capital is only dead matter, stored or frozen labour, and can therefore no longer be 'exploited' to provide current profits.[4] Only 'living' labour, then, can be used to provide profit for the capitalist. But if the amount of profit is extracted solely from labour, this means that any accumulation of capital will necessarily *reduce* the *rate* of profit earned by the capitalist. Thus, suppose no capital or, in Marxian terms, 'constant' capital is used,[5] and investment is made solely in the form of 'variable capital' used to pay wages. Suppose that profits from production of the good are $100, and total variable capital, or wage payment, is $1 000. In that case, the profit rate is 10 per cent. On the other hand, suppose that there is investment in capital goods amounting to, say, another $1 000. Total capital investment is then $2 000, but since profits are only derived from labour they are still the same $100, so that the profit rate has now fallen to 5 per cent.

What determines wages, the amount grudgingly accorded to the workers by the capitalist class? Here Malthus and the iron law of wages make their vital appearance, determining wages at all times at the means of subsistence. Marx, of course, hastens to clear his future communist utopia from any Malthusian problems by asserting that Malthus and the iron law only holds sway under capitalism, and would certainly not apply under communism.

It must be emphasized that the iron law is crucial to Marx's entire system. For Marx, the value and price of every good is determined by its cost, *i.e.,* the quantity of labour hours embodied in its production. Marx believed that, on the market, capitalists pay workers the 'value of their labour-power', by which he meant, of course, *not* their productivity or marginal productivity, but the 'cost' of producing and maintaining the labour, *i.e.*, the cost, or the quantity of labour hours, needed to produce the labourers' means of subsistence.[6]

Professor Conway, in his generally excellent survey and critique of Marxism, claims that Marx's theory of surplus value does not *require* the iron law of wages, since the capitalists could still extract some surplus value even if wages were higher than the subsistence wage. Very true, except that *then* wages in the Marxian system would be undetermined, and indeed there would be no reason to assume that surplus value exists at all, or that it is large enough to have any importance in the economy. Besides, if wages are not locked into the bare means of subsistence, then the plight of the workers under capitalism might not be so pitiable after all. And what if there were then very little substance to spur the workers into the revolutionary overthrow of capitalism that Marx insisted was inevitable? Thus, in the *Communist Manifesto*, Marx and Engels proclaimed emphatically that the average wage is always 'the minimum wage, *i.e.,* that quantum of the means of subsistence [*Lebensmittel*], which is absolutely requisite [*notwendig*] to keep the laborer in bare existence as a laborer. What, therefore, the wage-laborer appropriates by means of his labor, merely suffices to prolong and reproduce a bare existence'.[7,8] And Engels, in his late work *Anti-Dühring* (1878), asserts that large-scale industry 'restricts the consumption of the masses at home to a starvation minimum...'

There are great problems in Marx's model. His theory implies that, since profits are only derived from the exploitation of labour, profit *rates* are necessarily lower in heavily capitalized than in labour-intensive industries. But everyone, including Marx, is forced to acknowledge that this manifestly does *not* hold true on the market. The tendency on the market, as Smith and Ricardo well knew, is for rates of profit to tend toward equality in all industries. But how so, if profit rates are necessarily and systematically higher in the labour-intensive industries?

Here is surely the most glaring single hole in the Marxian model. Marx acknowledged that, in the real world, profit rates clearly tend toward equality (or, as Marx termed it, an 'average rate of profit'), and that real prices or exchange-values in capitalist markets therefore do not exchange at their Marxian quantity-of-labour values. Marx admitted this crucial problem, and promised that he could solve the problem successfully in a later volume of *Capital*. He struggled with this problem for the rest of his life, and never solved it – perhaps one of the main reasons that he stopped working early on *Capital* and never published the later volumes. In the first edition of his great *History of the Theories of Capital and Interest* published in 1884, the year after Marx's death, the outstanding Austrian theorist Eugen von Böhm-Bawerk, in his critique of Marx, pointed out that 'Marx himself became aware of the fact that there was a contradiction here, and found it necessary for the sake of his solution to promise to deal with it later on. But the promise was never kept, and indeed could not be kept'.[9]

Böhm-Bawerk later noted that the growing legion of Marxian adepts continued to maintain their faith that the master would eventually come up with a solution to this grave and apparently ineradicable flaw in the Marxian system.[10] Then, in the preface to Marx's posthumous second volume of *Capital*, Friedrich Engels teasingly and rather childishly declared that in a forthcoming volume Marx would solve the famous profit rate and value problem, and invited all Marxian and other economists to a kind of prize essay contest to guess how Marx was going to solve this seemingly insoluble contradiction. In the ensuing nine years until the publication of the climactic Volume III of *Capital*, a surprisingly large number of economists tried their hands at this little game. In the preface to the long-awaited Volume III, published in 1894, a year before his own death, Engels was able to demonstrate triumphantly that none of these economists had come close to winning the prize.[11] Thus Engels was far less cautious than Marx in being willing to go public and trumpet a 'solution' that Marx had apparently not felt worthy of being published.[12]

Volume III was subjected to detailed, withering, thoroughgoing demolition two years later by Böhm-Bawerk in his extensive review essay, *Karl Marx and the Close of His System*.[13] A century later, Böhm-Bawerk's devastating refutation of the Volume III solution and therefore the Marxian system remains definitive. It swept the boards in professional economics, and has remained dominant ever since, successfully inoculating economists, at least, against the Marxian virus, and certainly against the labour theory of value. Unfortunately, Böhm-Bawerk's point was too technical to have much impact outside the ranks of economists, and, since then, Marxism has held its greatest attraction in the ranks of sociologists, historians, the literati, and others who tend to be economically ignorant.

Böhm-Bawerk, in sum, posed the grave inner contradiction of Marxian theory plainly and starkly: Marx claimed that goods exchanged on the market in proportion to the quantities of labour embodied in them (i.e., that their values are determined by the quantity of labour-hours needed to produce them), and *yet* also conceded that the rates of profit on all goods tended to be equal. And yet, if the first clause is true, the rates of profit would be systematically lower in proportion to the intensity of capital investment, and higher in proportion to their labour-intensiveness of production. Marx promised to resolve this insoluble contradiction in Volume III and to reconcile these two fundamentally contradictory propositions.

In *Karl Marx and the Close of His System*, Böhm-Bawerk demonstrated that Marx's proffered 'solution' was a sham, and that actually what Marx did was to throw in the towel and admit that, on the capitalist market, profit rates were equal and therefore that prices were *not* proportional to or determined by the quantity of labour hours in the production of goods. Instead, Marx in effect embraced standard Ricardian theory and admitted that prices were actually determined by the costs (or, in his terminology, 'prices') of production plus the average rate of profit. In this way, while pretending to have saved his theory by talking grandly about competition transforming 'values into prices of production', Marx had actually abandoned the labour theory of value altogether and had therefore scuttled his entire system.

Böhm-Bawerk then goes into a systematic critique of various Marxian arguments attempting to save the phenomenon, including nonsense about 'total value' being equal to total prices of all products.

It is instructive to note the reaction of Marxists to Volume III and to Böhm-Bawerk's exposure and demolition of their system's grave inner contradictions. Too often, they reacted in the manner of religious cultists and not honest scientists. That is, when their system is caught in egregious fallacies or contradictions, or makes grossly faulty predictions, cultists save their theory *by changing the terms* of the argument. That is, they assert that the theory said something quite different, or that the prediction had really been different. Similarly, the extremely popular Millerite movement in the early 1840s had confidently forecast the exact date of Jesus's Second Advent, in 1843. When Jesus did not arrive on the predicted date, the Millerites characteristically claimed a slight error in their calculations, and postponed the happy date for another few months. When Jesus failed to arrive once more, most Millerites dispersed, but some of the hard-core faithful changed the terms of the argument by insisting that Jesus had indeed arrived on the expected date, but that his advent was invisible, the more visible second part of the Second Coming to arrive at some future date. (This latter group became the Seventh Day Adventists.) And so the fallback position of the Marxian apologists was the outrageously false claim that Marx never *meant* his labour-determined values to determine, or in any way affect, market prices. Marx, they asserted loftily, had no interest in such petty matters as market price; his labour-quantity-created 'values' were simply embodied mystically into market commodities, presumably then to have no relevance whatever to the real world of market capitalism.

Thus Paul Sweezy asserted that Marx was not dealing with prices at all but really in 'what today might be called economic sociology'.[14] G.D.H. Cole tried to claim, in his *What Marx Really Meant*, that for Marx, in contrast to other economists, value had nothing to do with determining prices, but was, essentially *by definition*, the quantity of labour hours embodied in a product. Alexander Gray levelled a witty and devastating critique of Cole:

> But the identity of value and embodied labour was surely something that Marx thought he had *proved* (and which therefore required proof) in the opening pages of *Capital*...If the identity of value and labour is a matter of definition and assumption, then at least we know the meaning Marx attaches to 'value': but in that case the pretended proof in the opening chapter is mere eye-wash; since one states, but does not prove, definitions. Also in that case it is to be feared that the whole of *Capital*, resting on an arbitrary definition which implies the conclusion to be reached, is an example of wandering vainly in a circle, even more than the most critical critics had thought possible. If, on the other hand, the identity of value and labour is a matter of proof and not of definition, we are still left to grope for the meaning Marx attaches to 'value'.[15]

While official Marxists have all taken this escape-hatch – saving the labour theory of value by rendering it irrelevant – the only full-scale Marxist attempt to rebut Böhm-Bawerk was that of the Austrian Marxist Rudolf Hilferding (1877–1941), *Böhm-Bawerk's Critique of Marx*, published in 1904, with the English translation being published in 1920. Hilferding's apologetics, taking the fallback line that Marx never meant values to determine prices, is a clumsy and garbled work. It is interesting that Hilferding's friend and fellow leading Austro-Marxist theoretician, Otto Bauer, dismissed Hilferding as never having truly understood the nature of the problem. Bauer enrolled in

Böhm-Bawerk's great seminar at the University of Vienna in order to learn enough to be able to refute Böhm-Bawerk's celebrated critique. In the end, Bauer gave up the task, virtually admitting that the Marxian labour theory of value was indefensible.[16] Most modern Marxist scholars hold the labour theory of value to be an embarrassment, and sophisticated Marxists have dropped it altogether, unfortunately without also giving up the system of which it is a crucial and necessary part.[17]

A curious case of Marxist apologetics is a book widely and extravagantly touted as the definitive *critique* of Marxism. In his *Marxism*, Professor Thomas Sowell takes the Hilferding line and adds further errors of his own. Thus, he berates Böhm-Bawerk for having 'repeatedly misunderstood' Marx, when the meticulous Böhm-Bawerk understood Marx all too well, and Sowell follows Hilferding in erroneously claiming that Böhm-Bawerk and other critics wrongly held that Marx identified 'values' with prices. On the contrary, Böhm-Bawerk and the others were fully aware that labour-created 'values' were supposed to determine, but not be the same as, exchange-values, or prices. It is also ironic that an author who makes a big point of castigating well-known economists who write on Marxian economics without once citing Marx, should yet make the egregious and pompous claim that Marx referred 'nowhere to a *theory* of value, despite a numerous – and undocumented – interpretive literature to the contrary'. As a reviewer of Sowell points out, such a reference by Marx can easily be found in Volume III of *Capital*.[18]

Although orthodox Marxists of course do not acknowledge it, the Hilferding fallback position, while indeed saving the equalization of profit in the real world, does so at the grave cost of abandoning the labour theory of value. Or, what is the same, leaving it as an empty and meaningless shell. But if there is no labour theory of value, then there is no surplus value, no exploitation and no reason for the proletariat to rebel against a world in which their product is not being systematically confiscated by the capitalist class.

The most interesting and flamboyant case of an ardent Marxist who behaved honourably when confronted with the stark contradiction between Volumes I and III of *Capital* was the Italian economist Achille Loria (1857–1943). For Loria, the first volume of *Capital* had been 'a masterpiece wherein all is great, all alike incomparable and wonderful'. Yet to Loria Volume III was a grievous death-blow to Marx's own system. Loria in fact did not need to wait for Böhm-Bawerk's critique; in his own review of Volume III, Loria attacked the book as a 'mystification' instead of a 'solution'. Loria denounced the book as 'the Russian campaign' [à la Napoleon] of the Marxian system, its 'complete theoretical bankruptcy', a 'scientific suicide', and the 'most explicit surrender of his own teaching'.[19]

Let Alexander Gray have the perceptive and hilarious last word on Marx's value theory:

> To witness Böhm-Bawerk or Mr. [H.W.B.] Joseph carving up Marx is but a pedestrian pleasure; for these are but pedestrian writers, who are so pedestrian as to clutch at the plain meaning of words, not realising that what Marx really meant [Cole] has no necessary connection with what Marx undeniably said. To witness Marx surrounded by his friends is, however, a joy of an entirely different order. For it is fairly clear that none of them really knows what Marx really meant; they are even in considerable doubt as to what he was talking about; there are hints that Marx himself did not know what he was doing. In particular, there is no one to tell us what Marx thought he meant by 'value'. And indeed, what all these conjectures reveal is somewhat astounding, and, one would like to think unique. *Capital* is, in one sense, a three-volume treatise, expounding a theory of value and its manifold applications. Yet Marx never condescends to say what he means by 'value', which accordingly is what anyone cares to make it as he follows the unfolding scroll from 1867 to 1894. Nor does anyone know to what world all this applies. Is it to the world in which Marx wrote? Or to an abstract, 'pure' capitalist world existing ideally in the imagination, and nowhere else? [Croce] Or (odd as the suggestion may appear) was Marx (probably unconsciously) thinking in terms of medieval conditions? [Wilbrandt] No one knows. Are we concerned with *Wissenschaft*, slogans, myths, or incantations? Marx, it has been said, was a prophet – and perhaps this suggestion provides the best approach. One does not apply to Jeremiah and Ezekiel the tests to which less inspired men are subjected. Perhaps the mistake the world and most of the critics have made is just that they have not sufficiently regarded Marx as a prophet – a man above logic, uttering cryptic and incomprehensible words, which every man may interpret as he chooses.[20]

13.3 The 'laws of motion', I: the accumulation and centralization of capital

Thus, Karl Marx had established, to his own satisfaction at least, the labour theory of value and the reconciliation of the theory with the tendency of profit rates toward equality. But Marx was not particularly interested in explanatory laws for the workings of the capitalist system. He was interested in pressing on to what he called the 'laws of motion' (a revealingly mechanistic term!) of the capitalist system, that is, in its inevitable march towards the victory of revolutionary communism, a march that would proceed 'with the inexorability of the laws of nature'. How and where, then, was capitalism bound to move?

One crucial aspect of the inevitable doom of capitalism is the inescapable law of the falling rate of profit. The extant uniform equilibrium rate, according to Marx, was doomed to keep falling. Both Smith and Ricardo had theories of a falling rate of profit, each fallacious, and each arrived at in completely different ways. To Smith, the rate of profit (or interest) is determined by the stock of capital; the greater the amount of capital accumulated, the lower the profit rate. Ricardo, in contrast, was worried about the increasing squeeze of the economy by the landlords as inexorable population growth puts ever more inferior lands under cultivation. Labour hours required for production are raised, thereby raising both money wages and rents, hence eating increasingly into profits.[21]

Marx's falling rate of profit follows from the accumulation of capital over time, but in a way different from Smith's or Ricardo's.[22] As we have seen, for Marx capital is deadweight, and provides no profit to the capitalist. All his profit comes from the exploitation of 'living' labour, and therefore amassing more capital necessarily lowers his rate of profit, the ratio of his total profit divided by his total capital invested. And since the hallmark of capitalist development is continuing accumulation of capital, this means that capitalism is doomed to ever-falling rates of profit.

But, one may well ask, if the accumulation of capital necessarily slashes profits, why do capitalists, who are clearly motivated by a search for higher rather than lower profits, insist on continuing to accumulate? Why do they persist in cutting their own throats?

One Marxian answer to this riddle is 'competition', and Leninists in particular like to explain the allegedly later development of 'monopoly capitalism' and of imperialism as attempts by capitalists to form cartels, or find investment outlets abroad, as attempts to stave off the dread consequences of competition.[23] But the mere citation of 'competition' is scarcely an adequate answer. It is true, for example, that a new discovery or a new industry will cause very high profits at the beginning, and that in the pursuit of these profits new, competing firms will eventually bid down the rate of profit in the industry. But, in the short run, at least, and before equilibrium arrives, these capitalists are still making high and above normal profits. But, in contrast, the Marxian businessman who accumulates capital, *loses* profits *at each step of the way,* and not simply in the long run. It is therefore difficult to see why any one capitalist, at any step of the way, would ever be tempted to join in the accumulative parade.

Marx's ultimate answer to this riddle is deceptively simple: capitalists accumulate, despite the immediate and future fall in their profits because, well, they have an irresistible, irrational urge, or 'instinct' to do so. This, of course, is no explanation at all; it abandons any genuine explanation under the cloak of a high-sounding but ultimately meaningless label such as 'drive' or 'instinct'. It makes the same error as the legendary attempt to 'explain' why opium puts people to sleep by solemnly intoning that opium has 'dormitive power'. Note the *Leitmotif* of irrationality in Marx's analysis of why capitalists accumulate in Volume I of *Capital*: 'Accumulate, accumulate! That is Moses and the prophets!...Therefore, save, save, i.e., reconvert the greatest possible of surplus-value, or surplus-product into capital! Accumulation for accumulation's sake, production for production's sake'.[24]

Not for the sake of profits! And a similar theme appears in Marx's earlier essay, *Wage Labor and Capital*': 'That is the law which again and again throws bourgeois production out of its old course and which compels capital to intensify the productive forces of labour, *because* it has intensified them..., the law which gives capital no rest and continually whispers in its ear: "Go on! Go on!'"[25]

There was, of course, another way by which Marx and the Marxists could salvage the rationality of the accumulation of capital, and that was to take the fallback Hilfdering route, and abandon the labour theory as a doctrine relevant to the real world. Marx, indeed, took this road as well as claiming a mystical urge to accumulate 'for its own sake'. In this manifestation, or face, of Marx, capitalist innovators do indeed make an initially high profit above the uniform 'average' rate prevailing in the market; these pioneers make high 'surplus profits', followed by imitators and competitors until the profit rate is eventually driven down to the equilibrium, or average rate. All well and good, and in this variant at least, reality again wins out. However, once again, the price of acknowledging reality is prohibitive: for if this sort of thing happens habitually on the market, why does the rate of profit have to fall *at all*, much less present us with an inexorable, continuing tendency? Once again, as in the Böhm-Bawerk–Hilferding imbroglio, Marxists can only embrace reality by abandoning the Marxian system. Unfortunately, they of course do not acknowledge this surrender, and continue to proclaim that reality has only required a slight adjustment to the true doctrine.

Whichever course the Marxists take, it is crucial for them to salvage the continuing accumulation of capital, since it is through such accumulation that increased productivity and particularly technological innovations take place and are instituted in the economy. And we must remember that it is through technological innovation that capitalists dig their own grave, for the capitalist system and capitalist relations become the fetters that block technological development. Some technological method that capitalism cannot encompass, which Marx late in life thought would be electricity, would provide the spark, the necessary and sufficient base for the inevitable overthrow of capitalism and the seizing power by the 'final' historical class, the proletariat.

To Marx, two consequences followed necessarily from the alleged tendency to the accumulation of capital and the advance of technology. The first is the 'concentration of capital', by which Marx meant the inexorable tendency of each firm to grow ever larger in size, for the scale of production to enlarge.[26] Certainly, there is a great amount of expansion of scale of plant and firm in the modern world. On the other hand, the law is scarcely apodictic. Why may not the accumulation of capital be reflected in a growth in the *number* of firms, rather than merely in increasing the size of each? And while many industrial processes grow by increasing the optimal scale, others flourish by being relatively small and flexible in size. Henry Ford's massive automobile factories were economic and profitable for a while; but, later, by the 1920s, they inevitably led to severe losses because such massive investment proved inflexible in meeting changes in the nature and form of consumer demand. And while automobile plants are large-sized, automobile *parts* plants and firms are typically small in size. Furthermore, new and small firms have typically outcompeted large Behemoths in introducing inventions and technological innovations—the very area that most interested Marx. Large-scale firms tend to become bureaucratic, hidebound, and mired in intellectual and financial vested interests in existing plants and ways of production. Time after time, only new, small firms can carry out the cutting-edge of technological innovation.[27]

If Marx's law of the concentration of capital is by no means certain, then his next thesis, the 'law of the centralization of capital', is in even shakier shape. Here Marx asserted an inevitable law by which smaller firms in each industry go to the wall, and are absorbed in fewer and fewer giant firms – in short, a tendency toward the monopolization of industry. For one reason, competition 'always ends in the ruin of many small capitalists, whose capitals partly pass into the hands of their conquerors, and partly vanish completely'. For a second reason for his law, Marx pointed to the recent invention of the joint-stock company, or corporation, and its ability to concentrate masses of small capital into one organization. But this process of centralization or monopolization can be, and has been, counteracted by such developments as the growth of new processes (as we have seen above) and by the spread of geographical competition. Thus, in addition to small innovators we have mentioned, the alleged dominance of the Big Three automobile firms in the US has been eradicated by the growth of foreign (Japanese, West German, etc.) competition. Furthermore, while small 'family' retail groceries were superseded, the alleged monopolization of the retail grocery business by A&P in the 1930s was pulverized by the growth of the new technology of supermarkets. In the meanwhile, the small groceries have returned in the new form of convenience or 24-hour stores. In New York City, in recent years, larger supermarkets have been outcompeted in the quality and variety of fruit and vegetables by small, 24-hour Korean–American family stores. In late nineteenth and early twentieth century America, the Standard Oil monopoly of petroleum refining was rocked by its bureaucratic failure to perceive that the new Texas and Oklahoma oil fields were the wave of the future in crude oil, and by its backwardness in seeing that kerosene would rapidly be giving way to gasoline as the dominant petroleum product. This muscle-bound failure left room for small and vigorous new entrepreneurs such as Gulf and Texaco to leap in and eliminate Standard's dominance in oil.

A final instructive example of excessive scale of firm and unprofitable monopoly, was the result of the vast merger boom of 1899–1901, in which literally scores of industries, following the lure of monopoly profits, merged into one monopoly firm, and almost invariably lost heavily, and were forced to give way to strenuous multi-firm competition.[28]

Thus, no one can predict which way the winds of competition, of creation and decline, of innovation and decay, will blow. Certainly one of the tendencies of capitalism is a greater variety and spectrum of quality of product, and this tendency promotes 'decentralization' rather than Marxian centralization. Suffice it to say that there is no evidence, despite the numerous attempts of the federal government to give artificial impetus to centralization, that American industry is any more centralized now than it was at the turn of the twentieth century.[29]

Finally, there is another side to the rise of corporations that Marx naturally leaves out. The very instrument by which the joint-stock company can raise otherwise unavailable masses of capital, has transformed the economy from one of a small number of capitalists, to a modern world in which every person, be he or she ever so small, can and does become a capitalist. That is, virtually everyone owns a few shares of stock, or owns shares of pension funds invested in stocks or bonds. 'Every man a capitalist' is, in today's world, a pervasive condition rather than a hopeful slogan for the future.

Stressing this point leaves one subject to ridicule by Marxists and left-liberals, who point out, obviously enough, that an individual capitalist owning a few shares of stock exerts little power in the corporate world. But such ridicule is ignorant and misplaced, since the point is that in this sense, stockholders are like consumers. The individual consumer has little say over the types and amounts of goods and services produced, but the mass of consumers together exert total economic power. Similarly, the man who owns one share of stock may have little say in corporate decisions, but the disaffection of even a relatively small minority could have costly consequences for the large shareholders if the disaffected sell their stock and send the values of shares plummeting. Large stockholders will exert direct control of a corporation, but far more indirect power lies in the hands of the mass of small shareholders, just as the ultimate economic power over each firm is wielded by the mass of consumers in their decisions on whether and how much to buy of the firm's product.

To return to Marx and his laws of concentration and centralization of capital. We are now beginning to see the lineaments of why, for Marx, capitalism is inevitably rushing to its appointed doom. First, of course, Marx must rely on his absurd monolithic two-class model, all of society being increasingly squeezed into two uniform classes each with common interests: the capitalists and the proletariat. But the law of the centralization of capital means that the ranks of the capitalists are continually diminishing (as we have seen, running in the teeth of the virtual universalization of the ranks of capitalists from the development of capital markets and corporations). Indeed, the ever-smaller number of ever-wealthier and more powerful capitalists succeed by 'expropriating' their fellow capitalists, and driving them downward into the ranks of the proletariat (since, in Marx's two-class schema, there is no other place for them to go).[30] Before even bringing the workers themselves into the picture, we can see that the ranks of the capitalists, as they dwindle, necessarily become more beleaguered.

The genuine absurdity of this picture was unwittingly revealed by the German Marxist Karl Kautsky, dubbed by Engels, in apostolic succession, the next pope of the Marxian movement. Kautsky simplistically pursued the logic of his master. As Kautsky summed up this process in his book on the Erfurt programme:

> capitalist production tends to unite the means of production, which have become the monopoly of the capitalist class, into fewer hands. This evolution finally makes all the means of production of a nation, indeed of the whole world economy, the private property of a single individual or company, which disposes of them arbitrarily. The whole economy will be drawn into one colossal undertaking, in which every thing has to serve one master. In capitalist society private ownership in the means of production ends with all except one person being propertyless. It thus leads to its own abolition, to the lack of property by all and the enslavement of all.[31]

And what is more, we are advancing toward this state of affairs 'more rapidly than most people believe.'

It's as if Kautsky can now glimpse a bit of the absurdity of the position into which the logic of the Marxian system has placed him. Lest we be tempted to sit back and wait for the one Goldfinger, worth umpteen quadrillion dollars, who holds the entire world of impoverished slaves in his thrall, Kautsky hastens to assure us that the world will not have to wait for the *entire* process to work itself out. Instead, 'the mere approach to this condition must increase the sufferings, conflicts, and contradictions in society to such an extent, that they become intolerable and society bursts its bounds and falls to pieces...'[32] Kautsky, however, did not succeed in drawing back before inadvertently revealing how preposterous the Marxian model really is.

13.4 The 'laws of motion', II: the impoverishment of the working class

The vital corollary for the Marxian system, of the ever-thinning ranks of the centralized capitalists, is the ever-swelling ranks of the proletariat, and their increasing impoverishment and immiseration. The two antagonistic classes engage in a dialectic all their own, the culminating dialectic in the Marxian system. On the one hand: the ever-thinning ranks of the ever-wealthier capitalists, until (or nearly until) one man owns all the wealth in the world; on the other, the ever-swelling ranks of the ever-more impoverished proletariat, until the proletarian masses rise up and take over. But let Marx tell the story, in what amounts to his rousing peroration in the penultimate chapter of Volume I of *Capital*:

> Hand in hand with this centralisation, or this expropriation of many capitalists by few, develop, on an ever-extending scale, the cooperative form of the labour-process, the conscious technical application of science,...the entanglement of all peoples in the net of the world-market, and with this, the international character of the capitalistic regime. Along with the constantly diminishing number of the magnates of capital, who usurp and monopolise all advantages of this process of transformation, grows the mass of misery, oppression, slavery, degradation, exploitation; but with this too grows the revolt of the working-class, a class always increasing in numbers, and disciplined, united, organized by the very mechanism of the process of capitalist production itself. The monopoly of capital becomes a fetter on the mode of production, which has sprung up and flourished along with, and under it. Centralisation of the means of production and socialisation of labour at last reach a point where they become incompatible with their capitalist integument. This integument is burst asunder. The knell of capitalist private property sounds. The expropriators are expropriated.[33]

Now here is a critical and crucial point in the Marxian argument. The increasing impoverishment of the working class is a key to the Marxian system, because on it rests the allegedly inevitable doom of capitalism and its replacement by the proletariat.[34] If there is no increasing impoverishment, there is no reason for the working class to react against their intensifying exploitation and burst asunder their 'capitalist integument', those fetters on the technological mode of production. So how does Marx demonstrate the increasing poverty of the proletariat?

At this point, Marx seems to grow desperate, and to come up with a number of varied and contrasting arguments, some of which are mutually contradictory. It's as if Marx wildly tries to multiply the arguments, however feeble, in the hope that at least one will stick, and that he will demonstrate the inevitability of the next, proletarian communist, stage of history. But all of these attempts to prove increasing misery come up, first and foremost, against an insuperable obstacle, an obstacle that only Ludwig von Mises has clearly demonstrated.[35] For if workers' wages are already and at all times at the means of subsistence, kept there by the iron law, how can they get any *worse off*? They have been at maximum poverty level, so to speak, for a long time. But if for that reason they cannot get worse off, where is the dynamic that will lead them to rise up and overthrow the system? We can concede, of course, that the new proletarians, so rudely tossed into the ranks of the working class by their triumphant fellow-capitalists, will be particularly edgy and disgruntled at their new lot in life. But surely Marx would not be content to *confine* his revolutionary workers to the relatively limited ranks of recently déclassé capitalists. Especially since the bulk of the workers simply remain where they have always been: at the margin of subsistence.[36]

Setting aside for the moment this grave inner contradiction with the iron law of wages, *how* does Marx propose to establish his alleged law of the increasing impoverishment of the proletariat? In one answer, the eternally falling rate of profits puts a severe pressure on capitalists to find more profit by sweating and exploiting the proletariat more intensively, making them work harder and for longer hours. But aside from the problem of the ever-present iron law, Marx is faced with the problem: why did capitalists allow their rate of exploitation to grow slack until finally spurred on by a falling rate of profit? Don't capitalists always and at all times try to maximize their rates of profit? And if so, and unless we are to assume a sudden intensification of greed, or of eagerness for profit among capitalists, they are never slack or lax in squeezing the greatest possible amount of profit from the workers. But then, how can a falling rate of profit spur them on to ever-greater heights? Surely, it is not simply a desire for profit.

Here Marx falls back on a suggested mechanism for this increased exploitation of labour and falling wage rate: the accelerating growth of a permanent 'industrial reserve army', a growing legion of the unemployed. It is increased competition from the unemployed that forces wage rates downwards, and increasingly continues to do so as capitalism advances.

But how can there be a continuing army of the unemployed, when wages to the unemployed are zero? Why don't the unemployed starve to death before they can ever constitute a competitive threat to the employed proletariat? If Marx answers that the unemployed are rapidly absorbed into the employed ranks, driving down wage rates thereby, then he abandons his requirement for increasing impoverishment: the growth of a permanent, and expanding, army of the unemployed. So how are they supported and how do they continue in existence?

Also, where does the industrial reserve army come from? Market economists know that unemployment quickly eliminates itself by lowering wage rates. Only if wage rates are bolstered above the market equilibrium level does unemployment become permanent; and if, as Marx maintains, the unemployed army *lowers* wage rates through its competition, then it should rapidly disappear and pose no further problems.

But where does the industrial reserve army come from in the first place? For Marx, it is the old bugaboo, technological unemployment. Industry is mechanized, and workers are thrown, presumably permanently, out of jobs. But what of the expansion of quantity demanded and of production brought about by technological innovation? And what of the increased demand for production and resources in *other* industries that are freed by cheaper products in the technologically expanding industry? And what, as we have seen above, of lower wage rates as the free market way of maintaining full employment of labour? Technological unemployment is an old and oft-discredited bogey. When automatic dialling for telephones was established, for example, there was a general piteous wail that the poor, beloved telephone operators would be thrown out of work by this productive, but heartless, innovation. And yet, of course, the lower prices of telephone service resulted in an enormous expansion of telephone's market, *including* a substantial increase in the number of telephone operators. Similarly, the number of workers in the construction industry have been *increased* not slashed, by the development of cranes, electric shovels, and other construction machinery, as compared to the good old days of hand shovels. All in all, for the technological unemployment argument to work as a way of demonstrating increasing impoverishment, not only would each successive technological innovation have to cause permanent unemployment, but the effect would have to accelerate over time, and thereby more than offset any equilibrating tendencies towards greater employment that the market might possess.

In the discussion of the alleged industrial reserve army, we have been dealing with Marx's assertion that there is a permanent, secular increase of that army. Below, we shall deal with another Marxian doctrine, of the recurrence of *cyclical* unemployment, which, along with ever-worsening cyclical depressions, may provide the motor of increasing misery and proletarian revolution.

Another Marxian argument for the inevitability of the impoverishment of the working class is found particularly in the *Communist Manifesto*. As machinery develops and capitalists accumulate capital, Marx and Engels lament, labour loses its variety of skills, and the proletariat gets pushed into ever simpler, more monotonous and unskilled tasks, and this de-skilling lowers the average wage.[37]

This feeble argument rings particularly hollow nowadays, when left-liberal friends of the working class are pushing the exactly *opposite* lament: that, in an age when ever greater numbers of labour are going into high-skilled computer and electronics work, what is to happen to the poor, aging unskilled labourer, left behind in the march of progress?

A related Marxian argument stresses not so much the increasing impoverishment of the working class, but its immiseration through aggravated 'alienation', increasing monotony or repulsiveness of work caused by expanding mechanization. While Marx himself indeed refers to such alleged expanding misery in work of the labouring class, we have seen at length above that for Marx 'alienation' had nothing to do with subjective psychology, or monotony of work, but was cosmically rooted in, and indeed defined as an attribute of, the basic modern system of exchange and the division of labour, and, beyond that, in the separation of individual men from Man and from Nature that was going to be cured, and could only be cured, by communism. Apart from the empirical problem of how more monotonous work was really becoming, and the contrast to the liberating nature of the increasing variety of wants, products and occupations, it is difficult to see how or why any 'alienation' should *increase* significantly over time, much less how this increase is conveyed in some way to the working class. No, the case of increasing misery as a spur to revolution must be a palpable and objective one, evident to the working class, or be no case at all.

We are left with the doctrine of the growing impoverishment of the proletariat, a doctrine so crucial in Marx that it can hardly be trivialized as a 'prediction' that somehow went astray. This 'prediction' is absolutely critical to the allegedly inevitable tendency for the workers to rise up and overthrow capitalism, a tendency that is supposed to deepen and accelerate as capitalism progresses. And yet, it has been starkly evident to everyone that one of the vitally significant facts of the century and a half since the birth of Marxism has been the continuing, spectacular growth in real wages and in the standard of living of the working class and of the mass of the population. Indeed what we have seen in this period is the most spectacular growth in industrialization and in living standards in the history of the world. Moreover, and particularly telling in a critique of Marx, that advance of the working class has been particularly striking precisely in the advanced capitalist countries of the West, those that were supposed to herald the growing impoverishment of the proletariat. Here is a stern and unrelenting fact that every Marxist must face, and one that by itself can and should destroy the Marxian system. How have the Marxists dealt with this grave problem?

Some Marxists, of course, have simply abandoned the ship, either noisily proclaiming their defection or quietly slipping from the fold. A few Marxists, as Schumpeter bemusedly notes, 'actually do not mind taking up the ridiculous position that a tendency for the working class's standard of life to fall is in fact observable'.[38] But generally, Marxists have tried to save the phenomenon, salvage the theory, by various fallback positions or forms of evasion. One popular tactic asserts that the underlying *tendency* toward impoverishment still exists, but has been 'temporarily' (one or two centuries?) offset by counteracting factors. A popular but bizarre Leninist variant is that workers in the West have benefited from imperialist western exploitation of, or investment in, the Third World, so that in a sense, western workers become 'capitalists' on an international scale. In the first place, in this transmutation of the oppressed proletariat of the West into exploiting 'capitalists' of the Third World, what ever happened to the inevitable *dwindling* of the capitalist class? Second, the grotesquerie of this doctrine may be gauged by the fact, as P.T. Bauer has demonstrated in many works, that the bulk of the Third World, however poor, has *also* been developing rapidly in recent decades, and the standard of living of their working masses has steadily risen. Not only that; but this development and rise in standards has taken place precisely in those areas and regions of the Third World (e.g. port cities) in closest trading and investment touch with developed western countries. On the other hand, it is the remote areas of the Third World, not yet opened up to trade with the West, that have lagged behind in this economic growth. None of this can be squared with the image of the western world making its tremendous strides over the century at the expense of what would have to be very rapid and deep impoverishment and immiseration of the masses in the Third World.[39]

Apart from imperialism, there have been other intervening factors that various Marxists claim to have temporarily interrupted the working of inevitable impoverishment. A particularly popular choice, at about the turn of the twentieth century, was the closing of the frontier in the western United States. The frontier thesis eventually lost popularity as the event receded in memory and the workers' living standards continued their inexorable advance, although it was curiously revived in the outlandish 'stagnation thesis' of the late 1930s, in which the closing of the frontier (along with other ill-chosen factors) was suddenly supposed to have risen up out of its grave of four decades and smitten the economy with an unexplained delayed immiseration.

But by far the most popular fallback position has been to change the terms of the argument and the prediction. Flying in the face of the evidence, these Marxists contend that Marx 'did not really mean' 'absolute' impoverishment, a continuing fall in the standard of living; he meant a fall in the *relative* income of the workers, relative, of course, to the standard of living of the capitalist class. It was 'relative impoverishment', not 'absolute', that Marx supposedly meant, and that the Marxists were now proclaiming.[40]

As an empirical question, relative impoverishment may or may not be true at various times and places, but its cogency is certainly dubious. It is certainly clear that the degree of inequality, for example, under oriental despotism or in the absolutist France of Louis XIV was far greater than it is under modern capitalism. But more important is the ludicrousness of relying on 'relative impoverishment' as a sufficient motor for the working class to rise up in bloody revolution to overthrow the capitalist class. If a worker has one yacht, will he rise up in rebellion because there are others in the society who have two or three? Or, to put it more realistically, will a worker with two colour TV sets rise up in revolution because Rockefeller or Lee Iacocca or Hugh Hefner has a larger set in each room? We are a long, long way from immiseration. The coming inevitable wrath of the proletariat has turned, at last, to farce.

And yet even the head of official Marxism after Engels, Karl Kautsky, being forced in 1899 to admit that the standard of living of the workers was rising, was compelled to fall back on the view that what Marx really meant was relative, or what Kautsky called 'social', poverty. By 'social poverty' Kautsky frankly meant envy, or 'covetousness', and so he was obliged to fall back on the view that gaining in income but seeing *others* gain more would suffice to rouse the workers into enough envy to rise up and overthrow the entire system.[41] In any case, it is far more plausible that envy would be