in 1902, specifically in two typical assertions: (1) capitalist production builds a market for itself through its own expansion, so that the sales outlet should pose no difficulties for accumulation (apart from lack of proper proportion); (2) the proof that this is so is provided by mathematical models such as those used by Marx, i.e. exercises in addition and subtraction on uncomplaining paper. Thus spoke Tugan-Baranovsky in 1902. Then the man had a tough time. Immediately, Karl Kautsky started on him in Neue Zeit; he mercilessly criticized the absurdities of the Russian revisionist, including the above-mentioned 'basic principle'.

If that were true (wrote Kautsky), the greater its capital wealth is, the faster England's industry would have to grow. But instead, it is coming to a standstill, capital is emigrating to Russia, South Africa, China, Japan and so on. This phenomenon is explained by our theory, according to which under-consumption is the ultimate cause of crises; it is incomprehensible from Tugan-Baranovsky's point of view.

Now, what is the theory that Kautsky opposes to Tugan's? Here it is, in Kautsky's own words:

Although capitalists increase their wealth and the number of exploited workers grows, they cannot themselves form a sufficient market for capitalist-produced commodities, as accumulation of capital and productivity grow even faster. They must find a market in those strata and nations which are still non-capitalist. They find this market, and expand it, but still not fast enough, since this additional market hardly has the flexibility and ability to expand of the capitalist process of production. Once capitalist production has developed large-scale industry, as was already the case in England in the nineteenth century, it has the possibility of expanding by such leaps and bounds that it soon overtakes any expansion of the market. Thus, any prosperity which results from a substantial expansion in the market is doomed from the beginning to a short life, and will necessarily end in a crisis.

This, in short, is the theory of crises which, as far as we can see, is generally accepted by 'orthodox' Marxists and which was set up by Marx.†

Let us forget that Kautsky calls this theory by the dubious name of an explanation of crises caused 'by under-consumption'. Marx ridicules this in the second volume of *Capital* (p. 410).

Let us forget that Kautsky sees only the problem of crises, without noticing that capitalist production poses a problem apart from ups and downs in the state of business.

Finally, let us forget that Kautsky's explanation – that the consumption of capitalists and workers does not grow 'fast enough' for accumulation, which therefore needs an 'additional market' – is rather vague and makes no attempt to understand the problem of accumulation in its exact terms.

We are only interested in what Kautsky shows in black and

^{*} Neue Zeit, 1902, No. 5 (31), p. 140.

[†] Neue Zeit, No. 3 (29), p. 80. (My emphasis, R. L.)

white as his own and the commonly accepted opinion among 'orthodox Marxists':

- 1. That capitalists and workers alone do not represent a sufficient market for accumulation.
- 2. That capitalist accumulation needs an additional market in non-capitalist strata and nations.

So far one thing is certain: in 1902, when attacking Tugan-Baranovsky, Kautsky refuted the same assertions which the 'experts' use to oppose my Accumulation, and the 'experts' attack as a horrible deviation from the true faith the same assertions, only this time dealing with the problem of accumulation in an exact manner, which Kautsky used in opposition to the revisionist Tugan-Baranovsky as the theory of crises 'generally accepted' by orthodox Marxists.

And how does Kautsky prove the untenability of his opponent's thesis? Just by using Marx's models? Kautsky shows Tugan that, even when properly used, these models do not prove his thesis but, on the contrary, prove the theory of crises as caused by 'underconsumption'.

The world shakes to its very foundations. Has the supreme expert 'understood' the 'nature, aim and significance of Marx's models' even less than Tugan?...

But Kautsky draws some interesting conclusions from Tugan-Baranovsky's assertion. That this assertion straightforwardly contradicts Marx's theory of crises, that it makes the export of capital to non-capitalist countries an inexplicable phenomenon, we have already seen. And now the general tendency of this position:

What practical importance . . . do our theoretical differences have? (asks Kautsky) Whether crises are caused by unstable proportions in social production or by under-consumption – is that anything more than an academic question?

That is what many 'practical' men might think. But in fact the question is of great practical importance, especially for tactical differences which are being discussed in our party. It is no mere accident that revisionism attacks Marx's theory of crises with particular vigour.

And Kautsky demonstrates explicitly that Tugan-Baranovsky's theory of crises basically leads to an alleged 'moderation of class

contradictions'. That means it is in the tradition of the theory that believes in the 'change of social democracy from a party of proletarian class struggle into a democratic party on the left wing of a democratic party of socialist reform'.*

This is how the supreme expert slew the heretic Tugan-Baranovsky fourteen years ago on thirty-six printed pages of *Neue Zeit*, finally walking away with his victim's scalp in his belt.

And now I must stand by and watch the 'expert' pupils of this master damn my analysis of accumulation with the same 'basic principle' that cost the Russian revisionist his life in the hunting grounds of *Neue Zeit*! It is not quite clear what happens in this adventure to the 'theory of crises which, as far as we can see, is generally accepted by orthodox Marxists'.

But something even more original happened. After my Accumulation had been destroyed with Tugan-Baranovsky's weapons in Vorwärts, the Bremer Bürgerzeitung, Dresdener Volkszeitung and the Frankfurter Volksstimme, Otto Bauer's critique appeared in Neue Zeit. This expert also believed in the magical power of mathematical formulae to prove questions of social reproduction. as we have seen. But he is still not completely satisfied with Marx's models. He finds them 'not incontestable', 'arbitrary and not without contradictions', which he explains by the fact that Engels 'found this part unfinished' in his master's notebooks! He therefore goes to all the trouble of constructing his own formulae: 'That is why we have constructed models which, once one accepts the assumptions, are not arbitrary.' Only with this new model does Bauer believe he has found 'an incontestable basis on which to approach the problems posed by Comrade Luxemburg'.† But above all, Bauer has understood that capitalist production cannot float around in thin air 'undisturbed'. He therefore looks for some objective social basis for capital accumulation, which he finally finds in the growth of the population.

And here begins the most absurd bit. The unanimous judgement of the 'experts', with the corporate blessing of the editorial staff of *Vorwärts*, declares my book to be arrant nonsense, total misunderstanding, the problem of accumulation simply does not exist, Marx already solved it, the models give a sufficient answer. Bauer

^{*} Neue Zeit, No. 5 (31), p. 141.

[†] Neue Zeit, 1913, No. 23, p. 838.

is now forced to place his models on a slightly more material basis than the simple rules of addition and subtraction: he takes account of a certain social phenomenon — population growth; it is on the basis of this that he constructs his tables. The expansion of capitalist production, as his models are supposed to demonstrate, is not an autonomous movement of capital around its own axis, but follows the corresponding growth of the population:

Accumulation presupposes expansion of the range of production, and this expands through population growth.... In capitalist production there is a tendency for capital accumulation to adjust to the growth of population.... The tendency for accumulation to adjust to the population growth determines the international relations [of capital, Trans.].... When the capitalist world economy is seen as a whole, the tendency in the industrial cycle to adjust accumulation to the population growth becomes visible.... The periodic return of prosperity and of the crisis of depression is the empirical expression of the fact that the mechanism of capitalism acts to cancel overaccumulation and underaccumulation and continually readjusts accumulation to the population growth.*

Later we will take a closer look at Bauer's population theory. But one thing is certain: the theory actually represents something quite new. For the other 'experts', all questions about the social and economic foundation of accumulation seemed pure nonsense, 'indeed difficult to discover'. Bauer, on the other hand, constructs a whole theory to answer this question.

Yet Bauer's theory is not only a novelty to the other critics of my book; it makes its very first appearance in the whole of Marxist literature. Neither in the three volumes of Marx's Capital nor in Theories of Surplus Value or in Marx's other writings do we find a trace of Bauer's population theory as the basic principle of accumulation.

Let us take another look at the way in which Karl Kautsky announces and reviews the second volume of *Capital* in *Neue Zeit*. In the detailed contents of accumulation in the second volume Kautsky deals very thoroughly with the first paragraphs on circulation, showing all the formulae and cyphers as Marx uses them. He then dedicates three whole pages out of a total of twenty to the most important and original part of the volume, the 'Reproduction and Circulation of Aggregate Social Capital'. In

^{*} Neue Zeit, 1913, No. 24, pp. 871-3. (All emphasis by Bauer.)

these three pages he deals exclusively – with, of course, complete reproduction of the unavoidable formulae – with the introductory fiction of 'simple reproduction', i.e. capitalist production without profit, which Marx himself only takes as a theoretical starting point from which to approach the actual problem, the accumulation of the aggregate capital. Kautsky settles this latter problem in literally two lines: 'Accumulation of surplus value, the expansion of the productive process, brings further complications.' Full stop. Not another word at the time, just after the publication of the second volume, and not another word in the thirty years since then. Thus not only do we find no trace of Bauer's population theory, Kautsky also completely failed to notice the whole section on accumulation.

He does not notice any special problem (like Bauer creating an 'unobjectionable principle' for its solution), nor the fact that Marx stops in the midst of his own investigation without an answer to the question he posed himself several times.

Once again (in the previously mentioned series against Tugan-Baranovsky) Kautsky talks about the second volume of Capital. Here he formulates the crisis theory, 'commonly accepted by orthodox Marxists', of which the central point is that consumption by capitalists and workers is insufficient as a basis for accumulation, and that an additional market is necessary in the 'pre-capitalist producing strata and nations'. Kautsky does not seem to be aware that this 'commonly accepted' theory of crises neither fits Tugan-Baranovsky's paradoxes nor his own model of Marxist accumulation with its general preconditions. This is because the premise in Marx's analysis in the second volume is a society of capitalists and workers only. The models are to show in detail as economic law, how those two insufficient consumer classes make accumulation possible year after year merely by consuming. Kautsky does not even give us the slightest hint of a population theory such as that used by Bauer as the true principle of Marx's model of accumulation.

Let us look at Hilferding's Finance Capital.* In Chapter XVI,

[* Rudolf Hilferding (1877-1944). Austrian. One of the editors of Marx-Studien. Left Vienna in 1907 to go to Berlin where he was given the post of leader-writer on Vorwärts. His main contribution to Marxist theory was Das Finanz Kapital, published in 1910. This was one of the first Marxist inter-

after an introduction in which he praises Marx's illustration of the conditions of reproduction of gross capital as the most brilliant effort in this 'astonishing work' — and indeed he is correct — he copies word for word on fourteen pages the relevant pages in Marx, including of course the mathematical models. Here he moans that these models have been neglected and only attracted some attention thanks to Tugan-Baranovsky. And what does Hilferding himself notice in the whole brilliant effort? Here are his conclusions:

Marx's models show

that in capitalist production reproduction can take place on a simple as well as an extended scale, if only these relations can be kept stable. On the other hand even simple reproduction can produce crises if the proportions are upset; for instance that between used-up capital and capital that must be invested. It does not necessarily follow that the cause of the crisis lies in the under-consumption of the masses, which is inherent in capitalist production.

Neither does the possibility of general over-production follow from the models: rather one can show that any expansion of production is possible which takes place within the limits of the existing productive forces.*

That is all. Hilferding, too, sees Marx's analysis of accumulation as only a guide for the solution of the crisis problem. The mathematical models show the proportion which, if it is followed, allows undisturbed accumulation. From this Hilferding draws these conclusions:

1. Crises only develop from disproportionality. In this he sinks the 'commonly accepted theory of crisis' into the deep sea and he takes over Tugan-Baranovsky's theory, condemned by Kautsky

pretations of the growth of monopoly and imperialism. In 1914 he was part of the minority in the SPD which was against the voting for war credits in the Reichstag by the SPD parliamentary group. He later became a leader of the USPD (Independent Social Democratic Party) formed in 1917. This party was opposed to the war and Luxemburg, Leibknecht and Mehring took their followers into this until the creation of the Spartakusbund. In 1918, with the creation of the Republic, Hilferding became a German citizen. In 1922 he led the remnants of the USPD back into the SPD. The majority of the Independents had voted to join the Third International in 1920 and had fused with the KPD (Spartakusbund). Hilferding became Finance Minister in the Social Democratic governments of 1923 and 1928.]

^{*} Hilferding, Finance Capital, p. 318.

as revisionist heresy. Following this, he concludes with the theory of this 'wretched man', Say: general over-production is impossible.

2. Apart from crises as periodic interferences due to the lack of proportionality capital accumulation (in a society of only capitalists and workers) can expand as far as the actual productive forces allow, in which he again copies Tugan word for word.

Apart from crises, a problem of accumulation does not exist for Hilferding since the models show that 'any expansion' is limit-lessly possible, i.e. that production and sales grow simultaneously. Again, no trace of Bauer's 'growth of population' theory and no idea that such a theory was necessary.

Finally, even for Bauer himself his present theory was a new discovery. Only in 1904, after the arguments between Kautsky and Tugan-Baranovsky, does he especially deal with the theory of crises in the light of Marx's theory. In two articles in Neue Zeit he himself explains that for the first time he wants to give a coherent elaboration of this theory. But he attributes the crises mainly to the special form of circulation, the 'fixed capital', making use of a phrase in the second volume of Capital, which tries to explain the ten-year cycle of modern industry. Not once does Bauer mention the basic importance of the relation between the expansion of production and the growth of population. Bauer's whole theory, the 'tendency to adjust to the growth of population' which now explains the crises and the booms, the accumulation and the international movement of capital from country to country, and finally even imperialism: this supernatural law, which moves the whole mechanism of capitalism and 'rules it automatically' existed for neither Bauer nor the rest of the world. Now, in answer to my book, it has become the basic theory, the only theory, to put Marx's models on an 'incontestable foundation'. Suddenly and casually this basis appears, in order to solve the problem which allegedly did not exist at all.

What shall we think about all the other 'experts'? Let us summarize what has been said:

1. According to Eckstein and Hilferding (and Pannekoek as well) a problem of capital accumulation does not exist. Everything, needless to say, is as clear as Marx's formulae demonstrate. It is only because I am totally incapable of understanding the formulae

that I am critical of them. According to Bauer, the figures used by Marx are 'arbitrarily chosen and not free of contradictions'. Only he, Bauer, has found an 'adequate illustration for Marx's thoughts' and put up a 'model free from arbitrariness'.

- 2. According to Eckstein and the editorial staff of *Vorwärts*, my book has to be 'rejected' as totally worthless. According to the little 'expert' of the *Frankfurter Volksstimme* (1 February 1913) it is even highly damaging. According to Bauer there 'is still a valid kernel hidden in the wrong explanation': it points out the limit of accumulation of capital (*Neue Zeit*, 1913, No. 24, p. 873).
- 3. According to Eckstein and *Vorwärts*, my book has not the slightest thing to do with imperialism; 'as things stand the book has so little to do with the new phenomena of today's pulsating economic life, that it could have been written just as well twenty or more years ago'. According to Bauer, my research discovers in fact 'not the sole . . . but only one root of imperialism' (*ibid.*, p. 874) which for a little person like me is quite a nice achievement.
- 4. According to Eckstein, Marx's models show 'the actual extent of social needs'; they show 'the possibility of equilibrium' from which capitalist reality is distant since it is governed by striving for profit, resulting in crises. Early in the next paragraph 'the illustration corresponds to Marx's model, but also to reality', because the model demonstrates precisely 'how this profit is realized for the capitalist'.*

According to Pannekoek, there is no state of equilibrium, but only 'empty blue sky'; 'the extent of production can be compared to a weightless thing floating at any level'. 'For the extent of production is in no state of equilibrium to be drawn back when it deviates.' 'The industrial cycle is not a fluctuation around an average, which is defined by some demand.'

According to Bauer, Marx's models – he having finally found their true meaning – mean nothing but the movement of capitalist production in adjustment to population growth.

5. Eckstein and Hilferding believe in the objective economic possibility of limitless accumulation; 'the models show who buys the products' (Eckstein). Pannekoek's 'weightless thing' can all

^{*} Vorwärts, 16 February 1913, supplement.

[†] Neue Zeit, 1913, No. 22, 'Theoretisches zur Ursache der Krisen', pp. 783, 792.

the more 'float at any level', as he says himself. According to Hilferding, 'any expansion of production is possible that takes place within the limit of the existing productive forces' because, as the models show, 'the outlet grows automatically with production'. According to Bauer, 'only the apologists for capitalism can talk of the endlessness of accumulation' and assert that 'with the production the consumption power grows automatically'.*

How does it stand now? What do the gentlemen of the jury mean? Was there a problem of accumulation with Marx which none of us had noticed until now, or is the problem still (even after its latest solution by Bauer) the product of my 'total inability to work with Marx's models', as the Vorwärts reviewer said? Are Marx's models the ultimate truth, infallible dogma or are they 'arbitrary and not free from contradictions'? Does the problem I dealt with delve to the roots of imperialism, or has it not the 'slightest thing to do with the phenomena of today's pulsating economic life'? And what do those (as Eckstein calls them) 'now famous' models of Marx finally illustrate - only a theoretical state of equilibrium of production, or a picture of reality, a proof of the possibility of 'expansion', or a proof of its impossibility in the face of under-consumption, or an adjustment of production to population growth, or Pannekoek's 'weightless' children's balloon, or something else altogether, perhaps a camel or a weasel? It is about time the 'experts' started making up their minds.

Meanwhile let us look at a beautiful picture of clarity, harmony and perfection of official Marxism in relation to the fundamental section of the second volume of *Capital*. A fitting reply to the arrogance of these gentlemen who attacked my book so viciously.†

^{*} Neue Zeit, 1913, No. 24, p. 873.

[†] The reviewer of *Vorwärts*, Eckstein, of all my critics, has understood least what it is all about. He belongs to the category of journalists who came up with the growth of the working-class press. He can write anything about anything: Japanese family laws, modern biology, the history of socialism, ethnography, culture, economics, tactical problems – whatever is needed at the time. These universal writers move about in every sector of knowledge with such scrupulous safety that they are the envy of any serious scientist. Where they have no understanding of the matter, they replace it by becoming impudent and tough. Here are two examples: 'Let us recognize here and now', says Eckstein at one point in his review, 'that the author has misunderstood the meaning and purpose of Marx's analysis, and this recognition is

Since Otto Bauer has relieved me of the bother of arguing with the other 'experts', I can now turn to Bauer himself.

confirmed by the remainder of her book. Above all, she is completely incapable of understanding the technique of these models. This is already quite clear on p. 100 of her book.' There I am dealing with the fact that in his models Marx includes the production of money in the department of means of production. I criticize this in my book and attempt to demonstrate that, since in itself money is not a means of production, this confusion must inevitably result in great difficulties for a precise treatment of the subject. Eckstein carries on impudently: 'Comrade Luxemburg objects that Marx incorporates the production of money-materials, i.e. gold and silver, in row I and calculates it with the production of means of production. That is supposed to be incorrect. For this reason she adds a third row to those constructed by Marx, which is supposed to represent the production of money-materials.' And now he is bitterly disappointed! 'In the model constructed by Comrade Luxemburg the difficulty is . . . not only very great, it is insuperable. . . . She herself does not make the slightest effort to portray these "organic tangles". The very attempt would have shown her that her model is not feasible', and so on. But the 'model constructed by Comrade Luxemburg' on p. 100 was not 'constructed' by me at all - but by Marx! I simply wrote down the figures given in Capital. Vol. II, p. 470, in order to show that, according to Marx, it is impossible to incorporate the production of money, as I explained explicitly in the following: 'Besides, a mere glance at Marx's model of reproduction demonstrates what inconsistencies must follow from confusing means of exchange with means of production.' And along comes Eckstein to blame me for Marx's model, which I criticize, and to scold me because of this model, like a stupid hussy, for having completely failed to understand 'the technique of these models'.

Another example: on p. 510 of Capital, Vol. II, Marx constructs his first accumulation model, in which he allows the capitalists of the first department always to capitalize 50 per cent of their surplus value, but lets it happen any old way in the other department, with no visible rules, purely according to the need of the first department. I attempt to criticize this assumption as an arbitrary one. Then along comes Eckstein with the following effusion: 'The mistake lies in the very way she has made her calculations, and this shows that she has not grasped the essence of Marx's models. She thinks that these are based on the requirement of an equal rate of accumulation, i.e. she assumes that accumulation always proceeds equally in both main departments of social production. But this assumption is quite arbitrary and contradicts the facts.... In reality there is no such general rate of accumulation and it would be a theoretical nonsense.' Therein resides the 'scarcely comprehensible error of the author, which shows that she is completely puzzled by the essence of Marx's models'. The real law of equal rate of profit stands 'in complete contradiction to the fictitious law of equal accumulation' and so on with that meaty thoroughness, salted and peppered, with which Eckstein ensures my destruction. If indeed . . . then indeed. But five pages later [three pages in the

FLPH edition] Marx gives a second example of his accumulation model, the real and fundamental model, which he then uses exclusively till the end, whilst the first one was merely an attempt, a preliminary sketch. And Marx continually assumes the equal rate of accumulation, 'the fictitious law', in both departments in this second and definitive example! The 'theoretical nonsense'. in 'complete contradiction to the real law of equal rate of profit' - these capital offences and capital crimes can be found in their entirety on p. 513 of Capital, Vol. II, and Marx is unrepentant right up to the last line of the volume. Thus the effusion goes all over the unfortunate Marx, who was obviously 'completely puzzled' by the 'essence' of his own models. At least he does not have to share this hard luck with me alone; Bauer, too, takes his fair share of it, since in his own 'incontestable' models he similarly stated his explicit assumption 'that the rate of accumulation is equal in both spheres of production' (Neue Zeit, op. cit., p. 838). And to think that one is treated to such insolences by a fellow who has not even read Marx's Capital properly! It is characteristic of the domination of the two central organs of Social Democracy by the 'Austro-Marxist'* school of epigones that such a 'review' could even appear in Vorwärts. If God grants that I am alive to see the second edition of my book I shall not be robbed of the opportunity to save this pearl for posterity by printing it in full in an appendix!

[* Austro-Marxist school. This was a collective term used to denote Friedrich Adler, Rudolf Hilferding, Otto Bauer, Max Adler, Gustav Eckstein, Karl Renner et al. This was not an homogeneous school of thought but rather a collection of individuals who attempted to apply Marxism to a number of particular problems which they considered to have developed since Marx had died, or had not been dealt with by him. Their ideas were set out in a series of books under the general title of Marx-Studien (Marx Studies), and in the journal Der Kampf, founded in 1907 by Otto Bauer, Karl Renner and Adolf Braun.]

BAUER'S GENERAL CRITICISMS

Naturally I shall not let myself be drawn into a discussion of Bauer's tabulated calculations. His position and his critique of my book depend mainly on the theory of population which he counterposes to my ideas as the basis of accumulation, and which in itself really has nothing to do with any mathematical models. It is this theory which we must investigate. However, we must first get acquainted with the ways and means, with the method, in which Bauer performs his tabulated manipulations. Even if they are absolutely worthless when it comes to solving the purely social and economic problems of accumulation, they are still very characteristic of Bauer himself, and of the consciousness with which he approaches a solution to the problem. This procedure can be illustrated with a few very simple examples which may even be judged by common mortals who are usually horrified by mind-boggling tables and cabalistic signs.

Three examples are sufficient.

On p. 836 of Neue Zeit* Bauer demonstrates how the accumulation of social capital takes place. He assumes (like Marx) the two large departments of production (I, production of means of production; II, production of means of consumption). The first department begins with 120,000 as constant and 50,000 as variable capital (which can represent thousands or millions of marks, in short money value). In the second department he assumes a constant capital of 80,000 and a variable capital of 50,000. The figures are, of course, arbitrary, but their relations to each other are important, for they express certain economic assumptions from which Bauer proceeds. Thus the constant capital in both departments is greater than the variable, which expresses the stage of technical progress. This predominance of constant capital over variable is greater in the first department than in the second, as technology usually progresses at a faster rate in the first department. Finally, in accordance with this, the total capital of the

first department is larger than that of the second. These are all Bauer's own assumptions and, since they agree with Marx's, they are quite laudable. So far so good.

Now for accumulation. This begins with Bauer increasing both constant capitals by 10,000 and both variable capitals by 2,500.* But he thus immediately abandons his economic premises. For (1) the smaller capital of the second department cannot possibly grow by the same amount as the larger capital of the first department, since this would upset their mutual relations, which are determined by technological progress; (2) the additional capitals cannot possibly be distributed in the same way in both departments between constant and variable capital, since the original capitals were not distributed in the same proportion. Once again, Bauer is destroying the technical basis which he himself assumed.

So Bauer begins by arbitrarily destroying his own premises with the first step he takes. Why is that? Simply for the sake of arithmetical results, to obtain a smooth calculation by addition and subtraction which would otherwise have been impossible.

After expanding production in this way Bauer tries to show us how the second act of accumulation operates, this salto mortale, the realization of surplus value. He is trying to demonstrate the exchange of the increased amount of goods in such a way that we reach a further step of accumulation, i.e. another expansion of production. This happens on p. 863.

We are here concerned with the exchange of the two piles of commodities which are the result of the first year's production: 220,000 means of production and 180,000 means of consumption. At first it proceeds as usual: each department uses the biggest portion of its commodities – partly directly, partly through exchange – to renew the old, used-up capital, and also to provide for the capitalists' own consumption. So far everything is in order; so far, of course, Bauer is following in Marx's footsteps. But now the situation becomes delicate: expansion of production for the next year, accumulation. This procedure is introduced with the well-known quotation: 'Moreover, the capitalists want to use the surplus value accumulated in the first year to expand existing operations and found new ones.' It is no longer our task to concern ourselves with the question we dealt with earlier on: whether the

'will' of the capitalists is sufficient. We agree here with Bauer that 'a man's will' can go a long way, and are concerned only with the manipulation which puts the independent will of the capitalist to work.

The capitalists in Bauer's first department 'want' to reinvest 12,500 of their surplus value. Why so much? Because Bauer needs this figure for his calculations to work out. Well, we will submit without complaining to Bauer's plan, and we will only allow ourselves one thing: to stick to his own freely chosen assumptions. To continue, the capitalists in the first department have decided to invest 12,500 of their surplus value in production. They have already put 10,000 of their commodities into their own constant capital, and passed on a further 2,500 to the other department to purchase provisions for the additional workers in their expanded factories, and now a situation arises where they still have 4,666 left over from the total stock of goods. They have already consumed, exchanged their old used-up capital, invested new capital for expansion, and now they still have this embarrassing remainder. What can they do with the 4,666 left over?

Of course, let us not forget that the capitalists 'want' to accumulate in the second department as well as in the first. These capitalists in the second department also propose to invest 12,500, although as we have seen they own a much smaller capital, and they even want to distribute them in the same way - their vanity to imitate their richer colleagues even makes them neglect technical factors. However that may be, in order for this expansion to take place they need an additional portion of means of production from the first department; could this be an opportunity to get rid of the unconsumable remainder from that department? No, that has already been taken care of, it has already happened. The expansion of Dept II has already proceeded 'according to plan', namely according to the plan invented by Bauer himself. There is not even room there for one more nail. And yet, after all this, there is still a remainder of 4.666 in the first department. What are we to do with this? 'Where do they find their outlet?' Bauer asks. And now the following happens:

The capitalists in the consumer goods industries transfer a part of the surplus value accumulated during the first year to the means of production industries: either they themselves found factories to produce

means of production, or they transfer part of their accumulated surplus value via banks to the capitalists in the means of production industries for their use, or they buy shares in companies which manufacture means of production. . . . Thus, the means of production industry sells commodities worth 4,666 to that capital which has been accumulated in the consumer goods industry, but is to be invested in the means of production industry. Therefore, apart from means of production worth 85,334 (which fully covers their own demand), the consumer goods industry buys means of production worth 4,666, which are meant to produce means of production.*

So that is the solution: the first department sells the indigestible remainder of 4,666 to the second department, which does not make use of it for itself, but 'transfers' it . . . back to the first department where it is used to further expand constant capital I.

Once again, we do not have to go into the economic fact of Bauer's 'transfers' of surplus value from Dept I to Dept II. At this point we are blindly following Bauer through thick and thin; we just want to notice whether his own freely chosen operations are taking place fairly and cleanly, whether he is abiding by his own assumptions.

Capitalists I 'sell' their commodity-remainder of 4,666 to capitalists II who 'buy' it by transferring 'part of their accumulated surplus value' to Dept I. But wait a minute! What do they 'buy' it with? Where is the 'part of the surplus value' which pays for the purchase? There is no trace of it in Bauer's tables! The entire amount of commodities in Dept II has already been used for the consumption of the capitalist class of both departments as well as for the renewal and enlargement of variable capital (see Bauer's own calculations on p. 865), at least except a remainder of 1,167. This 1,167 in consumer goods is all that is left over from the surplus value of the second department. And now Bauer uses this 1,167, not as a sort of down payment on the 4,666 in means of production, but as variable capital for the additional workers, who were needed for the allegedly 'bought' 4,666 in means of production. Whichever way you look at the thing, the capitalists II have used up all their surplus value; they turn out their pockets and cannot find a penny to buy the stored 4,666 in means of production.

^{*} op cit., No. 24, p. 863.

On the other hand, if this purchase had really taken place we would have to find the 4,666 worth of exchange consumer goods in Dept I. But where are they and what does Dept I do with them? Not a word about this from Bauer. The mystical 4,666 in consumer goods which would have to be exchanged at the 'purchase' have disappeared without a trace. Or should we imagine the proceedings as follows: perhaps the capitalists in Dept II possess some spare capital which does not appear in the table; perhaps they have some deposits in the Bank of Germany, and draw 4.666 in money to buy those means of production? Pardon me! It would be an insult to Marx's models if Bauer had thought of that, if he had constructed his tables as illustrations of 'aggregate social capital' with one eye on secret drawers containing capital reserves which he can draw on if his tables don't make any sense. Aggregate social capital is aggregate social capital! There can be no messing about with that. Everything has to be shown honestly, even the bank deposits, and the entire circulation has to take place within the framework of the model, or else the model is not worth the paper it is written on!

The fact remains that the manipulations of Bauer's capitalists are sheer swindles. These gentlemen pretend to be buying and selling 4,666 in means of production, but in reality there are no means with which to buy them. When capitalists I give the remainder of their commodities to capitalists II it is a lovely birthday present. And, in order not to act shabbily, capitalists II reply to this noble gesture with equal high-mindedness; they give the present straight back to their colleagues and even generously add their own remainder of consumer goods worth 1,167 (they would not know what to do with it, anyway). There you are, folks, take it. God bless you, there you have the variable capital to set your superfluous machines in motion. Thus, as the last act of accumulation in Dept I (after it has been ended 'according to plan' in Bauer's view) we still have a new constant capital of 4,666 and a variable capital of 1,167. And Bauer adds, turning towards his audience with a tender smile: voilà.

In this way the total productive value of both spheres, thus also the entire surplus value, is realized . . . similarly, table IV clearly shows that the total productive value of both spheres, including the total surplus value, is realized without disturbance not only in the first year,

but in each subsequent year too. Comrade Luxemburg's assumption that the accumulated part of surplus value cannot be realized is therefore incorrect.*

The result is very nice, but the excitement is somewhat modified by the manipulations that brought it into being. To put it plainly: after the exchange between the two departments has taken place in order to renew and expand the capital, an indigestible remainder of means of production worth 4,666 is left in Dept I, and a similar remainder of consumer goods worth 1,167 is left in Dept II. What are we to do with both of them? First exchange them, at least up to the smaller sum? But there would still be a totally useless remainder in Dept I; we would only have changed the numbers, but not the embarrassment. Secondly, what economic purpose and meaning could this exchange have? What is Dept I to do with the consumer goods it has purchased in this way for its additional workers, as it would not have enough means of production to occupy these workers? Similarly what is Dept II to do with the means of production it has bought, since in this exchange it gave away the consumer goods it would need for its additional workers? Exchange is therefore impossible, the two remainders in the model are unsaleable.

Bauer uses the following tricks to get himself out of this mess. Firstly, he fabricates the 'sale' of the unsaleable remainder of commodities from Dept I to Dept II, without a single word about how the latter pays for it. Secondly, after the fabricated 'sale', he lets capitalists II do something even more original: with the newly acquired means of production they walk out of their own department into the other and invest them there as capital; and thirdly, they take with them their own unsaleable consumer goods, likewise to invest them in the other department as variable capital.

One wonders why Bauer thought up this original transaction instead of simply leaving the surplus means of production in the first department and letting it be used there for expansion, which is what finally happens according to his tricks. However, Bauer would then fall out of the frying pan into the fire; that is, he would have to explain how the necessary variable capital in the shape of 1,167 consumer commodities can be steered from the

second department over to the first. Since this is just not feasible and it is absolutely impossible to use up every single product through exchange, Bauer makes up his confused contraption which makes one's eyes swim, in order to put together these unsaleable remains of the commodities in the first department as the final act of accumulation.

It is certainly a bold idea. Marx was the first in the history of political economy to make the distinction between the two departments of social production and describe it schematically. This is a fundamental concept which put the whole problem of social reproduction on a new basis and made it possible to investigate accurately for the first time.

Marx's distinction and his model, however, assume that only exchange relations exist between the two departments, which is precisely the basic form of capitalist or commodity-producing economy. When working with his model, too, Marx keeps strictly to this basic condition, just as he sticks to all his assumptions with relentless consistency. Bauer comes along and casually hurls Marx's entire analysis to the ground by 'transferring' the commodities backwards and forwards from one department to the other without exchange, and flying about in the rigorous model like a wild goose in the sky, to use a Polish proverb.

Bauer appeals to the fact that, with technological progress, the production of means of production will grow at the expense of the consumer goods production, and the capitalists in the latter department will thus constantly place a portion of their surplus value in the former department in some form or other (through banks, share-holding or founding new enterprises). All this is excellent. However, the 'transfer' of accumulated surplus value from one branch of production to another can only occur in the form of money capital, that form of capital which does not differentiate and is absolute, and is therefore essential for social fluctuation, to initiate the displacements of social commodity production. A load of unsaleable wax candles cannot buy shares in copper mines, nor can a warehouse full of unmarketable rubber shoes set up a new machine factory. The point was to show how general exchange converts capitalist commodities into money capital, which alone enables the fluctuation from one branch of production to the other. Thus, when exchange is no longer pos-

sible, it is pure escapism simply to 'transfer' the unmarketable products into another department of production without exchange.

Equally amazing is Bauer's idea of letting one department of social production participate in the other. Marx's departments do not mean registers of employers' names, but objective economic categories. If a capitalist from Dept II wants to 'set up' and accumulate in Dept I with part of his money capital, that does not mean that the department of consumer commodities is producing in the department of means of production, which is an economic absurdity, but that one and the same person is acting simultaneously as an employer in each of the two departments. Thus in economic terms we are dealing with two capitals, one of which produces means of production, the other consumer goods. For the analysis of the conditions of social reproduction, the fact that both sums of capital belong to one and the same person, and that the surplus value from them both join each other in one pocket. is objectively immaterial. Thus exchange remains the sole connexion between the two departments. Otherwise, if one mixes the two into a shapeless mash, as Bauer does, Marx's rigorous construction, the result of a hundred years of struggle for clarity in political economy, disintegrates; the analysis of the process of reproduction breaks up into the chaos where Sav and similar intellects wandered boldly about in 'thin air'.

Nota bene, at first Bauer himself proceeds from this premise. For example, right at the beginning when he is constructing his tables he says: 'Thus the value of the products of the consumer goods industry must amount to 188,000 in the second year, for the consumer goods can only be exchanged for these amounts of value.'* Similarly, after his tables are complete and accumulation can proceed, he asks: 'Who buys these commodities?'† Thus Bauer himself makes the condition that he will accomplish accumulation by raising the total social amount of commodities. And, finally, after various exchanges, he still has some commodities left in both departments which cannot be exchanged. He then gets himself out of trouble by making both departments give presents to each other and by letting one department participate in the other's production. Thus, at the very point of departure of his

^{*} op. cit., No. 23, p. 837. † op. cit., No. 24, p. 863.

tables, Bauer gives up his own premise and the fundamental premise of Marx's model.

And now a third example.

As is well known, Marx develops his models for the illustration of accumulation on the assumption that constant capital is in a fixed relation to variable capital, and that the rate of surplus value is equally fixed when capital is also growing progressively. In my book I explain, amongst other things, that it is this assumption which cannot be reconciled with real life, and that facilitates the smooth process of accumulation in Marx's models. The mere consideration of technological progress, i.e. of the gradual alteration of the relation between constant and variable capital, and the increase in the rate of surplus value, would, I said, pose insuperable problems for the explanation of accumulation in Marx's models; it would show that accumulation simply cannot be confined to the mutual relations of purely capitalist industry.

Now Otto Bauer, unlike Marx, takes good note of technological progress in his tables, and incorporates it into his calculations in the most explicit way, so that he lets constant capital grow twice as fast as variable capital from year to year. Indeed, as he expounds his theory further he assigns a determining role to technological progress in the variation in the state of business. But what do we see over the page? In the same breath Bauer assumes a fixed and constant rate of surplus value 'to simplify the investigation'.*

Nota bene, scientific analysis can ignore the conditions of reality or combine them at will to simplify the subject, as the occasion demands. The mathematician may lower or raise his equation as he wishes. A physicist may plan experiments in a vacuum to explain the relative speed of fall of bodies. Similarly, the political economist may leave out concrete conditions of economic life for certain purposes of investigation. In the whole of the first volume of Capital Marx proceeds from the assumption that (1) all commodities are sold at their value, and (2) that wages correspond to the full value of labour, an assumption which, as everyone knows, contradicts practice at every step. Marx uses this procedure to show how capitalist exploitation is accomplished even under the most favourable conditions for the workers. His

^{*} op. cit., No. 23, p. 835.

analysis does not cease to be scientifically accurate because of this; on the contrary, it is precisely in this way that he gives us an unshakable foundation for the exact estimation of daily practice and its exceptions.

But what would one say to a mathematician who would multiply one half of his equation by two and leave the other half unchanged or divided by two? What is one to think of a physicist who would compare the relative speed of fall of various bodies, one in an atmosphere and the other in a vacuum? This is how Bauer behaves. Of course, in all his models of reproduction Marx assumes a permanently fixed rate of surplus value, and one can hold that this very assumption is not legitimate for the investigation of the problem of accumulation. Marx, however, did stick rigorously to his assumption, and within the limits of that assumption: he ignored technological progress in every case.

Bauer treats the subject quite differently: like Marx he assumes a fixed rate of surplus value; but unlike Marx he simultaneously assumes strong and continuous technological progress! He brings technological progress into his calculations, but this by no means raises the level of exploitation – two conditions which completely contradict and neutralize one another. He then generously leaves us to test all his calculations on the assumption of an increasing rate of surplus value, which he had at first 'neglected', assuring us that everything would then proceed to the satisfaction of all. It is a pity that Bauer did not consider it worth his trouble to go on to complete this little detail himself, instead of breaking off his ingenious calculations, just like the other calculation experts, and taking leave of us because of urgent delays at the very point where his proof should have begun.*

This at least would be the only way in which an arithmetical 'proof' could have been provided for Bauer's assertion. What he has now provided is no longer an aid for scientific analysis, but quackery, which explains nothing and can prove nothing.

Up till now I have still not touched upon the economic content of Bauer's tables. I have only, with a few examples, attempted to

^{*} Pannekoek, also, after calculating his tables with quickly growing capital but with a constant rate of surplus value, says: 'As above, a gradual alteration in the rate of exploitation comes into consideration too' (Bremer Bürgerzeitung, 29 January 1913). But he too leaves that difficulty to the reader.

demonstrate the methods used by Bauer, and the way in which he keeps to his own conditions. I did not go into his handling of the tables in such detail in order to celebrate cheap victories over the clumsiness of his schematic operations. Many of his pitfalls can easily be avoided by somewhat more ingeniously constructed tables – Tugan-Baranovsky, for example, is a past-master at this – not that this would prove much more about the question. The point, however, is how Bauer uses Marx's models; it is a fact that the confusion which Bauer engenders in his tables betrays all too clearly just how much he could do with Marx's tables.

Bauer's co-expert, Eckstein, can slate him as much as he likes for his 'basic misunderstanding of Marx's models' and his complete 'inability' to work 'with Marx's models'. It is not because I wanted to judge Bauer so harshly, like his Austro-Marxist colleague, that I am not content with emphasizing these few tests, but because Bauer explains naïvely:

Rosa Luxemburg is content to point out the capriciousness of Marx's models – we propose to attempt to look at Marx's thought process in a reasonable manner and to conduct our investigation with a model freed from caprice. This is why we have erected tables here which are no longer capricious, and whose measurements necessarily follow from each other, provided one first presupposes the assumption.*

Now, Bauer will excuse my wanting to stay with the uncorrected Marx and his 'capriciousness' after the tests I have made. We will still have the opportunity at the end to see what difference there is between the mistakes of a Marx and the blunders of his 'expert' epigones.

Bauer, however, is not content to give me instruction, but—thorough man that he is—he also sees fit to explain my mistake. He has discovered the basis of my error: 'Comrade Luxemburg is thus incorrect in her assumption that the accumulated part of surplus value cannot be realized,' he writes, after his tables have worked out 'without remainder' through the above manipulations. 'How can Comrade Luxemburg have come to this incorrect assumption?' And now follows the amazing explanation:

We have assumed that in the first year the capitalists buy the means of production which will be set in motion by the increased labour force in the second year, and that in the first year the capitalists buy the

consumer goods which they sell to the increased labour force in the second year. If we did not assume this, it would in fact be impossible to realize this year the surplus value which was produced in the first year.

And yet again:

Rosa Luxemburg believes that the accumulated part of surplus value cannot be realized. Indeed, it cannot be realized in the *first year* if the material elements of the additional productive capital will not be bought until the second year.*

That is the heart of the matter. I was not aware that, if one wanted to open a factory and put it into production in 1916, one had to construct the necessary buildings, buy the machines and materials and get the provisions in stock for the workers who are to be employed – in 1915. I was under the impression that one founds a business enterprise first and then buys the building site for it, that one employs workers first and then plants the rye which will be baked into bread for them! It is, in fact, ludicrous – for the very reason that such disclosures are served up in the scientific organ of Marxism.

So Otto Bauer really believes that Marx's formulae have something to do with 'years', and the good soul toils through two sides of print to point this out to me in simple language with the help of three-storeyed formulae and Roman and Greek letters. But Marx's models of capital accumulation have absolutely nothing to do with calendar years. Marx was dealing with the economic metamorphoses of products and their connexion in a capitalist economy; he was dealing with the fact that, in the capitalist world, the sequence of the economic processes is: production – exchange – consumption – production again – exchange – consumption, and so on in an endless chain. Because exchange is the unavoidable transitional phase of all products and the sole link between producers, when the commodities are realized is in the first instance irrelevant for profit-making and accumulation; the following two facts, however, are relevant:

- 1. The total capitalist, like each individual capitalist, cannot plan to enlarge production until he has exchanged his quantity of commodities; and
 - 2. The total capitalist, like each individual capitalist, cannot * op. cir., No. 24, p. 866.

plan to enlarge production if there is no indication of an enlarged market.

Where then does the entire class of capitalists find the growing market which is the basis for their accumulation? This was the question. And Bauer finally provides the following detailed elucidation:

In reality the accumulated surplus value is also realized in capitalist society. At all events, the realization is accomplished step by step, gradually. Thus, for instance, the provisions which will be used in the second year to feed the extra number of workers are normally produced in the first year and sold to wholesale capital; thus, part of the surplus value which lies in these provisions will already be realized in the first year. The realization of the other part of the surplus value would then result from the wholesaler selling these provisions to the retailer, who sells them to the workers – thus far our model is a faithful representation of reality.*

At least Bauer gives us a tangible example here of how he imagines surplus value is realized. Whether it be in the first or the second year, this takes place by the manufacturer selling the provisions to the wholesaler, he to the retailer, and finally the small shopkeeper selling them to the extra labour force. Thus it is the workers who, in the last analysis, realize the capitalist's surplus value for him, who help it to turn into hard cash. 'Thus far' Bauer's model is a faithful representation of the range of vision of the individual capitalist and his theoretical Sancho Panza, the bourgeois vulgar economist.

Of course, as far as the individual capitalist is concerned, Fred is as good a consumer of his commodities as Joe, workers are as good as another capitalist, nationals are as good as foreigners and farmers are as good as artisans. To whomever he sells his commodities, the individual capitalist pockets his profit and the employers in the branch of provisions who sell their commodities to the workers rake in as good a profit as the employers in the branch of luxury goods do by selling off their top quality wares, lace, gold articles and diamonds to the fair womanhood of the 'top ten thousand'. But if Bauer, without noticing it in the least, transfers this trite empiricism as regards every individual employer, over to capital as a whole, if he cannot differentiate the conditions

of social reproduction from the conditions of reproduction of individual capital – well then, why on earth did Marx write the second volume of Capital? For the very heart of Marx's theory of reproduction, the decisive achievement of the 'amazing work', as Bauer's colleague, Hilferding, calls it, lies in the fact that Marx had finally extracted out of the chaos of contradictions and fumbling attempts of Quesnay, Adam Smith and their poor imitators who followed them, for the first time and with classical clarity, the fundamental distinction between the two categories: individual capital and aggregate social capital and their movements! Let us examine Bauer's ideas from this point of view in the simplest possible way.

Whence do the workers get the money with which they are to buy the provisions and thus realize the capitalist's surplus value? The individual capitalist does not give a tinker's damn where his 'customer's' mammon comes from, as long as he has some - it can be given, stolen or earned by prostitution. For the entire class of capitalists, however, there remains the unshakable fact that the workers receive the means to satisfy their needs from the capitalists themselves in exchange for labour - in the form of wages. As I have explained above, they receive these in two different forms, according to the conditions of modern commodity production: first as money, then as commodity, in which way the money always returns to its point of departure, the pocket of the capitalist class. This circulation of variable capital completely exhausts the purchasing power of the workers and their contact by way of exchange with the capitalist. Thus, if provisions are allotted to the workers, that does not mean, speaking in social terms, that capital is realizing surplus value, but that it is delivering variable capital in commodities (material wages), thus retrieving its own capital from the previous period in an equal amount of money capital. Thus, according to Bauer's formula, the socalled realization of surplus value consists in the capitalists repeatedly exchanging a portion of new capital in commodity form against an equal portion of capital in money form which already belonged to them! In reality, the class of capitalists does indeed carry out this transaction, since they must bow to the sad necessity of giving their labour force a portion of the total product as means of subsistence, so that they can produce new surplus

value in commodity form. But the capitalist class never imagines that it is 'realizing' its previous surplus value through this process. This was reserved for Bauer to discover.*

At all events, Bauer himself dimly suspects that the conversion of surplus value into variable capital represents anything but 'realization of surplus value'. For instance, he does not say a word about it as long as he is dealing with the renewal of variable capital within the old framework. That clever trick does not start until the 'additional workers' appear. Workers who have already been employed by capital for years simply receive wages - first as money, then as provisions - and produce surplus value in return. However, workers who have been taken on recently with the expansion of operations accomplish even more; they 'realize' the capitalists' surplus value by using the money wage they receive from the capitalists to buy provisions from these same capitalists! Workers in general only realize their own commodity - labour power for themselves and do enough for capital when they produce surplus value. But the so-called 'additional' workers are supposed to accomplish a double miracle for capital: (1) they produce surplus value in commodities, and (2) they actually realize this surplus value in money.

We have finally arrived at the basic concepts of the process of reproduction, just inside the front door of the second volume of *Capital*, and now it becomes very clear that Bauer is not only called upon to explain Marx's second volume, but also to 'free' it

* A little 'expert' in the Dresdener Volkszeitung (of 22 January 1913) has solved the problem of accumulation in a remarkable way. 'Each extra Mark', he tells us, 'which the worker receives creates a new capital investment of ten Marks or more, thus the workers' struggle . . . creates a market for surplus value and makes capital accumulation in their own country possible.' What a clever little boy! The next time one such 'expert' has the brilliant idea of simply writing 'cockadoodledoo' in the middle of an economic observation, he can be dead certain that that too will be printed unchecked as a lead article in the Social Democratic organ. It seems that the esteemed editors, at least those of them with an academic education, who have their hands full with upturning the whole world history in parliamentary waiting rooms and corridors, have for a long time considered it a waste of time actually to get down to reading theoretical books themselves in order to form some kind of opinion about problems which merge. It is much easier to pass that sort of thing on to the nearest scribbler who collates economic reviews out of English, American and other statistical publications.

from contradictions and 'arbitrariness' and to 'express Marx's thoughts in a reasonable way'.

Bauer crowns the general section of his critique of my book with the following passage:

Comrade Luxemburg believes that the commodities which contain $(\alpha + \beta)$ (for common mortals: the commodities containing the surplus value destined for capitalization, R. L.) must be sold outside the capitalist world to make the realization of their surplus value possible. What sorts of commodities are they? They are those means of production capitalists need to expand their productive apparatus and those commodities needed to feed the additional workers.

Astonished at my obtuseness, Bauer exclaims:

If those commodities were thrown out of the capitalist world there would be no production on an expanded scale possible during the following year. Neither the means of production necessary for the expansion of the productive apparatus nor the necessary provisions to feed the increased labour force can be supplied. The elimination of this part of the surplus value from the capitalist market would not make accumulation possible, as Rosa Luxemburg thinks, but rather make any accumulation impossible.*

Again, he states categorically at the end of his article: 'The part of the surplus product which contains accumulated surplus value cannot be sold to the peasants and petit-bourgeoisie in the colonies as it is needed in the capitalist country itself to expand production.'†

Good God, are there words for such thinking, for such criticism! We are back again in the realm of economic innocence on the level of the good old von Kirchmann‡ or the honourable Russian arch-confusionist Woronzow.§ Bauer seriously believes that capitalist commodities disappear altogether if they are 'thrown away' to non-capitalist strata or countries, as if they were tossed into the sea. He did not notice one fact which every child

- * *ibid.*, p. 863. (All emphasis by Bauer.) † *ibid.*, p. 873.
- [‡ Julius Herman von Kirchmann (1802-84). German lawyer, philosopher and politician. For treatment of his ideas see Marx, *Theories of Surplus Value*, pt II (Progress Publishers, Moscow, 1968; Lawrence & Wishart, London, 1969). Also Luxemburg, *op. cit.*]
- [§ V. P. Woronzow (Vorontsov) (1847–1918). Theoretician of Narodnism. See G. V. Plekhanov, *The Development of the Monist View of History* (Foreign Language Publishing House, Moscow, 1956). Also Luxemburg, *op. cit*.

knows these days, that, if commodities are exported, they do not get lost, but are exchanged. Usually other commodities are bought from these non-capitalist countries and strata, which supply the capitalist economy with means of production and consumption! He grandly calls what is everyday reality in the history of capitalism ignorance on my side, and, what is more, highly injurious to capitalism!

This is indeed astonishing. From the 1820s to the 1860s English capitalism 'threw away' coal and iron to the then non-capitalist North and South America; and it did not perish but grew and developed rosy cheeks. German capitalism eagerly exports machines, iron, locomotives and textiles to Turkey, and does not collapse. Rather, it is prepared to set the world on fire to monopolize this trade to an even greater extent. In order to open up opportunities to 'throw away' capitalist commodities to non-capitalist China. France and England conducted bloody wars for three decades in East Asia: the united capital of Europe undertook an international crusade against China at the turn of the century. Trade, exchange with peasants and artisans - non-capitalist producers in Europe - is one of the most common phenomena in every country today, and at the same time, as everyone knows, the unavoidable precondition for the existence of capitalist industry. And there is Otto Bauer suddenly declaring: if capitalists were to 'throw away' into the non-capitalist world the commodities which they and their workers do not consume themselves, accumulation would become impossible! As if capitalist development would be historically possible if capital were dependent solely on self-produced means of production and consumption.

This is how one can get entangled in one's eagerness for theoretical stupidity! But it is characteristic, for this entire 'expert' epigon-tendency of Marxism in theory and practice – and we will find this amply confirmed later on – that they lose all sense of reality by burying themselves in an abstract 'model'; the more boldly they wander around with a stick in the mist of theory, the more miserably they stumble over the glaringly obvious facts of real life.

We have now dealt with Bauer's preliminary points; we are familiar with his methods and procedures. We still have the main thing: his population theory.

THE 'NEW' POPULATION THEORY OF OTTO BAUER

'Every society which grows must expand its productive apparatus every year. This will be a necessity for the future socialist society as much as it is for the present capitalist society, or as it was for the simple commodity-production and peasant economy of the past, which produced for its own need.'*

Here, in a nutshell, is Bauer's solution to the problem of accumulation. In order to accumulate, capital needs a steadily increasing outlet to make the realization of surplus value possible. Where does the outlet come from? Bauer answers: the population in capitalist society grows, like that in any other society, thus increasing the demand for commodities and giving the foundation for accumulation in general. 'In capitalist society there is a need for capital accumulation to adjust to population growth.'† From this central point Bauer deduces the characteristic movements of capital and its forms.

First is the state of equilibrium between production and population, i.e. the median around which the fluctuations take place.

Bauer assumes, for the sake of illustration, that the population grows by 5 per cent annually.

'Variable capital must grow by 5 per cent if the equilibrium is to be maintained.' Technological progress increases constant capital (dead means of production) at the expense of variable capital (wages for the labour force). To stress that fact, Bauer assumes that it grows twice as fast, i.e. by 10 per cent yearly. On this basis he constructs one of his 'incontestable' tables, which we already know about and which now only interest us for their economic content. In these tables Bauer entirely disregards the total social product. He reaches the conclusion: 'The expansion of the field of production, which is a precondition of accumulation, is provided by population growth.'‡

The vital point of this 'state of equilibrium' which allows

^{*} Neue Zeit., 1913, No. 23, p. 834. † op. cit., No. 24, p. 871. ‡ ibid., p. 869.

undisturbed accumulation is conditional on variable capital growing at the same rate as the population. Let us take a short look at Bauer's basic law of accumulation.

In his example, population grows at the rate of 5 per cent per annum, and so variable capital must also grow by 5 per cent. What does this mean? 'Variable capital' is an amount of value, the sum of wages paid to the workers, expressed in a certain amount of money. This can represent different 'otals of goods. In general, assuming technological progress and increasing productivity, a relatively decreasing sum of variable capital corresponds to a constant amount of means of consumption. If population grows by 5 per cent annually, variable capital has only to grow by, let us say, $4\frac{3}{4}$, $4\frac{1}{4}$, 4 per cent, etc., to provide an equal standard of living. And Bauer does indeed assume general technological progress; to express that, he presupposes a growth of constant capital which is twice as fast. Given this assumption, an increase of variable capital parallel with the growth of population is conceivable only in one situation: if, in spite of rapid technological progress in all branches of production – increasing productivity of labour - prices remain unchanged. But that would not only be theoretically the funeral of Marx's theory of value, but also, in practice, incomprehensible from the capitalist point of view: since the lowering of prices is a weapon in the competition struggle, a stimulant for individual capital to become a pioneer of technological progress.

But wait! Must we think that money-wages remain unchanged in spite of increasing productivity and cheapening of provisions, as the workers' standard of living rises with this progression? The social rise of the working class is taken into account in this. But if the rise in the workers' standard of living is so strong that variable capital (sum of money-wages) must grow year after year in exactly the same proportion as the working population, then this means that all the technological progress is for the benefit of the workers alone. The capitalists could neither increase their standard of living nor the rate of surplus value. As we know, Bauer does assume a constant rate of surplus value. He claims that he only assumes it 'for the sake of simplicity' . . . 'to begin with', to help us intellectual dimwits grasp the rung of his theory. But in reality this assumption is the economic foundation of

Bauer's theory, as we can now see, and the entire 'state of equilibrium' is dependent on it. Bauer admits this quite explicitly himself:

Our model (table IV) presupposes that (1) the working population grows by 5 per cent each year, (2) variable capital grows at the same rate as the working class, (3) constant capital (i.e. the cost of dead means of production) grows faster than variable capital to the degree required by technological progress: under these conditions it is not astonishing that there are no difficulties in the realization of surplus value.*

Yes, but these conditions themselves are quite 'astonishing'. For as long as we are not wandering around in thin air but standing on the surface of this capitalist earth, what incentive do the capitalists have to make use of technological progress and to invest ever larger sums in constant capital if the whole benefit is only for the working class? According to Marx, the creation of 'relative surplus value', the increase in the rate of exploitation through the cheapening of the labour force, is the only objective reason for the capitalist class as a whole to promote technological progress; it is the real objective result of the competition of individual capitals, aiming unconsciously for extra profit. Bauer's astonishing assumption is a pure economic impossibility as long as capitalism exists. If we proceed with him, assuming technological progress, i.e. a rise in the productivity of labour, it clearly follows that variable capital, the sum of wages, cannot possibly grow 'at the same rate' as the population. If population grows at a constant rate, variable capital can grow only at a steadily decreasing rate, let us say at $4\frac{5}{6}$, $4\frac{4}{3}$, $4\frac{3}{4}$, $4\frac{1}{2}$ per cent, etc. And in reverse: to make variable capital grow with the regularity of 5 per cent per annum, the population would have to grow at an increasing rate – let us say $5\frac{1}{4}$, $5\frac{1}{2}$, $5\frac{3}{4}$, 6 per cent, etc.

Bauer's law of 'equilibrium' collapses like a house of cards. His theory of 'equilibrium' is constructed on the dilemma of two economic absurdities, both contradicting the essence of capitalism and the purpose of accumulation – either technological progress does not lower commodity prices at all, or the lower prices are only for the benefit, not of accumulation, but of the workers!

Let us take a look at reality. Bauer's assumption of a 5 per cent

growth rate in the population is, of course, only theoretical. He could just as well have chosen 2 or 10 per cent. But *real* population growth is by no means immaterial, since, according to Bauer, capitalist development must adjust to it. On this basic principle rests his entire theory of accumulation. And what is the real population growth, for instance, in Germany?

Growth per annum, according to official statistics, was 0.96 per cent between 1816 and 1864, and 1.09 per cent between 1864 and 1910. Thus, in reality, the rate rose in almost a century from 0.96 to 1.09 per cent – a rise of 0.13 per cent. If we look at the period of large-scale capitalist development in Germany, the annual increase from 1871 to 1880 was 1.08 per cent; 0.89 per cent from 1880 to 1890; 1.31 per cent from 1890 to 1900; and 1.41 per cent from 1900 to 1910. Here, too, there is an increase of a third within forty years. How does that correspond to the rate of growth of German capitalism during the last quarter of the century?

If we look at other capitalist countries we see even better examples. According to the latest census figures the annual population growth is:

	per cent
Austro-Hungary	0.87
European Russia	1.37
Italy	0.63
Rumania	1.50
Serbia	1.60
Belgium	1.03
Netherlands	1.38
England, Scotland and Ireland	0.87
U.S.A.	1.90
France	0.18

One sees that the absolute figure of population growth, as well as the comparison of different countries, gives wonderful figures for the standpoint of the alleged basis of capital accumulation. To find Bauer's hypothetical 5 per cent, just for fun, we would have to emigrate to warmer climates, somewhere like Nigeria or the Sunda archipelago. Indeed, the annual increase of population in the following countries is:

	per cent
Uruguay	3.77
British Malaya	4.18
South Nigeria	5.55
North Borneo	6.36
Hong Kong	7.84

What a pity that those inviting luxurious pastures only exist where there is as yet no capitalist production, and these perspectives shrink to a barren field as soon as we come closer to the family seats of capitalism!

Let us take a closer look at the matter. Bauer says that capital accumulation is dependent on population growth. What about France, for instance? There population growth has steadily decreased; it is now only 0.18 per cent. The population growth is slowly coming to a standstill, perhaps even an absolute decrease is ahead. In spite of that, capital in France happily carries on accumulating: so well, that France can provide the whole world with its capital reserves. In Serbia population increases twice as fast as in England; but, as is well known, capital accumulation is much stronger in England than in Serbia. How does that make sense?

The answer to these doubts only points out our own obtuseness: Bauer's theory is not related to individual countries and their populations. It looks at population in general. The growth of mankind in general is important. Excellent. But then there are even stranger riddles.

It is obvious that the annual increase of 'mankind' is relevant for capitalism only to the extent that mankind consumes capitalist commodities. There is no doubt that the encouraging growth of population in North Borneo or South Nigeria is of little relevance to the accumulation of capital in the near future. Is the increase in the number of customers for capitalism somehow connected to the natural growth of population? One thing is clear: if capital were to wait for the increase of its consumers through natural reproduction, it would still be, at best, in the swaddling clothes of its manufacturing period. In fact, capital does not dream of waiting. Rather, it uses other abbreviated methods to expand the basis of accumulation. Making use of all political means it

attacks (1) barter economy, (2) simple commodity-producing economy. Gradually destroying both, it finds more and more consumers in all parts of the world. But these methods interfere drastically with population growth in the relevant countries and peoples.

The number of consumers can grow while the population decreases. In fact, the capitalist method of producing a world market goes hand-in-hand with decimation and even extermination of whole tribes. This process, still going on, has accompanied capitalist development since the discovery of America: the Spanish in Mexico and Peru in the sixteenth century, the English in North America in the seventeenth, in Australia in the eighteenth century, Dutch in the Malay Archipelago, French in North Africa, English in India in the nineteenth century, Germans in South West Africa in the twentieth century. The wars of European capital to 'open up' China have also led to periodic mass slaughter of the Chinese population, thus unavoidably slowing down their natural growth.

At the same time as the expansion of the base of accumulation in non-capitalist countries is linked with the partial extermination of the populations, it is accompanied by different variations in the population structure in those countries where capitalist production is already rooted.

In the two constituents of the latter (birth rate and death rate) we see two opposed movements in all capitalist countries. The birth rate is generally decreasing. Thus these were the figures for the birth rate in Germany per 1,000 inhabitants: 1871–80, 40·7; 1881–90, 38·2; 1891–1900, 37·3; 1901–10, 33·9; 1911, 29·5; 1912, 29·1. The same tendency is clear when one compares the highly developed countries with the underdeveloped ones. Per 1,000 in Germany there were born: (1911–12) 28·3; in England, 23·8; in France, 19·0; in Portugal, 39·5; in Bosnia and Herzegovina, 40·3; in Bulgaria, 40·6; in Rumania, 43·4; in Russia, 46·8. All statisticians, sociologists and doctors attribute this phenomenon to the effects of big city life, factories, insecurity of existence, cultural improvements, etc. – in short to the effects of capitalist culture.

At the same time, modern developments in science and technology and cultural improvements successfully combat the death rate. Thus in Germany per 1,000 inhabitants, per annum, there

died: 1871-80, 28.8; 1881-90, 26.5; 1891-1900, 23.5; 1901-10. 19.7; 1911, 18.2; 1912, 16.4. Comparing highly developed with backward countries the same picture appears: deaths per 1,000 inhabitants (1911-12) in France, 17.5; in Germany, 15.6; in Belgium, 14.8; England, 13.3; Russia, 29.8; Bosnia and Herzegovina, 26·1; Rumania, 22·9; Portugal, 22·5; Bulgaria, 21·8. Depending on which of the two factors becomes stronger, population grows either faster or slower. But, in any case, it is the development of capitalism with its economic, social, physical and intellectual epiphenomena, it is capital accumulation, which influences the growth of population and not the other way round. In general, the influence of capitalist development leads, sooner or later, to a slowing down of the population growth. The examples of Hong Kong and Borneo, contrasted with Germany and England, and of Serbia and Rumania with France and Italy, are explicit enough.

After all this, the conclusion is at hand. Bauer's theory stands the actual relationship on its head. By subordinating the accumulation of capital to population growth he negates the commonly known fact that capital shapes population: at one point it exterminates it *en masse*, soon it speeds up growth, soon it slows it down – with the general result: the faster the accumulation the slower the growth of population.

A nice quid pro quo this for an historical materialist, forgetting to look at reality and to ask himself: yes, capital accumulation is dependent on population growth, but what does population growth itself depend on?

Friedrich Albert Lange* said in his History of Materialism:

We still have these days so-called philosophers in Germany, who write, in a sort of metaphysical clumsiness, great treatises on the origins of ideas – perhaps even claiming accurate observation by means of the inner sense – without even considering the fact that there are nurseries, perhaps even in their own homes, where one can observe the symptoms of the origin of ideas with one's own eyes and ears.

I do not know whether there are still such 'philosophers' in Germany today. But the species of 'metaphysical clumsiness'

^{[*} Friedrich Albert Lange. Nineteenth-century author of a History of Materialism. See Marx's letter to Dr Kugelmann, 27 June 1870.]

which tries to solve social problems through exact schematic calculations by using the 'inner sense' and forgetting eyes and ears, the world and the nursery, seems to have found the competent 'heirs of classical German philosophy' among the 'experts' of official Marxism.

But things get even more beautiful. Up till now we have been considering the economic conditions of population growth because Bauer appears to be basing his theory of accumulation on this. In reality, his theory has a different basis. When he talks about 'population' and 'population growth' he really refers to the class of wage-workers in capitalist society, and to this alone.

The following quotations are sufficient to prove this: 'We assume that the population grows by 5 per cent each year. If the balance (between production and social requirements) is to be maintained, then the variable capital (i.e. the amount of wages paid) must also grow by 5 per cent each year.'*

If the consumption by the population, on which production is calculated, is equal to the variable capital, i.e. the amount of wages paid, then this 'population' can only refer to the workers. But Bauer himself formulates this quite explicitly: 'The acquisition of provisions for population growth is expressed through the increase in variable capital.'† He states this even more categorically in the following passage, which I have already cited:

Our model assumes, (1) that the working population grows by 5 per cent yearly, (2) variable capital grows at the same rate as the working class, (3) constant capital (i.e. the cost of dead means of production) grows faster than variable capital to the degree required by technological progress. Under these conditions it is not astonishing that there are difficulties in the realization of surplus value.‡

Nota bene, according to Bauer's assumption there are only two classes in society: workers and capitalists. 'For in a society', he says a few lines later, 'which consists solely of capitalists and workers, there is no income for the unemployed proletarian other than earned income,'§ etc. This assumption is by no means incidental; on the contrary, it is highly important for Bauer's attitude to the problem: for his task, like that of the other

† *ibid.*, p. 834. § *loc. cit.*

^{*} op. cit., No. 23, p. 835. ‡ op. cit., No. 24, p. 869.

'experts', is to disprove me by showing that, according to the 'model', capital accumulation is possible and can proceed smoothly even in a society with exclusively capitalist production, consisting solely of capitalists and workers. Thus there are only two social classes in Bauer's theory: capitalists and proletarians. But the growth of capital accumulation is related only to the class of proletarians. First Bauer reduces the population simply to workers and capitalists (with his explicit assumption), then he silently reduces it (with his operations) to workers. These are the 'population' to whose needs capital adapts. Thus, when Bauer takes an annual 'population growth' of 5 per cent as a basis for his schematic exposition, this means that only the population of workers grows annually by 5 per cent. Or perhaps we should see this increase in the proletarian class as only a part of the normal regular increase of 5 per cent annually in the total population? But that would be an entirely new discovery, and professional statisticians have long since proved that in present-day society each class follows its own population laws.

Bauer is not, in point of fact, thinking of a regular increase in the total population. At any rate, this is not valid for his capitalists whose annual growth rate, as can be easily proven, is nothing like 5 per cent.

On p. 835 Bauer gives the following figures for the consumption stock in the four consecutive years: 75,000; 77,750; 80,539; and 83,374. If Bauer assumes that the workers' wages rise with these numbers, then we are justified in assuming that the capitalists' standard of living is at least faring no worse than the workers'; and that their income for consumption is keeping pace with their growth. If that is so, the following figures follow in Bauer's model from the capitalists' consumption, for the resulting annual increase in the capitalist class in the corresponding four years; 5 per cent in the second year; 3.6 per cent in the third; 3.5 per cent in the fourth. If that were to continue, Bauer's capitalists would soon start to die out, which would solve the problem of accumulation in the most peculiar way. But we are not concerned here with the individual fates of Bauer's capitalists; the point here is to establish that Bauer always means growth of the working class when he talks about population growth as the basis of accumulation.

Bauer finally spells it out himself, by explaining on p. 869: 'It (the rate of accumulation) must continue to increase in this way until the equilibrium between the growth of variable capital and population growth has been restored.'

With equal clarity he lays down the general rule once again on p. 871:

In capitalist society the accumulation of capital tends to adjust to population growth. This adjustment is complete as soon as variable capital (i.e. the amount of wages) increases at the same rate as the population of workers, but constant capital grows faster, at a rate required by the development of the productive forces.

Bauer puts it at its simplest at the end of his article, where he summarizes the main points:

To begin with (in an isolated capitalist society, like that on which his model is based) accumulation is limited by the increase of the working population. Since – with a given organic composition of capital – the amount of accumulation is determined by the increase in the number of available workers, etc.*

Thus the whole thing is brilliantly clear: under the pretext of the adjustment of capital accumulation to population growth, Bauer makes capital depend solely on the working class and its natural growth. We say natural growth expressly because in Bauer's society, which knows no middle classes but only capitalists and proletarians, the proletariat is barred from recruiting from the petty-bourgeois and peasant strata and can thus only increase by natural reproduction. Bauer makes this very adjustment to proletarian population into the pivot of the capitalist business cycle. We must examine his theory from this point.

We have seen that the equilibrium between social production and consumption is reached when variable capital, i.e. that part of capital which is set aside for wages, grows as fast as the population. However, the mechanics of capitalist production are continually trying to upset this equilibrium, first downwards – to 'under-accumulation' – then upwards – to 'over-accumulation'. Let us start by considering the first movement of the swing.

If the first 'rate of accumulation' is too weak, says Bauer, i.e. if the capitalists do not put aside enough new capital to be used

in production, the growth of constant capital lags behind that of the number looking for work. 'We can call the state which then appears the state of *under-accumulation*.'* Bauer then describes this state in more detail. The first effect of under-accumulation is the formation of an industrial reserve army. A section of the increased population is out of work. The unemployed proletarians exert pressure on the wages of the employed, wages sink, the rate of surplus value rises.

For in a society consisting solely of capitalists and workers there is no other income for the unemployed proletarians but wage income; wages must sink and the rate of surplus value must rise until the entire working class finds work despite the relatively reduced variable capital. The change which occurs because of this in the distribution of the product is brought about by the fact that, with the increasing organic composition of capital, which expresses technological progress, the value of the labour force has fallen and thus created relative surplus value.

This growth of surplus value provides fresh funds for the capitalists to employ in renewed and stronger accumulation, which results in a more energetic demand for labour: 'Thus, the amount of surplus value which will be used to enlarge variable capital grows too.' It will continue to grow like this 'until the equilibrium between the growth of variable capital and population growth has been restored'.† In this way we are led out of under-accumulation and back to equilibrium. We have described here one half of the pendulum movement of capital; let us take a little more time over this, the first act of the performance.

The state of equilibrium means – let us remind ourselves once again – that the demand for labour and the growth of the proletarian population balance each other; thus the entire working class finds employment for its natural increase. Production is then thrown out of this equilibrium, the demand for work lags behind the growth of the proletariat. What throws it out of equilibrium? What makes the pendulum move past the centrepoint of balance for the first time? Mere mortals find it somewhat difficult to discover this from Bauer's learned gibberish. Fortunately, he comes to our aid with somewhat clearer language on the

next page, where he says: 'The progress towards the higher organic composition of capital always brings about under-accumulation.'*

At least that is clear and to the point. Technological progress, which supplants living labour power by machines and, therefore, periodically slows down the demand for workers, creates an industrial reserve army, lowers wages; in short, it brings about a state of 'under-accumulation'.

Let us confront Bauer with Marx.

- 1. In a state of under-accumulation, says Bauer, 'the value of labour falls', and in this way 'relative surplus value' is formed, serving as a new fund for accumulation. If the use of machines makes 'a portion of the increased population unemployed' and 'wages fall' under the pressure of these unemployed, that still does not mean that 'the value of labour' sinks; it does mean that the price of the commodity labour (the money-wage) falls below its value (i.e. below the standard of living previously attained by the workers) as a result of excess supply. According to Marx, however, relative surplus value does not develop through wages falling below the value of labour because of a decreased demand for workers; on the contrary - and Marx repeats this time and time again in the first volume of Capital - it develops under the explicit condition that the price of labour, i.e. the wage, is equal to its value; in other words, that demand and supply of labour are in equilibrium. According to Marx, it arises under this condition as a result of a cheapening in the cost of maintaining labour, i.e. as a result of the very factor which Bauer omitted when he explained, as we have seen, that it was essential to an 'equilibrium' that 'variable capital grows as fast as the working population'. To put it simply: under the pretext of 'relative surplus value' Bauer in fact simply derives the formation of new capital, with which he intends to provide for future accumulation, from the depression of wages which is forced on the workers by a downward swing in the capitalist pendulum.
- 2. What sort of a remarkable economic law for the movement of wages is it, that they must 'continually fall' 'until the entire working class is employed'? We are now experiencing a curious phenomenon: that the lower the wages fall the higher the level of

employment rises. When wages reach their lowest point the entire reserve army will be absorbed! In real life the normal course of events is quite the opposite; a fall in wages corresponds with growing unemployment, a rise with increasing employment. The industrial reserve army is usually at its largest when wages reach their lowest level, and it is more or less absorbed when wages reach their highest level.

But there are more strange things to come in Bauer's model.

Capitalist production lifts itself out of the valley of death of under-accumulation with a method which is as simple as it is abrupt: when wages are lowest, the capitalist can put aside new earnings (what Bauer, slightly misunderstanding the first volume of Capital, calls 'relative surplus value'). They then provide a new fund for investments, to expand production and raise the demand for labour. Again, we are not on dry land, but adrift in Bauer's 'society'. These days, capital would have to scrape up all its little savings from a general lowering of wages before it dared to start new investments and enterprises! It must wait for wages to sink to their lowest level in order to get new investment capital to expand production! In Bauer's dreamland speculations capitalism has reached the ultimate level of its development, All intermediate strata have been absorbed, only capitalists and proletarians are left. Nonetheless, in this society there are no capital reserves; it still lives from hand to mouth, as in the 'good old days of Dr Aikin' in sixteenth-century England. In that society there are obviously as yet no banks, which here on earth started accumulating huge capital reserves long ago, just waiting for opportunities to invest at all wage levels. The feverish accumulation on this highest level now taking place in all belligerent and neutral countries brings the bitter harvest of world war into their barns of easy profit. This is the most dramatic satire on the anaemic capital of Bauer's fantasy, which relies on a periodic general depression of the labour force to its lowest level in order to pluck up courage for its adventurous accumulation. Bauer repeats himself when describing the 'restoration of equilibrium':

Under the pressure of the industrial reserve army, the rate of surplus value, and with it the rate of social accumulation, will rise *until it is large enough* to increase variable capital at the same rate as the working **population**, in spite of increasing organic composition. As soon as that

point is reached, the industrial reserve army is absorbed (nota bene: for the second time, it was absorbed once before, when wages were at their lowest, i.e. in the most severe 'under-accumulation', R. L.) and the equilibrium between accumulation and population growth is restored.*

The second swing of the pendulum now follows this restored 'state of equilibrium' - upwards, to 'over-accumulation'. Bauer describes this process very simply:

'If the rate of social accumulation rises (due to conscious pressure on wages!, R.L.) the point will be reached where variable capital is growing faster than the population. We call this state the state of over-accumulation.'

That is all: Bauer tells us no more than that about 'overaccumulation'. All we discover is that the rate of accumulation (i.e. formation of capital suitable for investment) 'finally' increases to the point where the demand for labour is greater than the supply. But why must it 'finally' reach this point? Does it follow a physical law of inertia because it is already in the process of rising? Let us envisage what initiated this rise! Wages fell under the pressure of unemployment, resulting in the growth of disposable (?) capital. This growth can only continue until all workers return to employment, and in Bauer's strange society this happens when wages are at their lowest point. But once the entire working population is employed, wages stop falling even in this strange society and, as in real life, they actually start to rise again. And as soon as they begin to rise the rate of 'accumulation' which - according to Bauer - can only grow from that source, must stop increasing. How, then, can it continue to grow towards the 'final' stage of 'over-accumulation' once all the workers are employed? In vain do we wait for an answer.

The *origin* of over-accumulation remains hidden from us, and so does the last act of the performance: the process by which over-accumulation is overcome and the state of equilibrium restored.

'If the rate of accumulation is too high (of course: in relation to the labour force and its growth, R.L.) then the reserve army is soon absorbed, wages rise, the rate of surplus value sinks.' This results in an even more rapid fall in the rate of profit than would otherwise be the result of increasing organic composition of

capital. This gives rise to 'a disastrous crisis, large-scale unemployment of capital, mass destruction of values and a sudden slump in the rate of profit', and once again we fall back into 'under-accumulation', since accumulation drops and 'the growth of variable capital again falls behind the population growth'.*

But why on earth does the 'disastrous crisis' occur at the height of over-accumulation? For Bauer, over-accumulation means only that variable capital increase: faster than the population. More simply: the demand for labour is greater than the supply. And that causes a crisis in industry and commerce? Bauer avoids explanation, bringing a quotation by Hilferding to his aid: the crisis occurs 'when the previously described tendencies of a falling rate of profit grow stronger than the tendencies which have caused increases in prices and profits because of rising demand'. This quotation of Hilferding's explains nothing as far as Bauer is concerned, since it is not an explanation, but a complicated description of the crisis — and it breaks into Bauer's speculations like a fox into a chicken run.

Bauer never mentions a rising or falling 'demand' for commodities which might cause 'increases in prices and profits'. Bauer only sees the interaction of two figures: variable capital and the proletariat, i.e. 'population'. He never mentions demand for commodities or markets and their problems. Over-accumulation is nothing but a surplus of variable capital (i.e. demand for workers) in relation to its natural growth. This is the only 'demand' Bauer deals with. And that should cause a 'disastrous crisis'? This trick we want to see!

Certainly also, on our plain earth the outbreak of a crisis follows a situation where demand for labour is very strong, and wages rise. But in reality this phenomenon is not the cause of the crisis, but only its 'stormy petrel', as Marx calls it in the second volume of Capital; it is a mere subsidiary factor to circumstance, the relationship between production and the market.

In whatever way one tries to explain periodic crises theoretically, in reality they obviously stem from disproportions between production, i.e. the supply of commodities, and market, i.e. demand for commodities. The question of markets does not even exist for Bauer: his periodic crises stem from maladjustment

between demand for labour force, and the natural multiplication of the working class. Because workers do not reproduce as rapidly as the increasing demand of capital requires, a 'disastrous crisis' occurs. The periodic lack of labour is the sole cause of economic crises – that, indeed, is one of the most astonishing discoveries of Nationalökonomie,* not merely since Marx but since William Petty.†

Now we have seen capital in all its phases, and Bauer proceeds to make this conclusion of harmony:

'Capitalist production carries in itself the mechanism to bring up the retarded rate of accumulation to the level of population growth' (i.e. growth of the working population). And again he stresses:

Looking at the capitalist world economy as a whole, the tendency of accumulation to adjust with the growth of population appears as a cycle. Prosperity is over-accumulation, it destroys itself in the crisis. The following depression is a time of under-accumulation; it restores itself, as depression itself creates the conditions for a return to prosperity. The periodic return to prosperity, crisis and depression is the empirical expression of the fact that the capitalist mode of production automatically overcomes over- and under-accumulation, and accumulation of capital is again and again adjusted to the growth of population.

There can no longer be any mistake. Bauer's 'mechanism' rests simply on the following: at the centre of capitalist world economy is the working class. Economic life revolves around the axis of the working population and its natural growth. At one point variable capital is too small to employ all proletarians, and so it initiates growth through lower wages. At another time capital is over-extended and cannot find sufficient labour; it destroys itself in a crisis. In each case the entire movement of production

^{[*} Usually translated as 'economics', but the German term has certain connotations which make literal translation impossible, Ed.]

^{[†} William Petty (1623-87). Called by Marx the founder of political economy. Born into a poor weaving family in Hampshire, he led a very varied career as seaman, hawker, physician, professor of anatomy and music. Educated partly in France at a Jesuit college and at Oxford. Wrote numerous works on political economy, e.g. Political Arithmetick, Political Anatomy of Ireland, A Treatise of Taxes and Contributions.]

[‡] ibid., p. 872. (All emphasis by Bauer.)

is a constant effort to adjust to the number of workers and their natural reproduction.

That is the quintessence of Bauer's 'mechanism', his complicated mathematical tricks and explanations.

The reader, well-read in Marxism, may already guess what Copernican effort hides behind Bauer's theory of accumulation. But before we can fully appreciate this effort, we must see how Bauer can easily explain any feature of capitalist world economy:

The tendency of adjustment of accumulation to increases in population, controls international relations. Countries with a constant over-accumulation invest a large and growing part of their annual surplus value in foreign lands. Example: France and England. (Germany too, I hope, R. L.) Lands with constant under-accumulation draw capital from foreign countries and provide them with labour. Example: the agrarian countries of Eastern Europe.*

How well it all works, clear and to the point. One can almost see the smiling satisfaction with which Bauer, with the help of his newly won principle, solves, like a children's game, the most entangled problems. Let us enter into this game by touching on a few points.

There are countries 'with constant over-accumulation' and countries 'with constant under-accumulation'. But what is over-accumulation? What is under-accumulation? The answer follows on the next page: 'prosperity is over-accumulation, under-accumulation is depression'. Therefore there are countries with constant prosperity: England, France, Germany; and states with constant depression, the agrarian countries of Eastern Europe. Is it not wonderful? Second try: what is the cause of under-accumulation? The answer is on the previous page: 'The progress towards higher organic composition (simple: technological progress) leads to under-accumulation'. Countries with constant under-accumulation therefore must be the technologically most advanced—the agrarian countries of Eastern Europe. Countries with constant over-accumulation must be the countries with the slowest and weakest progress: England, France and Germany. Wonderful, is it not?

The crowning point of all seems to be North America. It has, at the same time, 'constant over-accumulation' and 'constant

under-accumulation', energetic technological progress and slowest progress, constant prosperity and constant depression. It draws — what a miracle — capital and labour force, simultaneously and all the time, from other countries. . . .

Let us confront Bauer's 'mechanism' with Marx.

The quintessence of Bauer's theory is the adjustment of capital to the population and its growth. Over-accumulation means for Bauer that capital grows faster than does the proletariat; under-accumulation – that it grows slower. But what do we find in Marx? Bauer includes a paragraph from the third volume of Capital, where Marx deals with over-accumulation, in order to give the impression that his own theory is simply an 'unobjection-able' interpretation of Marx:

As soon as capital would, therefore, have grown in such a ratio to the labouring population that neither the absolute working-time supplied by this population, nor the relative surplus working-time. could be expanded any further (this last would not be feasible at any rate in the case when the demand for labour were so strong that there were a tendency for wages to rise); at a point, therefore when the increased capital produced just as much, or even less, surplus value than it did before its increase, there would be absolute over-production of capital; i.e. the increased capital $C + \Delta C$ would produce no more, or even less, profit than capital C before its expansion by ΔC . In both cases there would be a steep and sudden fall in the general rate of profit, but this time due to a change in the composition of capital not caused by the development of the productive forces, but rather by a rise in the money value of the variable capital (because of increased wages) and the corresponding reduction in the proportion of surplus labour to necessary labour.*

Bauer adds to this quotation: 'This point is the absolute limit of accumulation. Once it is reached, the adjustment of accumulation to growth of population brings about a "disastrous crisis",' etc. He thus makes the average reader assume that Marx's and his own theory are basically the same, only Bauer says it more concisely, using his own words.

Immediately before the passage quoted by Bauer Marx says: 'This plethora of capital arises from the same courses as those

^{*} Marx, Capital, Vol. III, pp. 246-7.

which call forth relative over-population, and is, therefore, a phenomenon supplementing the latter, although they stand as opposite poles – unemployed capital at one pole and unemployed worker population at the other.'* Marx is saying quite the opposite to Bauer: surplus of capital and surplus of working population both at the same time – result from the same, third circumstance. In the same chapter from which Bauer took his quotation on pp. 246-7, Marx says:

It is no contradiction that this over-production of capital is accompanied by more or less considerable relative over-population. The circumstances which increased the productiveness of labour, augmented the mass of produced commodities, expanded markets, accelerated accumulation of capital both in terms of its mass and its value, and lowered the rate of profit – these same circumstances have also created, and continuously create, a relative over-population, an over-population of labourers not employed by the surplus-capital owing to the low degree of exploitation at which alone they could be employed, or at least owing to the low rate of profit which they would yield at the given degree of exploitation.†

On the same page Marx says farther on

If capital is sent abroad, this is not done because it absolutely could not be applied at home, but because it can be employed at a higher rate of profit in a foreign country. But such capital is absolute excess capital for the employed labouring population and for the home country in general. It exists as such alongside the relative over-population, and this is an illustration of how both of them exist side by side, and mutually influence one another. \$\frac{1}{2}\$

That is clear enough. And what is the title of this chapter of Marx? 'Excess Capital and Excess Population' (Capital, Vol. III, p. 245).

And there Bauer has the idea of taking a quotation from that chapter and adding on a sentence in order to give the impression he was simply illustrating Marx's thoughts. This chapter heading alone is strong enough to make Bauer's edifice crumble. Bauer's 'over-accumulation' and Marx's over-accumulation are two quite different economic terms, in fact opposites.

Bauer's over-accumulation is identical to prosperity, the highest demand for labour, the absorption of the industrial reserve army.

^{*} ibid., p. 246.

Marx's excess capital is equivalent to excess of workers, highest unemployment; over-accumulation means crisis and depression. Bauer declares: periodically there is too much capital, because there are too many workers. Marx says: periodically there is too much capital and as a result of that too many workers. In relation to what is there 'too much' of both? In relation to the market under 'normal' conditions. As the market for capitalist commodities periodically grows too small, capital must remain unemployed and consequently part of the labour force as well. The connexions of economic causes and effects are as follows: the market for capitalist goods is the starting point at all times. On this and its movements the amount of variable capital depends. And on that depends the number of unemployed workers. In the third volume of Capital Marx clarifies that repeatedly. Thus on p. 240, where he deals with the 'internal contradictions' of capitalist production which adjusts itself 'through expansion of the outlying field of production'. Bauer also cites 'the expansion of the production field' as essential for accumulation, and adds his idée fixe: 'The field of production is expanded by the growth of population.'* But Marx clearly states what he considers to be 'expansion of the outer field of production'. The 'market must, therefore, be continually expanded'.† Again on p. 250, after describing the crisis and its recovery: 'And thus the cycle would run its course anew. Part of the capital, depreciated by its functional stagnation, would recover its old value. For the rest the same vicious circle would be described once more under expanded conditions of production, with an expanded market and increased productive forces.'

And as we saw, on pp. 250-51:

The circumstances which increased the productiveness of labour, augmented the mass of produced commodities, expanded markets, accelerated accumulation of capital both in terms of its mass and its value and lowered the rate of profit – these same circumstances have also created and continuously create, a relative over-population, an over-population of labourers not employed by the surplus-capital...

It is clear that 'expansion of the outlying field of production' means the market and not the growth of the working population.

^{*} Bauer, op. cit., p. 872.

[†] Marx, op. cit., Vol. III, p. 240.

The expansion of the market is accompanied by excess of workers, increase of the army of the unemployed, shrinking of the purchasing power of the working class.

Again, on pp. 251-2:

To say that there is no general over-production, but rather a disproportion within the various branches of production [then –] It furthermore amounts to demanding that countries in which capitalist production is not developed, should consume and produce at a rate which suits the countries with capitalist production.

Here Marx literally states that the crisis does not result from disproportionality in disposable capital and disposable labour force, but from the disproportionality of exchange between capitalist and non-capitalist countries. He even claims this exchange to be the natural basis for accumulation. And a few lines further on: 'How could there otherwise be a shortage of demand for the very commodities which the mass of the people lack, and how would it be possible for this demand to be sought abroad, in foreign markets, to pay the labourers at home the average amount of necessities of life?' Here he states very clearly that the rate of employment in capitalist countries depends on the possibility of finding 'foreign markets' for capitalist commodities.

All this says enough about Bauer using quotations from Vol. III. But he goes on to quote from *Theories of Surplus Value*, Vol. II, p. 477; 'Population increase appears as the basis of accumulation as a continuous process.' Could that be Bauer's theory in a nutshell? Well, again, he just picked a raisin out of the cake. The whole passage reads rather differently. Marx investigates here the conditions of the 'Transformation of Revenue into Capital', i.e. the productive investment of surplus value. He explains that the additional portion of capital must be converted into one larger part of constant capital and one smaller part of variable capital.

To begin with, a portion of the surplus value (and the corresponding surplus product in the form of means of subsistence) has to be transformed into variable capital, that is to say, new labour has to be bought with it. This is only possible if the number of labourers grows or if the labour time during which they work is prolonged.*

^{*} Marx, Theories of Surplus Value, Vol. II, p. 477.

The latter happens when workers who are only employed for part of the time become fully employed, or when the working day is extended beyond its normal length. Also, additional strata of the proletariat, who have not yet worked productively, may be required: women, children, paupers.

Finally (says Marx), together with the growth of the population in general, the labouring population can grow absolutely. If accumulation is to be a steady continuous process, then this absolute growth in population – although it may be decreasing in relation to the capital employed – is a necessary condition.*

And now comes the little sentence extracted by Bauer: 'An increasing population appears to be the basis of accumulation as a continuous process.'

This is what Marx says on the very same page of *Theories of Surplus Value* as Bauer brings on to the field as a classic witness for his 'mechanism'. If there is anything the reader must immediately grasp from this quotation, it is that Marx's reasoning is as follows: if accumulation, i.e. expansion of production, is to take place, then additional labour is also needed. Thus there can be no constant expansion of production without an increasing working population. Even the simplest worker can understand that. In this sense, 'an increasing population appears to be the basis of accumulation'.

But Bauer's question was not whether an increase in the working population was needed for accumulation (no one ever denied that), but whether it is a sufficient condition. Marx says: accumulation cannot take place without an increasing population. Bauer changes this to read: an increasing working population is sufficient for accumulation to take place. Here, Marx presupposes accumulation, he assumes the possibility of an easy market; what he is investigating are the forms in which accumulation occurs, and there he finds that the increasing labour force is, among other things, necessary. Bauer takes the increase in the number of workers as a given factor, on account of which and according to which production expands with no further concern about the market! This is the same inversion of Marx's thought as in the classic quotations from the third volume of Capital.

But perhaps we are reading too much into Marx's quotation; perhaps Bauer could give Marx's words his own interpretation, or shall we say misinterpretation? And yet it is quite puzzling how anybody can misunderstand Marx on this point, providing they have read the chapter properly. For a few pages farther on he articulates his basic thought and the real problem of his analysis in the following clear words:

'The question has now to be formulated thus: assuming general accumulation (Marx's emphasis), in other words, assuming that capital is accumulated to some extent in all branches of production – this is in fact a condition of capitalist production . . . — what are the conditions of this general accumulation, what does it amount to?' And he answers: the conditions are 'that labour power was bought with one part of the money capital and means of production with the other'.*

And at the same time, to clear up any doubt, as if he had a premonition of his 'expert' pupils, he adds:

We disregard here the case in which more capital is accumulated than can be invested in production, and for example lies fallow in the form of money at the bank. This results in loans abroad, etc., in short speculative investments. Nor do we consider the case in which it is impossible to sell the mass of commodities produced, crises, etc. This belongs to the section on competition. Here we examine only the forms of capital in the various phases of its process, assuming throughout that the commodities are sold at their value.†

Thus, Marx assumes the expansion of the market, the possibility of accumulation, and only investigates what follows from that. One result is the employment of new workers, and for that an increase in the working population is necessary. From this Bauer deduces: in order for accumulation to take place, it suffices that the working population grows, indeed accumulation takes place because the working population grows. The objective purpose and aim of accumulation and its 'mechanism' is to adjust to the growth in the working population.

Man has to breathe air as a condition of his existence. Conclusion à la Bauer: man lives on air, he lives in order to breathe air, his entire life process is nothing but the 'automatic' adjustment

^{*} *ibid.*, p. 483. † *ibid.*, p. 484. (My emphasis, R. L.)

of his bodily mechanism to inhalation and exhalation. Such are the wonderful results reached by running about with one's stick in the air of abstract stupidity!

But the fun ends here, for the matter is anything but funny. He is not dealing with little me and my book any more, but with the elementary concepts of Marx's own teaching. We can now leave the steep and misty heights of the third volume and *Theories of Surplus Value* which, with a few exceptions, are unfortunately hardly known to the Marxist public. We return to the first volume of *Capital*, which has so far formed the actual economic basis of social democracy. Here every reader who is familiar with the first volume of Marx's *magnum opus* can easily examine Bauer's theory for himself: he need only open the twenty-fifth chapter to read on p. 637:

'For modern industry with its decennial cycles . . . that would indeed be a beautiful law, which pretends to make the action of capital dependent on the absolute variation of the population, instead of regulating the demand and supply of labour by the alternate expansion and contraction of capital,'* i.e. according to its requirements. Marx means the old 'dogma' of bourgeois economy; the so-called wage fund. It took the available social capital as a quite specific, given amount and made the employed workers dependent on their natural growth. Marx polemicizes against this 'dogma' in detail, and in the process accidentally delivers one rebuke after another to his 'expert' pupil.

On p. 640 he teaches him:

The demand for labour is not identical with increase of capital, nor supply of labour with increase of the working class. It is not a case of two independent forces working on one another. Les dès sont pipés. Capital works on both sides at the same time. If its accumulation, on the one hand, increases the demand for labour, it increases on the other the supply of labourers by the 'setting free' of them . . . †

In Bauer's 'mechanism' the industrial reserve army develops as a consequence of retarded, too slow, accumulation. He says categorically: 'The first effect of under-accumulation is the formation of an industrial reserve army.' The smaller the capital accu-

^{*} My emphasis, R. L.

[†] My emphasis, R. L.

[‡] Bauer, op. cit., p. 869.

mulation, the larger the reserve army. This is what Bauer says. Four pages after the above-cited quotation Marx teaches him:

The greater the social wealth, the functioning capital, the extent and energy of its growth, and, therefore, the absolute mass of the proletariat and the productiveness of its labour, the greater is the industrial reserve army. The same causes which develop the expansive power of capital, develop also the labour-power at its disposal.*

On the same page Marx says sarcastically: 'The folly is now patent of the economic wisdom that preaches to the labourers the accommodation of their number to the requirements of capital. The mechanism of capitalist production and accumulation constantly effects this adjustment.'†

Which is the greater 'folly': the old bourgeois one, which preaches to the workers to adjust their reproduction to capital, or the new 'Austro-Marxist' one, which tells the workers that capital always adjusts to their numbers? I believe the latter is worse. The old 'folly' was only the incomprehending subjective reflection of real relations, while the new one turns reality upside down.

Throughout the chapter dealing with the labouring population and its growth Marx talks about 'requirements' of capital. Demand for labour, wage levels, prosperity or crisis all depend on these. What are these 'requirements' which Marx mentions all the time and Bauer not once in his entire 'mechanism'?

In the same chapter Marx talks continuously about capital's 'sudden expansions', to which he attributes primary importance in the movement of capital accumulation as well as that of the working population. Indeed, the sudden and limitless ability to expand is, according to Marx, a characteristic feature of modern industrial development. What are we to understand by these 'sudden expansions' of capital, which were so important for Marx and which Bauer does not even mention?

Marx gives a clear answer to both questions at the beginning of the same chapter [on p. 613]:

"... since lastly, under special stimulus to enrichment, such as the opening of new markets, or of new spheres for the outlay of

^{*} Marx, op. cit., p. 644. (My emphasis, R. L.)

[†] My emphasis, R. L.

capital in consequence of newly developed social wants, etc., the scale of accumulation may be suddenly extended. . . . **

And again in more detail, on p. 632:

With accumulation, and the development of the productiveness of labour that accompanies it, the power of sadden expansion of capital grows also; it grows, not merely because the elasticity of the capital already functioning increases, not merely because the absolute wealth of society expands, of which capital only forms an elastic part, not merely because credit, under every special stimulus, at once places an unusual part of this wealth at the disposal of production in the form of additional capital. . . . The mass of social wealth, overflowing with the advance of accumulation, and transformable into additional capital, thrusts itself frantically into old branches of production, whose market suddenly expands, or into newly formed branches, such as railways, etc., the need for which grows out of the development of the old ones. In all such cases, there must be the possibility of throwing great masses of men suddenly on the decisive points without injury to the scale of production in other spheres. Over-population supplies these masses.†

Here Marx does not only explain how these sudden expansions of capital take place – namely, as a result of sudden expansion in the markets – but he also formulates the special function of the industrial reserve army: to be 'available' for those extraordinary sudden expansions of capital. Here Marx sees the most important, the actual function of the industrial reserve army, for which he calls it an existential condition of modern capitalist production. The formation of industrial over-population is 'the lever of capitalistic accumulation, nay, a condition of existence of the capitalist mode of production. . . . The whole form of the movement of modern industry depends, therefore, upon the constant transformation of a part of the labouring population into unemployed or half-employed hands. '‡ Marx formulates his opinion most clearly and concisely on p. 450:

So soon, in short, as the general conditions requisite for production by the modern industrial system have been established, this mode of production acquires an elasticity, a capacity for sudden extension by leaps and bounds that finds no hindrance except in the supply of raw material and in the disposal of the produce.§

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* My emphasis, R. L. † My emphasis, R. L. 

‡ ibid., p. 632-3. (My emphasis, R. L.) 

$ ibid., p. 450.
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How does Bauer deal with all this? There is no room for sudden expansions of capital in his 'mechanism', thus no room for its elasticity. There are two reasons for this: firstly, as production depends only on the working population and its growth, markets are of no importance. The population, growing through natural reproduction, of course shows no sudden expansion. The working population periodically causes rapid growth of the industrial reserve army, but for Bauer that happens in times of 'underaccumulation', of the slowest increase, of the shortage of disposable capital in relation to the working class.

Secondly, sudden expansion not only means sudden expansion of markets, but also of already accumulated disposable capital reserve, that reserve, which, as Marx says, 'credit, under every special stimulus, at once places . . . at the disposal of production in the form of additional capital'. Bauer excludes that possibility: in his 'mechanism' a recovery from the phase of 'under-accumulation' can only occur when the pressure from unemployment allows new accumulation by depressing wages!

As the sudden expansion of capital remains, like the outbreak of crises, inexplicable from Bauer's standpoint, the industrial reserve army has no actual function in it. It appears as a product of technological progress, but has no role apart from that mentioned by Marx in his second plan: to depress wages by weighing down the employed. What makes it, according to Marx, an 'existential condition', the 'lever' of capitalist production, Bauer does not notice. The humorous process of being absorbed three times in the run of an industrial cycle proves that Bauer does not know what to do with the reserve army: first, at the lowest point of 'under-accumulation', then at the peak of 'over-accumulation', and again at the state of equilibrium.

These miracles have a simple reason: for Bauer the movement of the working population is not caused by capital and its requirements (as for Marx and in reality) but vice versa. The entire movement of capital revolves round the working population. According to Bauer, capital acts like the hare and the hedgehog: it is always gasping for breath behind the working population, sometimes overtaking it in the middle, at others falling behind it, and at the end always hearing: Hey, I got here before you!

For Marx, the theory that the working population completely

adjusts to capital and its market prospects is the basic thought of the entire last section of the first volume. In forty pages, pp. 609-648, he carefully explains this important economic discovery. That is the absolute general law of capital accumulation, he emphasizes in conclusion. Then 'illustrations' follow, filling another sixty-five pages. What does he show from the example of England as the typical and leading country of capitalist production? - while the annual growth of the population in England constantly decreased from 1811-61, the wealth, i.e. capitalist accumulation, expanded by leaps and bounds! Marx proves that with innumerable and varied statistical facts.

Perhaps Bauer will interject: This huge increase of nineteenthcentury English industry was, of course, not calculated for the English population alone and must not be compared with it alone as the economic basis. Note the English sales to the North American Unión, Central and South America; note the periodic crises in English industry between 1825 and 1867, following the expansion of markets in those countries! Brilliant! But if Bauer knows that, then he knows everything, then he also knows that this theory of the adjustment of accumulation to population growth is nonsense, then he knows what Marx wanted to prove in the first volume of Capital, that the working population adjusts to the accumulation of capital and its changing requirements. This is the culminating point of the first volume of Capital. Marx compiles the spirit of his theory of capitalist exploitation, the primary relation between capital and labour, and the special 'law of population' in the capitalist period.

Along comes Bauer, who turns this whole edifice upside down and tells the world that the entire movement of capital results from the tendency to adjust to the increase of the working population! In terms of content Bauer's theory is a soap bubble.

Correct him by assuming with Marx a permanent formation of the industrial reserve army (whose function it is to satisfy the demands of capital even in times of the greatest prosperity), and his specific 'over-accumulation' is finished.

Correct him by assuming with Marx a constant relative decrease of variable capital in relation to the number of workers as a result of technological progress, and his 'equilibrium' is finished.

His theory vanishes into thin air. But more than the pretentious-

ness of this construction is the basic idea behind it: the alleged tendency of capital to adjust its movement to the working population. This casts the very spirit of Marx's theory to the wind. And to think that this pedantically puzzled out system of hairraising nonsense could be published in the official organ of Marxist theory! Eagerly fighting for a good cause - an insolent heretic was to be burnt - they did not notice that they were attacking somebody bigger! General control and public criticism keep watch over the natural scientists. Anyone who claimed to give the exact calculation for the movement of all stars around the earth, in order to explain modern astronomic systems, would not be taken seriously. Such an idea would not even come to the attention of the public, since no editor of a scientific journal would let such nonsense pass. Under the regime of the 'Austro-Marxist' diadoches* such things can easily happen. Pronounced from that rostrum, Bauer's theory of accumulation is not a common error, such as can occur in the quest for scientific knowledge. It is, quite apart from its position towards my book, a disgrace to present official Marxism and a scandal for Social Democracy.

[* successors.]

BAUER'S 'PRACTICAL' CONCLUSIONS

This is the limit of Bauer's own explanation of capital accumulation. What is its practical conclusion? Bauer expresses it as follows:

The result of our investigation is (1) that capital accumulation is possible even in isolated capitalist society, provided that it does not extend beyond a certain defined limit (i.e. the growth of the working population, R. L.); and (2) that the mechanism of capitalist production itself automatically brings it back to this limit.*

Immediately afterwards, Bauer summarizes the quintessence of the practical application of his theory in a concluding chapter, where we read:

Comrade Luxemburg explains imperialism in the following way: the conversion of surplus value into capital would be impossible in an isolated capitalist society. This is possible only if the class of capitalists expands its market continuously, so that it can sell that part of the surplus value which contains the accumulated part of surplus value in areas as yet without capitalist production. This is the object of imperialism. As we have seen, this explanation is incorrect. Accumulation is both possible and necessary even in isolated capitalist society.†

Thus Bauer, by way of a diversion in the form of a newly discovered 'population theory', clings like the other 'experts' to his proof that capitalist production and accumulation can thrive even under conditions which no mortal being has yet set eyes upon. And he thinks he can use this as a basis for an approach to the problem of imperialism!

Let us make one thing clear: in the process of appearing to defend Marx's ideas as expressed in the second volume of *Capital* against me, Bauer once again ascribes to Marx a discovery which runs directly counter to Marx's assumption.

Marx was definitely not dealing with an 'isolated capitalist society' and its simultaneous coordinate assumption of the

* Neue Zeit, 1913, No. 24, p. 873. † loc. cit. (My emphasis, R. L.)

existence of other, non-capitalist societies, and I have never referred to such a society. This tasteless picture appeared for the first time, like Venus from the waves, in Otto Bauer's theoretical imagination. Let us remind ourselves how Marx formulated his premise. In the first volume of *Capital* he expressly states his intention of assuming, 'in order to examine the object of our investigation in its integrity, free from all disturbing subsidiary circumstances', that 'the whole world (is) one nation', which formed an economic whole and 'that capitalist production is everywhere established and has possessed itself of every branch of industry'.* And in the second volume he states equally explicitly that his investigation of accumulation is based on 'the general and exclusive domination of capitalist production'.†

That is very explicit. Thus Marx did not assume the childish fantasy of a capitalist society on Robinson Crusoe's island which secretly thrives 'isolated' from continents of non-capitalist peoples, of a society in which capitalism has developed to the highest possible level (since the population consists solely of capitalists and workers), which knows nothing of either artisans or peasantry and has absolutely no connexion with the surrounding non-capitalist world. Marx's premise is no fantastic absurdity, it is a scientific fiction. In fact, Marx presupposes the real tendency of capitalist society. He assumes that the state of total and universal rule of capitalism has already been reached, that highest development of the world market and world economy which capital and every present economic and political development is in fact heading for. Thus, Marx is placing his investigation on the tracks of the real historical tendency of development, whose final goal he takes as already reached. Scientifically speaking, this method is quite correct and, as I have shown in my book, completely sufficient for the investigation of the accumulation of individual capital, even if, as I believe, it becomes incorrect and misleading when applied to the main problem: the accumulation of aggregate social capital.

Bauer, on the other hand, produces the grotesque picture of an 'isolated capitalist economy' with no intermediate strata, no artisans and no peasants, which never has existed and never will, and which has nothing to do with reality and the tendency of

^{*} p. 581, footnote.

[†] p. 348. (My emphasis, R. L.)

development; a creation, therefore, whose ingenious 'mechanism' contributes as little to clarifying the laws of capitalist accumulation as Vaucanson's* famous mechanical models did to explaining the physiology and psyche of the human organism. Until now only bourgeois economists employed the naïve device of an 'isolated economy', using this puppet to demonstrate the laws of global capitalist production. Nobody mocked the bourgeois 'Robinsonians' as cruelly as Marx. And to cap it all, Bauer's Robinsonian escapades are meant to explain Marx and put him on an 'objective basis'.

But Bauer has good reasons for his 'explanation'. For if, like Marx, one assumes that the 'general and exclusive domination of capitalist production' has already been universally attained, one excludes imperialism and no explanation can be found for it, since it has already been historically overtaken, killed and buried by the very assumption. Under this assumption one can as little describe the process of the imperialist phase as, for instance, one can portray the collapse of the Roman Empire under the assumption of the already existing general rule of feudalism in Europe. Faced with the task of uniting present-day imperialism with the theory of accumulation as sketched in the fragment in the second volume of Capital, the 'expert' epigons should have opted for one of the following: either deny that imperialism is a historical necessity or, as I do in my book, reject Marx's premise as mistaken and investigate the process of accumulation under historically given conditions: as capitalist development continuously interacting with a non-capitalist environment. A man like Eckstein, who has understood nothing about the matter in hand, is obviously not faced with the difficulty of choosing between the two alternatives. But Otto Bauer, who eventually saw the trap, finds his solutions, as a typical representative of the 'Marxist centre', in a compromise: capitalism can indeed thrive on Robinson Crusoe's island, but there is still a 'limit' to its thriving in isolation, and it can only overcome this limit by trading with the non-capitalist environment. 'There is a kernel of truth behind the false explana-

^{[*} Jacques Vaucanson (1709-82). French inventor. Invented the first mechanical loom, also a mechanical 'human' flute player and a mechanical duck that swam, quacked, flapped its wings and ate food, and many other mechanical devices.]

tion (i.e. mine, R. L.), 'he announces in conclusion. 'Accumulation is not impossible in an isolated capitalist society, but it is placed within limits. Imperialism in fact serves to expand these limits. This urge is, in fact, one of the roots of imperialism, but not the

only one.**

Thus Bauer himself did not consider his Robinsonian notion of an 'isolated capitalist economy' to be sufficient as a scientific premise, i.e. as a serious single basis for investigation; on the contrary, he constructed it with one eye looking ahead to the other, non-capitalist countries. He treated us to a fulsome dissertation on the ingenious 'mechanism' of a capitalist society which could exist and prosper all on its own, all the time keeping the non-capitalist environment in reserve so that he could use it at the end to drag himself out when he became bogged down with having to explain imperialism in Robinson Crusoe's island!

The careful reader of the footnotes and occasional critical remarks in the first volume of *Capital*, where Marx deals with the theoretical trickery of Say, J. S. Mill, Carey, etc., can probably imagine the punishment which Marx would have meted out to that sort of scientific method.

* op. cit., pp. 873-4.

IMPERIALISM

However that may be, we have at last arrived at imperialism. The concluding chapter of Bauer's essay is entitled 'The Explanation of Imperialism'. After this, the reader might well hope finally to find one. After Bauer had explained that I had only uncovered one root of imperialism, 'but not the only one', one could only expect that, from the standpoint of his theory, he himself would lay bare the other roots. Unfortunately, this was not the case. To the end, Bauer fails to give one single indication of the other roots, he keeps the secret to himself. In spite of the concluding chapter's promising title and introduction we are still left with only the one miserable 'root' of imperialism, which forms the 'kernel of truth' in my incorrect explanation.

In doing this, however, Bauer has already conceded too much to me, in the shape of the 'one root' which he kindly accepts as 'true'. For here too it is a case of either/or, and the compromise which Bauer tries to make is basically as impermanent and ethereal as most compromises.

For if his 'population growth' theory of accumulation were correct, the 'root' would be completely unnecessary, since then imperialism would simply be impossible.

Let us remind ourselves what Bauer's 'mechanism' consists of. It consists in the fact that capitalist production automatically readjusts itself to the growth of the working class. Then how can one speak of a 'limit' to accumulation? Capital neither needs to nor can it overstep this 'limit'. For if production grows faster than the working class – in Bauer's 'over-accumulation' phase – it compensates for this by lagging behind the available working population again in the following phase of 'under-accumulation'. In this way there is in general no surplus capital in Bauer's 'mechanism' which could outgrow his 'limit'. Yet for the same reason this theory, as we have seen, excludes the formation of reserve capital and the ability of production to expand suddenly. Surplus capital appears as only a passing phase which must

periodically be replaced by the opposite extreme, capital shortage: in Bauer's 'mechanism' both phases replace each other with the pedantic regularity of new moon and full moon. There are no more 'limits' to capital accumulation than there is a tendency for these to be exceeded; Bauer himself explicitly states that accumulation always returns to this limit of its own accord, due to the 'mechanism of capitalist production itself'.* Thus, there is no conflict between capital's ability to expand and an alleged limitation. Bauer only takes the trouble to include these concepts in his 'mechanism' so that he can build some sort of artificial bridge between it and imperialism. The explanation which he is compelled to give of imperialism from the standpoint of his theory shows most clearly that this construction is forced.

Since, according to Bauer, the working class is the axis around which capital revolves, expansion of the limits to accumulation comes to mean increase in the population of workers! This is down in black and white in *Neue Zeit.*†

Accumulation is at first limited by the growth of the working population. Imperialism increases the number of workers who are forced to sell their labour power to capital. It accomplishes this by destroying the old modes of production in colonial areas and thereby forcing millions either to emigrate to capitalist areas or to serve European or American capital in their native land, where the capital has been invested. Since with a given organic composition of capital the amount of accumulation is determined by the growth in the available working population, imperialism is in fact a means to enlarge the limits of accumulation.

So this is the main function and the main concern of imperialism: to increase 'greatly' the number of workers, either by immigration from the colonies or in their own country! And this, despite the fact that anyone who is in full possession of his senses is aware, on the contrary, of the continual presence of a complete, consolidated industrial reserve army of the proletariat and unemployment in the home countries of imperialist capital, in the old capitalist countries, whilst in the colonies capital is always complaining about labour shortage! Thus, in its urge for new wage proletarians, imperialist capital escapes from those countries where rapid technological progress, the energetic process of the

^{*} Neue Zeit, 1913, No. 24, p. 873.

proletarianization of the intermediate strata and the destruction of the proletarian family are continually replenishing the labour reserve; it prefers to flow to the very parts of the world in which rigid social relations in traditional forms of property keep the labour force in such strong shackles that it takes decades of the crushing impact of the domination of capital to produce, as the final result of this domination, a semi-usable proletariat!

Bauer fantasizes about a 'giant' stream of workers coming from the colonies to the old centres of capitalist production, while anyone with eyes can see that, on the contrary, workers emigrate to the colonies, along with the emigration of capital from the old centres to the colonies, which, as Marx says, 'indeed only follows emigrating capital'. Indeed, look at the 'giant' stream of people from Europe settling in North and South America, South Africa and Australia in the nineteenth century. Look at the different modes of 'moderate' slavery and forced labour European and North American capital employs to secure the necessary minimum of labour in the African colonies, in the West Indies, South America and the South Seas.

According to Bauer, English capital fought long and bloody wars with China for half a century to secure a 'giant' stream of Chinese coolies to meet the drastic lack of English workers. The same urgent need must have caused the united European crusade against China at the turn of the century. French capital was obviously mainly after the Berbers in Morocco to compensate for its deficit of French proletarians. Naturally, Austrian imperialism in Serbia and Albania was primarily hunting for fresh labour. German capital is now scouring Asia Minor and Mesopotamia with a torch for Turkish industrial workers, all the more as there was such a shocking lack of labour in all sectors in Germany before the World War! Clearly, Otto Bauer, 'as a man who speculates', has yet again forgotten our plain earth. He coldbloodedly interprets modern imperialism as capitalism in search of new labour. This is meant to be the nucleus, the innermost principle motivating imperialism. Only as a matter of secondary importance does he mention the need for overseas raw materials, which has no economic connexion with his theory of accumulation, and comes like a bolt from the blue. If accumulation in the specific 'isolated capitalist society' can flourish as well as Bauer

shows us, then it must have at hand all the necessary natural treasures and gifts from heaven on the miraculous island – quite different from the miserable capitalism of harsh reality, which from its very inception has depended for its existence on the world's means of production. And finally, in the third place, Bauer quite casually mentions in two sentences the acquisition of new markets as a minor motive for imperialism, and only as another means to mitigate the crises. This, of course, is another 'nice thing to say'; as is commonly known on our planet, any considerable expansion of the market is followed by an enormous sharpening of the crises.

This is the 'explanation of imperialism' Otto Bauer finally gives: 'In our opinion capitalism is possible even without expansion.'* This is the culmination of his theory of 'isolated' accumulation, and we are left with the consoling assurance that one way or the other, 'with or without expansion capitalism will bring about its own downfall...'

That is historical materialist research method in 'expert' execution. So capitalism is also conceivable even without expansion. Indeed, for Marx the urge of capitalism to expand suddenly forms a vital element, the most outstanding feature of modern development; indeed, expansion has accompanied the entire history of capitalism and in its present, final, imperialist phase, it has adopted such an unbridled character that it puts the whole civilization of mankind in question. Indeed, this untamable drive of capital to expand has gradually constructed a world market, connected the modern world economy and so laid the historical basis for socialism. Indeed, the proletarian International, which is to make an end of capitalism, is itself only a product of the global expansion of capital. But all this is quite unnecessary, a different historical course is conceivable. Indeed, is anything 'inconceivable' for a powerful thinker? 'In our opinion capitalism is conceivable even without expansion.' In our opinion modern development is conceivable even without the discovery of America and the circumnavigation of Africa. If one thinks about it for long enough one can even conceive of man's history without capitalism. Finally, the solar system is conceivable without our earth. German philosophy is perhaps conceivable without its 'metaphysical

clumsiness'. Only one thing seems to us to be quite inconceivable: that an official Marxism which thinks in this way could, as the intellectual avant garde of the Labour movement in the phase of imperialism, have resulted in something other than the miserable fiasco of Social Democracy which we have to witness today in the World War.

Of course, tactics and strategy in the practical struggle are not directly dependent on whether one considers the second volume of Capital to be a finished work or just a fragment, whether one believes in the possibility of accumulation in an 'isolated' capitalist society or not, whether one interprets Marx's models of reproduction one way or the other. Thousands of proletarians are good and brave fighters for the aims of socialism without knowing about these theoretical problems - for the reasons of a common basic understanding of the class struggle, an incorruptible class instinct and the revolutionary traditions of the movement. But there is the closest connexion between the understanding and treatment of theoretical problems and the practice of political parties over long periods. In the decade before the World War. German Social Democracy, as the international metropolis of proletarian intellectual life, displayed total harmony in theoretical as well as practical areas: in both areas the same indecision and ossification appeared, and it was the same imperialism as the overwhelmingly dominant manifestation of public life which defeated the theoretical as well as the political general staff of Social Democracy. The proud monolithic edifice of official German Social Democracy was revealed at its first historical trial to be a Potemkin village.* Similarly, the apparent theoretical 'expert knowledge' and infallibility of official Marxism, which blessed every practice of the movement, turned out to be a grandiose façade hiding its inner insecurity and inability to act behind intolerant and insolent dogmatism. The sad routine moving along the old tracks of the 'tried and tested tactics', i.e. nothing

[* Potemkin villages. Gregory Alexandrovich Potemkin (1724-91), the most outstanding personality of the time of Catherine the Great, and said to have been Catherine's lover, was authorized by the Empress to organize 'New Russia' in the South. He brought old ports up to date, set up new villages and founded Ekaterinislav (Catherine's Glory). His critics alleged that his villages were cardboard fronts, built to deceive the Empress when she toured the area.]

but parliamentarianism, corresponded to the theoretical epigons who clung to the master's formula whilst renouncing the living spirit of his teachings. We have already noted in passing some proof of this thoughtlessness in the 'supreme court' of 'experts'.

But the connexion with practice is in our case even more obvious than it may seem at first sight. It basically means two different methods of fighting imperialism.

Marx's analysis of accumulation was developed at a time when imperialism had not yet entered on to the world stage. The final and absolute rule of capital over the world - the precondition on which Marx bases his analysis - entails the a priori exclusion of the process of imperialism. But - and here lies the difference between the errors of a Marx and the crass blunders of his epigons - in this case even the error leads on to something fruitful. The problem posed and left unanswered in the second volume of Capital - to show how accumulation takes place under the exclusive rule of capitalism - is insoluble. Accumulation is simply impossible under these conditions. This apparently rigid theoretical contradiction has only to be translated into historical dialectics, in that it conforms to the spirit of the entire Marxist teaching and way of thinking, and the contradiction in Marx's model becomes the living mirror of the global career of capitalism, of its fortune and fall.

Accumulation is impossible in an exclusively capitalist environment. Therefore, we find that capital has been driven since its very inception to expand into non-capitalist strata and nations, ruin artisans and peasantry, proletarianize the intermediate strata, the politics of colonialism, the politics of opening-up and the export of capital. The development of capitalism has been possible only through constant expansion into new domains of production and new countries. But the global drive to expand leads to a collision between capital and pre-capitalist forms of society, resulting in violence, war, revolution: in brief, catastrophes from start to finish, the vital element of capitalism.

Capital accumulation progresses and expands at the expense of non-capitalist strata and countries, squeezing them out at an ever faster rate. The general tendency and final result of this process is the exclusive world rule of capitalist production. Once this is reached, Marx's model becomes valid; accumulation, i.e. further

expansion of capital, becomes impossible. Capitalism comes to a dead end, it cannot function any more as the historical vehicle for the unfolding of the productive forces, it reaches its objective economic limit. The contradiction in Marx's model of accumulation is, seen dialectically, only the living contradiction between the boundless expansionist drive and the limit capital creates for itself through progressive destruction of all other forms of production; it is the contradiction between the huge productive forces which it awakens throughout the world during the process of accumulation and the narrow basis to which it is confined by the laws of accumulation. Marx's model of accumulation - when properly understood - is precisely in its insolubility the exact prognosis of the economically unavoidable downfall of capitalism as a result of the imperialist process of expansion whose specific task it is to realize Marx's assumption: the general and undivided rule of capital.

Can this ever really happen? That is, of course, theoretical fiction, precisely because capital accumulation is not just an economic but also a political process.

Imperialism is as much a historical method for prolonging capital's existence as it is the surest way of setting an objective limit to its existence as fast as possible. This is not to say that the final point need actually be attained. The very tendency of capitalist development towards this end is expressed in forms which make the concluding phase of capitalism a period of catastrophes.*

The more ruthlessly capital uses militarism to put an end to non-capitalist strata in the outside world and at home, the more it depresses the conditions of existence of all working strata, the more the day-to-day history of capital accumulation on the world stage changes into an endless chain of political and social catastrophes and convulsions; these latter, together with the periodic economic catastrophes in the shape of crises, make continued accumulation impossible and the rebellion of the international working class against the rule of capital necessary, even before it has economically reached the limits it set for itself.†

Here, as elsewhere in history, theory is performing its duty if it shows us the tendency of development, the logical conclusion to

^{*} Luxemburg, The Accumulation of Capital, p. 425. [See p. 446, London edn.] † ibid., p. 445. [p. 466, London edn.]

which it is objectively heading. There is as little chance of this conclusion being reached as there was for any other previous period of social development to unfold itself completely. The need for it to be reached becomes less as social consciousness, embodied this time in the socialist proletariat, becomes more involved as an active factor in the blind game of forces. In this case, too, a correct conception of Marx's theory offers the most fruitful suggestions and the most powerful stimulus for this consciousness.

Modern imperialism is not the prelude to the expansion of capital, as in Bauer's model; on the contrary, it is only the last chapter of its historical process of expansion: it is the period of universally sharpened world competition between the capitalist states for the last remaining non-capitalist areas on earth. In this final phase, economic and political catastrophe is just as much the intrinsic, normal mode of existence for capital as it was in the 'primitive accumulation' of its development phase. The discovery of America and the sea route to India were not just Promethean achievements of the human mind and civilization but also, and inseparably, a series of mass murders of primitive peoples in the New World and large-scale slave trading with the peoples of Africa and Asia. Similarly, the economic expansion of capital in its imperialist final phase is inseparable from the series of colonial conquests and World Wars which we are now experiencing. What distinguishes imperialism as the last struggle for capitalist world domination is not simply the remarkable energy and universality of expansion but - and this is the specific sign that the circle of development is beginning to close - the return of the decisive struggle for expansion from those areas which are being fought over back to its home countries. In this way, imperialism brings catastrophe as a mode of existence back from the periphery of capitalist development to its point of departure. The expansion of capital, which for four centuries had given the existence and civilization of all non-capitalist peoples in Asia, Africa, America and Australia over to ceaseless convulsions and general and complete decline, is now plunging the civilized peoples of Europe itself into a series of catastrophes whose final result can only be the decline of civilization or the transition to the socialist mode of production. Seen in this light, the position of the proletariat with regard to imperialism leads to a general confrontation with the

rule of capital. The specific rules of its conduct are given by that historical alternative.

According to official 'expert' Marxism, the rules are quite different. The belief in the possibility of accumulation in an 'isolated capitalist society', the belief that capitalism is conceivable even without expansion, is the theoretical formula of a quite distinct tactical tendency. The logical conclusion of this idea is to look on the phase of imperialism not as a historical necessity, as the decisive conflict for socialism, but as the wicked invention of a small group of people who profit from it. This leads to convincing the bourgeoisie that, even from the point of view of their capitalist interests, imperialism and militarism are harmful, thus isolating the alleged small group of beneficiaries of this imperialism and forming a bloc of the proletariat with broad sections of the bourgeoisie in order to 'moderate' imperialism, starve it out by 'partial disarmament' and 'draw its claws'! Just as liberalism in the period of its decline appeals for a well-informed as against an ill-informed monarchy, the 'Marxist centre' appeals for the bourgeoisie it will educate as against the ill-advised one, for international disarmament treaties as against the disaster course of imperialism, for the peaceful federation of democratic nation states as against the struggle of the great powers for armed world domination. The final confrontation between proletariat and capital to settle their world-historical contradiction is converted into the utopia of a historical compromise between proletariat and bourgeoisie to 'moderate' the imperialist contradictions between capitalist states.*

* Eckstein, who denounced me for the 'catastrophe theory' in his review in Vorwärts of January 1913 by simply borrowing from the vocabulary of Kolb-Heine-David: ('The practical conclusion which Comrade Luxemburg constructs on the theory of necessity of non-capitalist consumers, especially the catastrophe theory, falls with the theoretical assumption') – is denouncing me now, since the swamp theoreticians have taken a 'left' turn, for the opposite crime of aiding and abetting the right-wing Social Democracy. He points out eagerly that Lensch, the same Lensch who gravitated to Kolb-Heine-David in the World War, approved of my book and reviewed it favourably in the Leipziger Volkszeitung. Is the connexion not obvious? Suspicious, highly suspicious! 'For that very reason' Eckstein had felt himself obliged to destroy my book so thoroughly in Vorwärts. But the very same Lensch approved of Marx's Capital even more – before the war. Yes, and a man called Max Grunwald was for years an enthusiastic interpreter of

Otto Bauer concludes his criticism of my book with the following words:

Capitalism will not collapse from the mechanical impossibility of realizing surplus value. It will be defeated by the rebellion to which it drives the masses. Not only then, when the last peasant and the last petty-bourgeois change into wage-workers, thus no longer providing a surplus market, will capitalism disintegrate: it will be cut down much earlier by the growing rebellion of the ever-rising working class, educated, united and organized by the mechanism of the capitalist mode of production itself.

In order to direct this advice to me specifically, Bauer, a master of abstraction, had to abstract not only from the entire meaning and direction of my conception of accumulation, but also from the clear text of my statements. His own brave words, however, can once again only be construed as a typical abstraction of 'expert' Marxism, i.e. as the harmless but short-lived flickering of 'pure thought'. This is demonstrated by the position of this group of theoreticians towards the outbreak of the World War. The rebellion of the ever-rising, educated and organized working class suddenly changed into the policy of 'abstention' on epoch-making decisions of world history and 'silence' until the bells of peace ring out. 'The road to power', brilliantly illustrated down to the last detail in a period of serene peace, when there was still not a sound in the treetops,* changed course straight to the 'road to impotence' at the first gust of reality. The epigons who held the official theoretical leadership of the Labour movement in the last decade bankrupted themselves at the first outbreak of the world crisis and handed leadership over to imperialism. A clear understanding of these connexions is one of the essential conditions for the reconstruction of a proletarian policy which would measure up to its historical tasks in the period of imperialism.

Once again, the self-pitying will bewail the fact that 'Marxists

Marx's Capital at the Berlin Workers' Education School. Is that not convincing proof that Marx's Capital directly leads one to cheer for England's destruction and write birthday articles for Hindenburg? But that sort of blunder happens to Eckstein, ruining his intentions. As is well known, already Bismarck complained often about the blind eagerness of his journalistic reptiles.

^{[* &#}x27;In allen Wipfeln Ruh' - quotation from Goethe, Trans.]

are arguing amongst themselves', that tried and tested 'authorities' are being contested. But Marxism is not a dozen people who ascribe the right to 'expert knowledge' to each other and before whom the mass of faithful Moslems must prostrate themselves in blind trust.

Marxism is a revolutionary world outlook which must always strive for new discoveries, which completely despises rigidity in once-valid theses, and whose living force is best preserved in the intellectual clash of self-criticism and the rough and tumble of history. Thus, I agree with Lessing, who wrote to the young Reimarus:

'But what can one do! Let each man say what he thinks to be the truth, and leave truth itself to God.'