

KEY QUOTES

On Technodepreciation, Fictitious Capital, and the Tendency of the Rate of Profit to Fall

(continued)

(B) As Perceived By Marx and Writers Relating to the Marxian Tradition:

1. Marx on Technodepreciation:

"The constantly ongoing devaluation of capital, resulting from the increase in the force of production, has to be compensated..."

Grundrisse, p. 317.

2. Grundrisse, pp. 402-403:

"...to the extent that capital does not increase absolute labour time but rather decreases the relative, necessary labour time, by increasing the force of production, to that extent does it reduce the costs of its own production.-- in so far as it was presupposed as a certain sum of commodities, reduces its exchange value: one part of the capital on hand is constantly devalued owing to a decrease in the costs of production at which it can be reproduced; not because of a decrease in the amount of labour objectified in it, but because of a decrease in the amount of living labour which it is henceforth necessary to objectify in this specific product. This constant devaluation of the existing capital does not belong here, since it already presupposes capital as completed. It is merely to be noted here in order to indicate how later developments are already contained in the general concept of capital. Belongs in the doctrine of the concentration and competition of capitals."

3. Grundrisse, pp. 422-423:

"Out of place here would be the question how, while it ((Capital)) has the tendency to heighten the productive forces boundlessly, it also and equally makes one-sided, limits, etc. the main force of production, the human being himself, and has the tendency in general to restrict the forces of production..."

"In one and the same moment, it posits the values on hand in circulation -- or, what is the same, the proportion of values posited by it to the values contained in it and presupposed in circulation -- as the barrier, the necessary barrier to its value-creation; on the other hand, its productivity as the only barrier and creatrix of values. It therefore drives constantly on one side-towards its own devaluation; on the other side towards the obstruction of the productive forces, and of labour which objectifies itself in values."

4. Grundrisse, pp. 446:

"Thus, in a crisis -- a general depreciation of prices -- there occurs up to a certain moment a general devaluation or destruction of capital. The devaluation, like the depreciation, can be absolute and not merely relative, because value expresses not merely a relation between one commodity and another, as does price, but rather the relation between the price of a commodity and the labour objectified in it, or between one amount of objectified labour of the same

quality and another. If these amounts are not equal, then devaluation takes place, which is not outweighed by appreciation on the other side, for the other side expresses a fixed amount of objectified labour which remains unchanged by exchange. In general crises, this devaluation extends even to living labour capacity itself. In consequence of what has been indicated above, the destruction of value and capital which takes place in a crisis coincides with -- or means the same thing as -- a general growth of the productive forces, which, however, takes place not by means of a real increase in the productive force of labour (the extent to which this happens in consequence of crises is beside the point here), but by means of a decrease of the existing value of raw materials, machines, labour capacity. For example. The cotton manufacturer loses capital on his products (e.g. twist), but he buys the same value of cotton, labour etc. at a lower price. It is the same for him as if the real value of labour, of cotton etc., had decreased, i.e. as if they had been produced more cheaply owing to an increase in the productive force of labour. In the same way, on the other hand, a sudden general increase in the forces of production would relatively devalue all the present values which labour objectifies at a lower stage of the productive forces, and hence would destroy present capital as well as present labouring capacity. The other side of the crisis resolves itself into a real decrease in production, in living labour -- in order to restore the correct relation between necessary and surplus labour, on which, in the last analysis, everything rests."

5. Grundrisse, p. 543:

"Capital itself is the contradiction that, while it constantly tries to suspend necessary labour time (and this is at the same time the reduction of the worker to a minimum, i.e. his existence as mere living labour capacity), surplus labour time exists only in antithesis with necessary labour time, so that capital posits necessary labour time as a necessary condition of its reproduction and realization. At a certain point, a development of the forces of material production -- which is at the same time a development of the forces of the working class -- suspends capital itself."

6. Grundrisse, pp. 749-750:

"...the development of the productive forces brought about by the historical development of capital itself, when it reaches a certain stage, suspends the self-realization of capital, instead of positing it. Beyond a certain point, the development of the powers of production becomes a barrier for capital; hence the capital relation a barrier for the development of the productive powers of labour. When it has reached this point, capital, i.e. wage-labour, enters into the same relation towards the development of social wealth and of the forces of production as the guild system, serfdom, slavery, and is necessarily stripped off as a fetter. The last form of servitude assumed by human activity, that of wage labour on one side, capital on the other, is thereby cast off like a skin, and this casting-off itself is the result of the mode of production corresponding to capital; the material and mental conditions of the negation of wage labour and of capital, themselves already the negation of earlier forms of unfree social production, are themselves results of its production process. The growing incompatibility between the productive development of society and its hitherto existing relations of production expresses itself in bitter contradictions, crises, spasms. The violent destruction of capital, not by relations external to it, but rather as a condition of its self-preservation, is the most striking form in which advice is given it to be gone and to give room to a higher state of social production..."

"Hence the highest development of productive power together with the greatest

expansion of existing wealth will coincide with depreciation of capital, degradation of the labourer, and a most straitened exhaustion of his vital powers. These contradictions lead to explosions, cataclysms, crises, in which by momentaneous suspension of all labour and annihilation of a great portion of capital the latter is violently reduced to the point where it can go on fully employing its productive powers without committing suicide. Yet these regularly recurring catastrophes lead to their repetition on a higher scale and finally to its violent overthrow."

7. Capital IV (Theories Of Surplus Value), part II, p. 118: (see also p. 416)

"Thus Ricardo's ruthlessness was not only scientifically honest but also a scientific necessity from his point of view. But because of this it is also quite immaterial to him whether the advance of the productive forces slays landed property or workers. If this progress devalues the capital of the industrial bourgeoisie it is equally welcome to him. If the development of the productive power of labour halves the value of the existing fixed capital, what does it matter, says Ricardo. The productivity of human labour has doubled. Thus here is scientific honesty. Ricardo's conception is, on the whole, in the interests of the industrial bourgeoisie, only because, and in so far as, their interests coincide with that of production or the productive development of human labour. Where the bourgeoisie comes into conflict with this, he is just as ruthless towards it as he is at other times towards the proletariat and the aristocracy."

8. Capital III, pp. 113-114:

"Of a general importance to the question of depreciation are:

"The continual improvements which lower the use-value, and therefore the value, of existing machinery, factory buildings, etc. This process has a particularly dire effect during the first period of the newly introduced machinery, before it attains a certain stage of maturity, when it continually becomes antiquated before it has time to reproduce its own value. This is one of the reasons for the flagrant prolongation of the working-time usual in such periods, for alternating day and night-shifts, so that the value of the machinery may be reproduced in a shorter time without having to place the figures for wear and tear too high. If, on the other hand, the short period in which the machinery is effective (its short life vis-à-vis the anticipated improvements) is not compensated in this manner, it gives up so much of its value to the product through moral depreciation that it cannot compete even with hand-labour.

"After machinery, equipment of buildings, and fixed capital in general, attain a certain maturity, so that they remain unaltered for some length of time at least in their basic construction, there arises a similar depreciation due to improvements in the methods of reproducing this fixed capital. The value of the machinery, etc. falls in this case not so much because the machinery is rapidly crowded out and depreciated to a certain degree by new and more productive machinery, etc., but because it can be reproduced more cheaply. This is one of the reasons why large enterprises frequently do not flourish until they pass into other hands, i.e., after their first proprietors have been bankrupted, and their successors, who buy them cheaply, therefore begin from the outset with a smaller outlay of capital."

9. Capital II, p. 170:

"On the one hand the mass of the fixed capital invested in a certain bodily form and endowed in that form with a certain average life constitutes one reason for the only gradual pace of the introduction of new machinery, etc.,

and therefore an obstacle to the rapid general introduction of improved instruments of labour. On the other hand competition compels the replacement of the old instruments of labour by new ones before the expiration of their natural life, especially when decisive changes occur. Such premature renewals of factory equipment on a rather large social scale are mainly enforced by catastrophes or crises."

10. Capital II, pp. 185-186;

"As the magnitude of the value and the durability of the applied fixed capital develop with the development of the capitalist mode of production, the lifetime of industry and of industrial capital lengthens in each particular field of investment to a period of many years, say ten years on the average. Whereas the development of fixed capital extends the length of this life on the one hand it is shortened on the other by the continuous revolution in the means of production, which likewise incessantly gains momentum with the development of the capitalist mode of production. This involves a change in the means of production and the necessity of their constant replacement, on account of moral depreciation, long before they expire physically. One may assume that in the essential branches of modern industry this life-cycle now averages ten years. However we are not concerned here with the exact figure. This much is evident: the cycle of interconnected turnovers embracing a number of years, in which capital is held fast by its fixed constituent part, furnishes a material basis for the periodic crises. During this cycle business undergoes successive periods of depression, medium activity, precipitancy, crisis. True, periods in which capital is invested differ greatly and far from coincide in time. But a crisis always forms the starting point of large new investments. Therefore, from the point of view of society as a whole, more or less, a new material basis for the next turnover cycle."

11. Capital I, pp. 43-44: The Root Of Technodepreciation:-

"An increase in the quantity of use-values is an increase of material wealth... Nevertheless, an increased quantity of material wealth may correspond to a simultaneous fall in the magnitude of its value. This antagonistic movement has its origin in the two-fold character of labour. Productive power has reference, of course, only to labour of some useful concrete form, the efficacy of any special productive activity during a given time being dependent on its productiveness. Useful labour becomes, therefore, a more or less abundant source of products, in proportion to the rise or fall of its productiveness. On the other hand, no change in this productiveness affects the labour represented by value. Since productive power is an attribute of the concrete useful forms of labour, of course it can no longer have any bearing on that labour, so soon as we make abstraction from those concrete useful forms. However then productive power may vary, the same labour, exercised during equal periods of time, always yields equal amounts of value. But it will yield, during equal periods of time, different quantities of value in use; more, if the productive power rise, fewer, if it fall. The same change in productive power, which increases the fruitfulness of labour, and, in consequence, the quantity of use-values produced by that labour, will diminish the total value of this increased quantity of use-values, provided such change shorten the total labour-time necessary for their production; and vice versa."

12. Marx on Credit processes and Fictitious Capital -- the contradiction between Loan-Capital (Debt-Capital) and Industrial Capital:

...In a general crisis of overproduction the contradiction is not between

"...in a general crisis of overproduction the contradiction is not between the different kinds of productive capital, but between industrial and loanable capital -- between capital as directly involved in the production process and capital as money existing (relatively) outside of it."

13. Grundrisse, p. 659:

"The necessary tendency of capital is therefore circulation without circulation time, and this tendency is the fundamental determinant of credit and of capital's credit contrivances... But the highest result it achieves in this line is, on the one side, fictitious capital; on the other side, credit only appears as a new element of concentration, of the destruction of capitals by individual, centralizing capitals."

14. Capital III, Chapter 29, "Component Parts Of Bank Capital", pp. 464-465:

"The state has to annually pay its creditors a certain amount of interest for the capital borrowed from them. In this case, the creditor cannot recall his investment from his debtor, but can only sell his claim, or his title of ownership. The capital itself has been consumed, i.e., expended by the state. It no longer exists.... But in all these cases, the capital, as whose offshoot (interest) state payments are considered, is illusory, fictitious capital. Not only that the amount loaned to the state no longer exists, but it was never intended that it be expended as capital, and only by investment as capital could it have been transformed into a self-preserving value. To the original creditor A, the share of annual taxes accruing to him represents interest on his capital, just as the share of the spendthrift's fortune accruing to the usurer appears to the latter, although in both cases the loaned amount was not invested as capital. The possibility of selling the state's promissory note represents for A the potential means of regaining his principal. As for B, his capital is invested, from his individual point of view, as interest-bearing capital. So far as the transaction is concerned B has simply taken the place of A by buying the latter's claim on the state's revenue. No matter how often this transaction is repeated, the capital of the state debt remains purely fictitious, and, as soon as the promissory notes become unsaleable, the illusion of this capital disappears. Nevertheless, this fictitious capital has its own laws of motion, as we shall presently see."

15. Ibid., pp. 466-467:

"Even when the promissory note -- the security -- does not represent purely fictitious capital, as it does in the case of state debts, the capital-value of such paper is nevertheless wholly illusory. We have previously seen in what manner the credit system creates associated capital. The paper serves as a title of ownership which represents this capital. The stocks of railways, mines, navigation companies, and the like, represent actual capital, namely, the capital invested and functioning in such enterprises, or the amount of money advanced by the stockholders for the purpose of being used as capital in such enterprises. This does not preclude the possibility that these may represent pure swindle. But this capital does not exist twice, once as the capital-value of titles of ownership (stocks) on the one hand and on the other hand as the actual capital invested, or to be invested, in those enterprises. It exists only in the latter form, and a share of stock is merely a title of ownership to a corresponding portion of the surplus-value to be realised by it. ... ".... The independent movement of the value of these titles of ownership, not only of government bonds but also of stocks, adds weight to the illusion that they constitute real capital alongside of the capital or claim to which

they may have title. For they become commodities, whose price has its own characteristic movements and is established in its own way. Their market-value is determined differently from their nominal value, without any change in the value (even though the expansion may change) of the actual capital."

16. Ibid., pp. 468-469:

"All this paper actually represents nothing more than accumulated claims, or legal titles, to future production whose money or capital value represents either no capital at all, as in the case of state debts, or is regulated independently of the value of the real capital which it represents.

"In all countries based on capitalist production, there exists in this form an enormous quantity of so-called interest-bearing capital, or moneyed capital. And by accumulation of moneyed capital nothing more, in the main, is connoted than an accumulation of these claims on production, an accumulation of the market-price, the illusory capital-value of these claims...

"The greater portion of banker's capital is, therefore, purely fictitious and consists of claims (bills of exchange), government securities (which represent spent capital), and stocks (drafts on future revenue). And it should not be forgotten that the money-value of the capital represented by this paper in the safes of the banker is itself fictitious, in so far as the paper consists of drafts on guaranteed revenue (e.g. government securities), or titles of ownership to real capital (e.g. stocks), and that this value is regulated differently from that of real capital, which the paper represents at least in part; or, when it represents mere claims on revenue and no capital, the claim on the same revenue is expressed in continually changing fictitious money-capital. In addition to this it should be noted that this fictitious banker's capital represents largely, not his own capital, but that of the public, which makes deposits with him, either interest-bearing or not."

17. Ibid., p. 470:

"With the development of interest-bearing capital and the credit system, all capital seems to double itself, and sometimes treble itself, by the various modes in which the same capital, or perhaps even the same claim on a debt, appears in different forms in different hands. The greater portion of this "money-capital" is purely fictitious."

18. Capital III. Chapters 30, 31, and 32; "Money-Capital and Real Capital", pp. 485; 489; 490; 493; 494; 502; 505; 507; 509;

"Not every augmentation of loanable capital indicates a real accumulation of capital or expansion of the reproduction process....

"On the whole, then, the movement of loan capital, as expressed in the rate of interest, is in the opposite direction to that of industrial capital. The phase wherein a low rate of interest, but above the minimum, coincides with the "improvement" and growing confidence after a crisis, and particularly the phase wherein the rate of interest reaches its average level, are the only two periods during which an abundance of loan capital is available simultaneously with a great expansion of industrial capital....

"In a system of production, where the entire continuity of the reproduction process rests upon credit, a crisis must obviously occur -- a tremendous rush for means of payment -- when credit suddenly ceases and only cash payments have validity. At first glance, therefore, the whole crisis seems to be merely a credit and money crisis...

"This fictitious money-capital is enormously reduced in times of crisis, and with it the ability of its owners to borrow money on it on the market."

However, the reduction of the money equivalents of these securities on the stock exchange list has nothing to do with the actual capital which they represent, but very much indeed with the solvency of their owners....

"We are still not finished with this question: to what extent does the accumulation of capital in the form of loanable money-capital coincide with actual accumulation, i.e., the expansion of the reproduction process....

"The accumulation of all money-lending capitalists naturally always takes place directly in money-form, whereas we have seen that the actual accumulation of industrial capitalists is accomplished, as a rule, by an increase in the elements of reproductive capital itself. Hence, the development of the credit system and the enormous concentration of the money-lending business in the hands of large banks must, by themselves alone, accelerate the accumulation of loanable capital, as a form distinct from actual accumulation... Loan capital accumulates at the expense of both the industrial and commercial capitalists. We have seen that in the unfavourable phases of the industrial cycle the rate of interest may rise so high that it temporarily consumes the whole profit of some lines of business which are particularly handicapped. At the same time, prices of government and other securities fall...the money capitalists convert all profits made, and reconverted by them into capital, first into loanable money-capital. The accumulation of the latter -- as distinct from actual accumulation, although its offshoot -- thus takes place, even when we consider only the money-capitalists, bankers, etc., by themselves, as an accumulation of this particular class of capitalists. And it must grow with every expansion of the credit system which accompanies the actual expansion of the reproduction process....

"The mass of money to be transformed back into capital in this manner is a result of the enormous reproduction process, but considered by itself, as loanable money-capital, it is not itself a mass of reproductive capital."

19. Marx on The Tendency Of The Rate Of Profit To Fall: In Connection With Accumulation

"This mode of production produces a progressive relative decrease of the of the variable capital as compared to the constant capital, and consequently a continuously rising organic composition of the total capital $((\frac{c}{v}))$. The immediate result of this is that the rate of surplus value $((\frac{s}{v}))$, at the same, or even a rising, degree of labour exploitation, is represented by a continually falling general rate of profit $((\frac{s}{c+v}))$. (We shall see later why this fall does not manifest itself in an absolute form, but rather as a tendency toward a progressive fall.) The progressive tendency of the general rate of profit to fall is, therefore, just an expression peculiar to the capitalist mode of production, of the progressive development of the social productivity of labour."

Capital III, pp. 212-213.

20. Capital IV (Theories Of Surplus Value), Part II, p. 596:
(rate of)

"Calculated on the total capital the profit of the larger capital, which employs more constant capital (machinery, raw material) and relatively less living labour, will be lower than that of the smaller (mass of) profit yielded by the smaller capital employing more living labour in proportion to the total capital. The (relative) decrease in variable capital and the relative increase in constant capital although both parts of it are growing is only another expression for the increased productivity of labour."

NOTE:

21. Marx thus presents a causal relationship between the rise of the organic composition of capital, which reflects the level of the social forces of production (social productivity), and the fall of the rate of profit. This process has an algebraic

metaphor. If we multiply the Marxian rate of profit ratio, $s/c+v$, by 1, we will not change its content. Therefore, let us multiply it by 1 in the specific form of $(1/v)/(1/v)$:

$$p = \left(\frac{s}{c+v} \right) \cdot \left(\frac{\frac{1}{v}}{\frac{1}{v}} \right) = \frac{s/v}{\frac{c}{v} + 1} = p$$

Thus, if s/v , the rate of exploitation, the rate of surplus value, or the ratio of surplus labor to necessary labor expressed in value terms, were to remain constant, or decline, or increase slowly enough, relative to the growth of c/v , then the increase of c/v would, since it 'resides' in the denominator, 'cause' in the algebraic or arithmetical sense, a fall in the magnitude of the ratio as a whole, the rate of profit, called here p .

The problem is, of course, that the only reason capitalists increase their relative investment in c , constant capital, is to lower necessary labor in order to increase surplus labor, i.e. in order to increase relative surplus value, and thus the rate of surplus value, s , as well. Not only c/v , but s/v as well, is an index of the growth of the productive forces! If s/v rises fast enough with respect to the rise of c/v , then growth of the productive forces will even 'cause' an increase of the rate of profit in this metaphor! As it stands, therefore, the relation of a rise of c/v to changes in p can only be defined as indeterminate, and its determination would require the introduction of deeper, more concrete, levels of relationship and analysis. (see Marcus, Dialectical Economics, pp. 8-9;197).

Marx, however, did introduce ^{something of} these deeper levels of analysis, and supplied an answer, or, rather, several answers, to this objection to his proposition that $c/v \uparrow \rightarrow p \downarrow$. These answers, some of which occur in the very Chapters of Capital III which deal with the tendency of the profit-rate, seem to have been overlooked. Two of these are quoted next.

However, we might still wonder whether ~~the~~ presentation of the subject of the profit-rate tendency from the point of view of competition, as opposed to that from the point of view of the concept of "Capital-in-general", of the inner, law-of-value analysis of Capital, which rules the scope of the four volumes of Capital (see Grundrisse, p. 449; Capital III, p. 235), would not assume an aspect the reverse of the latter in this case also, as Marx often says it does in other cases.

The question remains, ^(in fact) how, if they do, do the algebraic process and the real process coincide, i.e., via the mediation of what social-process in the actual course of competition, etc.

22. Capital III, pp. 247-248:

"In relation to employed labour-power the development of productivity again reveals itself in two ways: First, in the increase of surplus-labour, i.e., the reduction of the necessary labour-time required for the reproduction of labour-power. Secondly, in the decrease of the quantity of labour-power (the number of labourers) generally employed to set in motion a given capital.

"The two movements not only go hand in hand, but mutually influence one another and are phenomena in which the same law expresses itself. Yet they affect the rate of profit in opposite ways. The total mass of profit is equal to the total mass of surplus value, the rate of profit = s/C = surplus-value/advanced total capital. The surplus-value, however, as a total, is determined first by its rate, and second by the mass of labour simultaneously employed at this rate, or what amounts to the same, by the magnitude of the variable capital. One of these factors, the rate of surplus-value, rises, and the other, the number of labourers, falls (relatively or absolutely). Inasmuch as the development of the productive forces reduces the paid portion of employed labour, it raises the

surplus value, because it raises its rate; but inasmuch as it reduces the total mass of labour employed by a given capital, it reduces the factor of the number by which the rate of surplus-value is multiplied to obtain its mass... In this respect, then, the compensation of the reduced number of labourers by intensifying the degree of exploitation has certain insurmountable limits. It may, for this reason, well check the fall in the rate of profit, but cannot prevent it altogether." *With the development of the capitalist mode of production, therefore, the rate of profit falls, while its mass increases, with the growing mass of the capital employed."*

23. Grundrisse, "Surplus-Value and Productive Force", pp. 333-341:

"The worker needs to work only e.g. half a working day in order to live a whole one; and hence to be able to begin the same process again the next day. Only a half day's work is objectified in his labouring capacity -- to the extent that it exists in him as someone alive, or as a living instrument of labour. The worker's entire living day (day of life) is the static result, the objectification of half a day's work. By appropriating the entire day's work and then consuming it in the production process with the materials of which his ((constant)) capital consists, but by giving in exchange only the labour objectified in the worker -- i.e. half a day's work -- the capitalist creates the surplus value of his capital; in this case, half a day of objectified labour. Now suppose that the productive powers of labour double, i.e. that the same labour creates double the use-value... The worker would then have to work only $\frac{1}{4}$ day in order to live a full day; the capitalist then needs to give the worker only $\frac{1}{4}$ day's objectified labour in exchange, in order to increase his surplus value in the production process from $\frac{1}{2}$ to $\frac{3}{4}$; so that he would gain $\frac{3}{4}$ day's objectified labour ((per worker)) instead of $\frac{1}{2}$. At the end of the production process, the value of the capital would have risen by $\frac{3}{4}$ ((of the value of a day's labour, per worker)) instead of by $\frac{2}{4}$... The increase, the doubling of the productive force, has increased his surplus labour by $\frac{1}{4}$ (day). One remark here: the productive force has doubled, the surplus labour the worker has to do has not doubled, but has only grown by $\frac{1}{4}$ (day); nor has capital's surplus-value doubled; but it, too, has grown by only $\frac{1}{4}$ (day). This shows, then, that surplus labour (from the worker's standpoint) or surplus-value (from capital's standpoint) does not grow in the same numerical proportion as the productive force. Why? The doubling in the productive force is the reduction of necessary labour (for the worker) by $\frac{1}{4}$ (day), hence also the (increase of the) production of surplus-value by $\frac{1}{4}$ ((day)), because the original relation was posited as $\frac{1}{2}$. If the worker had to work, originally, $\frac{2}{3}$ day in order to live one full day, then the surplus value would have been $\frac{1}{3}$, and the surplus labour the same. The doubling in the productive force of labour would then have enabled ^{the worker} to restrict his necessary labour to half of $\frac{2}{3}$ or $\frac{2}{6}$ or $\frac{1}{3}$ day, and the capitalist would have gained $\frac{1}{3}$ (day) of value. But the total surplus labour would have become $\frac{2}{3}$ (day). The doubling of the productive force, which resulted in $\frac{1}{4}$ (day) surplus value and surplus labour ((increment)) in the first example, would now result in $\frac{1}{3}$ (day) surplus value or surplus labour ((increment)). The multiplier of the productive force -- the number by which it is multiplied -- is therefore not the multiplier of surplus labour or of surplus value; but rather, if the original relation of the labour objectified in the labour price was $\frac{1}{2}$ of the labour objectified in 1 working day, which always appears as the limit*, then the doubling is equal to the division of $\frac{1}{2}$ by 2 (in the original relation), i.e. $\frac{1}{4}$. If the original relation was $\frac{2}{3}$, then the doubling equals the division of $\frac{2}{3}$ by 2 = $\frac{2}{6}$ or $\frac{1}{3}$.

"The multiplier of the productive force is thus never the multiplier but always the divisor of the original relation, not the multiplier of its numerator but of its denominator...

"Therefore the value of capital does not grow ((by increments which are)) in the same proportion as the productive force increases, but in the proportion in which the increase in the productive force, the multiplier of the productive

force, divides the fraction of the working day which expresses the part of the day belonging to the worker...

"The multiplier of the productive force is the divisor of this original fraction... ~~The ((surplus)) value can never be equal to the entire working day; i.e. a certain part of the working day must always be exchanged for the labour objectified in the worker.~~ Surplus value in general is only the relation of living labour to that objectified in the worker; one member of the relation must therefore always remain. A certain relation between increase in productive force and increase of value is already given in the fact that the relation is constant as a relation, although its factors vary....

"The larger the surplus value of capital before the increase of productive force, the larger the amount of presupposed surplus labour or surplus value of capital; or, the smaller the fractional part of the working day which forms the equivalent of the worker, which expresses necessary labour, the smaller is the increase in surplus value which capital obtains from the increase of productive force. Thus the more developed capital already is, the more surplus labour it has created, the more terribly must it develop the productive force in order to realize itself in only smaller proportion, i.e. to add surplus value -- because its barrier always remains the relation between the fractional part of the day which expresses necessary labour, and the entire working day. It can move only within these boundaries. The smaller the fractional part of falling to necessary labour, the greater the surplus labour, the less can any increase in productive force perceptibly diminish necessary labour; since the denominator has grown enormously. The self-realization of capital becomes more difficult to the extent that it has already been realized. The increase of productive force would become irrelevant to capital; realization itself would become irrelevant, because its proportions have become minimal, and it would have ceased to be capital. If necessary labour were $1/1000$ and the productive force tripled, then it would fall to only $1/3000$ or surplus labour would have increased by only $2/3000$ ((ths of the value of a day's labour, per worker)). But this happens not because wages have increased or the share of labour in the product, but because it has already fallen so low, regarded in its relation to the product of labour or to the living work day.

"(All these statements correct only in this abstraction for the relation from the present standpoint. Additional relations will enter which modify them significantly. The whole, to the extent that it proceeds entirely in generalities, actually already belongs in the doctrine of profit.")"

24. This is probably Marx's first formal written formulation of the law of the tendency of the rate of profit to fall:

"...Presupposing the same surplus value, the same surplus labour in proportion to necessary labour, then, the rate of profit depends on the relation between the part of capital exchanged for living labour and the part existing in the form of raw materials and means of production. Hence, the smaller the portion exchanged for living labour becomes, the smaller becomes the rate of profit. Thus, in the same proportion as capital takes up a larger place as capital in the production process relative to immediate labour, i.e. the more the relative surplus value grows -- the value-creating power of capital -- the more does the rate of profit fall. We have seen that the magnitude of capital already presupposed, presupposed to reproduction, is specifically expressed in the growth of fixed capital, as the produced productive force, objectified labour endowed with apparent life... Take e.g. manufacturing industry. In the same proportion as fixed capital grows here, machinery etc., the part of capital existing in raw materials must grow, while the part exchanged for living labour decreases. Hence the rate of profit falls relative to the total value of capital presupposed to production -- and of the part of capital acting as capital in

production. The wider the existence already achieved by capital, the narrower the relation of newly created to presupposed value...

"...This is in every respect the most important law of modern political economy, and the most essential for understanding the most difficult relations. It is the most important law from the historical standpoint. It is a law which, despite its simplicity, has never before been grasped and, even less, consciously articulated."

Grundrisse, pp. 747-748.

25. Capital III, p. 240:

"The tendency for the rate of profit to fall is bound up with a tendency of the rate of surplus-value to rise, hence with a tendency for the rate of labour exploitation ~~to fall~~ to rise. Nothing is more absurd, for this reason, than to explain the fall in the rate of profit by a rise in the rate of wages, although this may be the case by way of an exception... The rate of profit does not fall because labour becomes less productive, but because it becomes more productive. Both the rise in the rate of surplus-value and the fall in the rate of profit are but specific forms through which the growing productivity of labour is expressed under capitalism."

26. In Summation, on the Tendency of the Rate of Profit as the Central Manifestation of the Internal Contradiction of Capital:

"The contradiction, to put it in a very general way, consists in that the capitalist mode of production involves a tendency towards the absolute development of the productive forces, regardless of the value and surplus-value it contains, and regardless of the social conditions under which capitalist production takes place; while, on the other hand, its aim is to preserve the value of the existing capital and promote its self-expansion to the highest limit. (i.e., to promote an ever more rapid growth of this value). The specific feature about it is that it uses the existing value of capital as a means of increasing this value to the utmost. The methods by which it accomplishes this include the fall of the rate of profit, depreciation of existing capital, and development of the productive forces of labour at the expense of already created productive forces."

Capital III, p. 249.

27. Capital III, p. 248: (Here the antagonistic effects of productivity-growth are noted):--

"Given the rate ((of profit)), the absolute increase in the mass of capital depends on its existing magnitude. But, on the other hand, if this magnitude is given, the proportion of its growth, i.e., the rate of its increment, depends on the rate of profit. The increase in the productiveness (which, moreover, we repeat, always goes hand in hand with a depreciation of the available capital) can directly only increase the value of the existing capital if by raising the rate of profit it increases that portion of the value of the annual product which is reconverted into capital. As concerns the productivity of labour, this can only occur (since this productivity has nothing direct to do with the value of the existing capital) by raising the relative surplus-value, or reducing the value of the constant capital, so that the commodities which ~~enter~~ the reproduction of labour-power, or the elements of constant capital, are cheapened. Both imply a depreciation of existing capital, and both go hand in hand with a reduction of the variable capital in relation to the constant. Both cause a fall in the rate of profit, and both slow it down."

28. 'Automatic'
Marx On Processes Which DELAY the realization of the Profit-Rate Tendency:

"There are moments in the developed movement of capital which delay this movement ((the overthrow of capital in terminal crisis; see quote #6, end)) other than by crises; such as e.g. the constant devaluation of a part of existing capital... The fall likewise delayed by creation of new branches of production in which more labour in relation to capital is needed, or where the productive power of labour is not yet developed..."

Grundrisse, pp. 750-751.

② (ex: today's electronic industry)

NOTE:

29. Thus, according to Marx, both crises and (techno-)devaluation of (fixed) capital are processes which delay the final explosion of the contradiction of capital. The "devaluation" spoken of here would evidently be that enforced by competition, hence that forced into recognition on the part of the capitalists. This devaluation in fact means a rise in the rate of profit for new entrants to the branch of industry where it occurs, and even for the established firms as computed on their re-valued -- down-valued -- fixed investment. But for the established firms it means a fall in the rate of profit in the sense that the "Profit" account is a "Profit minus Losses" Account, and the loss in the value of their fixed investment must be "written off" the Profit Account, i.e. subtracted from the Profits during the period in which the loss becomes recognized. In developing the "Concept of Capital-In-General", as opposed to that of the "many capitals" (the standpoint of competition, relegated to a section which Marx apparently never completed), Marx' seems to consistently and systematically adopt what, from the standpoint of competition, would be seen as the viewpoint of new entry, which Marx evidently sees as more connected to the "law-of-value" viewpoint (his own). Thus, for Marx's account recognized technodepreciation is a process which raises the rate of profit. It is un recognized technodepreciation which accumulates as potential illiquidity; fictitious capital, overvaluation of commodities and, hence, of the capital which produces them -- an overvaluation which must then be adjusted periodically via crises, according to Marx.
30. Capital III., "Cheapening Of Elements Of Constant Capital", p. 236:

"Everything said in Part I of this book about factors which raise the rate of profit while the rate of surplus-value remains the same, or regardless of the rate of surplus-value, belongs here. Hence also, with respect to the total capital, that the value of the constant capital does not increase in the same proportion as its material volume... The same applies to machinery and other fixed capital. In short, the same development which increases the mass of the constant capital in relation to the variable reduces the value of its elements as a result of the increased productivity of labour, and therefore prevents the value of constant capital, although it continually increases, from increasing at the same rate as its material volume, i.e. the material volume of the means of production set in motion by the same amount of labour-power. In isolated cases the mass of the elements of constant capital may even increase, while its value remains the same, or falls.

"The foregoing is bound up with the depreciation of existing capital (that is, of its material elements), which occurs with the development of industry. This is another continually operating factor which checks the fall of the rate of profit, although it may under certain circumstances encroach on the mass of profit, by reducing the mass of capital yielding a profit. This again shows that the same influences which tend to make the rate of profit fall, also moderate the effects of this tendency."

31. Capital III., p. 255:

"Ultimately, the depreciation of the elements of constant capital would itself tend to raise the rate of profit. The mass of employed constant capital would have increased in relation to the variable, but its value could have fallen. The ensuing stagnation of production would have prepared -- within capitalistic limits -- a subsequent expansion of production."

32. Marx On Deliberate Measures Undertaken By Capital In Response To Manifest Moments Of the Tendency $\frac{s'}{c+v} \downarrow$:

"Since this decline of profit signifies the same as the decrease of immediate labour relative to the size of the objectified labour which it reproduces and newly posits, capital will attempt every means of checking the smallness of the relation of living labour to the size of the capital generally, hence also of the surplus value, if expressed as profit, relative to the presupposed capital, by reducing the allotment made to necessary labour and by still more expanding the quantity of surplus labour with regard to the whole labour employed...((by)) the transformation of a great part of capital into fixed capital which does not serve as an agency of direct production, unproductive waste of a great portion of capital. (productively employed capital is always replaced doubly, as we have seen, in that the positing of value by a productive capital presupposes a counter-value. The unproductive consumption of capital replaces it on the one side, annihilates it on the other. That the fall of the rate of profit can further be delayed by the omission of existing deductions from profit, e.g. by a lowering of taxes, reduction of ground rent, etc., is actually not our concerns here, although of importance in practice, for these are themselves portions of the profit under another name, and are appropriated by persons other than the capitalists themselves...)(Likewise, monopolies.)"

* (ex: "Public Works")
* (ex: Weapons-goods)

Grundrisse, pp. 750-751. (Compare to Veblen, Robbins)

33. Capital III, "Depression Of Wages Below The Value Of Labour-Power", P. 235:

"This is mentioned here only empirically, since, like many other things which might be enumerated, it has nothing to do with the general analysis of capital, but belongs in an analysis of competition, which is not presented in this work. However, it is one of the most important factors checking the tendency of the rate of profit to fall."

34. Marx On The Causation Of CRISES In Relation To Technodepreciation:

"The periodical depreciation of existing capital -- one of the means immanent in capitalist production to check the fall of the rate of profit and hasten accumulation of capital-value through the formation of new capital -- disturbs the given conditions, within which the process of circulation and reproduction of capital takes place, and is therefore accompanied by sudden stoppages and crises in the production process."

Capital III, p. 249.

35. Capital IV, p. 534: *quoted by Marcus in Mathematical Economics erroneously as p. 235*

"(We are leaving out of account here that element of crises which arises from the fact that commodities are reproduced more cheaply than they were produced. Hence the depreciation of the commodities on the market.)"

36. Rosa Luxemburg On Technodepreciation:

"If we examine critically the diagram of enlarged reproduction ((in Capital II, pp. 505-523)) in the light of Marx's ((own)) theory, we find various contradictions between the two.

"To begin with, the diagram completely disregards the increasing productivity of labour. For it assumes that the composition of capital is the same

in every year, that is to say, the technical basis of the productive process is not affected by accumulation. This procedure would be quite permissible in itself in order to simplify the analysis, but when we come to examine the concrete conditions for the realization of the aggregate product, for reproduction, then at least we must take into account, and make allowance for, changes in technique which are bound up with the process of capital accumulation. Yet if we allow for improved productivity of labour, the material aggregate of the social product -- both producer and consumer goods -- will in consequence show a much more rapid increase in volume than is set forth in the diagram. The increase in the aggregate use-values, moreover, indicates also a change in the value relationships. As Marx argues so convincingly, basing his whole theory on this axiom, the progressive development of labour productivity reacts on both the composition of accumulating capital and the rate of surplus value so that they cannot remain constant under conditions of increasing accumulation of capital, as was assumed by the diagram...

"The increasing productivity of labour ensures that the means of production grow faster in bulk than in value, in other words: means of production become cheaper. As it is use-value, i.e. the material elements of capital, which is relevant for technical improvements of production, we may assume that the quantity of means of production, in spite of its lower value, will suffice for progressive accumulation up to a certain point. This phenomenon amongst others also checks the actual decline of the rate of profit and modifies it to a mere tendency, though our example shows that the decline of the profit rate would not only be retarded but rather completely arrested."

Rosa Luxemburg, The Accumulation Of Capital, Chapter 25, "Contradictions Within the Diagram Of Enlarged Reproduction", pp. 335-336; 337-338.

37. Paul Mattick On Fictitious Capital:

"Speculation may enhance crisis situations by permitting the fictitious over-evaluation of capital, which then cannot satisfy the profit claims bound up with it."

Marx and Keynes: The Limits Of The Mixed Economy, Robert Sargent, (Boston: 1969), p. 24.

38. Robert Fitch and Mary Oppenheimer on State-Capital and the Self-cannibalization Of Capital:

"In the mature monopoly industries, finance capital is driven by the very logic of its self-interest towards bankruptcy and state intervention... When finance capital requests the state to take over rail operations, one form of social capital is being replaced by another. Finance capital is the capital belonging to corporations and individuals, employed by financial institutions according to priorities set by those institutions. State capital is the capital of the entire people, raised through taxation and employed through their representatives according to priorities that are formally subject to popular review. State capital employed in industry is in theory more democratic and a more highly developed form of social capital. But what class purpose does state capital serve?

"At present, the mobilization of social capital in the form of state capital is a device to maintain the financiers' sinking fund payments. A socialist critique of the state's role in the transportation industry would question workers' taxes being used to subsidize capitalists whose private speculative investments have gone sour....

38. (cont'd.)

"Wholesale destruction of corporate capital, starvation of capital plants, and transfer and transformation of capital assets are not yet common industrial responses to falling profits. Utility companies may wish to diversify as the railroads have done, but legal and practical barriers prevent them from doing so. When possible, the utilities, like the railroads, prefer to take their monopoly profits and invest them elsewhere... When they are forced to retain their industrial identities, the directors of most utility companies develop a second new strategy of capital accumulation. This new mode, typified by the activities of such giants as AT&T and Consolidated Edison, involves the subordination of capital accumulation in the industrial sphere to the accumulation of finance capital, especially loan capital. The directors of these giant utilities, who are simultaneously representatives of the largest commercial banks, insurance companies and investment banking houses, have chosen consciously to limit expansion of telephone and power generating facilities. Since the mid-sixties, supply of these services has increasingly lagged behind demand. And in the meantime, these same directors have increased the rate of dividend payments and increased the rate of fixed (interest) charges paid out to suppliers of long-term capital, i.e., themselves.

"The practical impact of this mode of accumulation was felt by customers of Consolidated Edison during August 1970. As New York City temperatures reached the nineties, Con Ed announced that its generator in Queens had broken down. Power to the subways was cut; one-third of the trains were halted. The rest crawled through steaming tunnels at a top speed of eighteen miles per hour. Temperatures on the crowded platforms registered over one hundred degrees. Many commuters were overcome with heat prostration; a few suffered heart attacks and died. Of course, this was not the first nor the last breakdown during peak operating periods. About six weeks later, another heat wave found Con Ed again incapable of supplying power to New York City residents. Hundreds of thousands of people went without electricity in a failure that affected five other northeastern states as well. They were victims of what one company executive called "a fantastic coincidence."

"Electrical power failures in New York City and other Eastern cities are the unintended consequences of long-range financial planning. A reading of Con Ed's income accounts will show that power failures are inevitable. Beginning in 1964, the year before the first epic blackout, Con Ed received about \$100 million in net income. By 1969, net income had grown about 27%, to \$127 million yearly. But while net income was growing at about five percent a year, deductions from income were growing even faster. Dividend payments increased about 28%; payments to holders of Con Ed's long-term debt increased more than 45% -- about 9% a year. The result is that while the amount paid to capital holders amounted to 88% of Con Ed's total income in 1964, by 1969 their share had reached 93%. It is no wonder that the absolute amount spent on additions to plant declined nearly 10% between 1964 and 1969. Given increasing demand for service, and decreasing investment in facilities for producing it, New York City power failures are as natural an occurrence as the summer heat waves that precede them.

"...many of Con Ed's "problems" are mirrored in the performance of AT&T, the nation's largest utility. Both suffer from a seeming inability to forecast future demand and provide service during peak demand periods; both have capital structures dominated by loan capital which acts as a drag on profitability; both suffer from lack of investment in capital equipment. In New York City customers wait hours for dial tones, or are unable to get anything but busy signals when calling numbers that aren't actually busy; calls continually go astray, or are interrupted by calls coming in on the same line. The recently appointed head of New York Telephone (AT&T's largest subsidiary) acknowledges the company's lousy service, attributes the collapse to a gross underestimation of demand, and promises to "clean up" the mess....

"In the case of accumulation of speculative capital, the final mode we will analyze, productive/reinvestment effectively disappears from the picture. The most important source of capital is no longer the industrial corporation,

but the financial institution. And the capital advanced by financial institutions is advanced purely in order to earn financial profits, i.e., claims on profits in the form of stocks, bonds, warrants, etc.

"The typical vehicle for the accumulation of speculative capital during the 1960s was the conglomerate corporation. Corporate entities like Gulf and Western, LTV, AMK, and National General are almost pure examples of this mode of accumulation: with very little stockholder capital ten years ago, they grew not because of productive reinvestment in industrial capital, but because they purchased billions of dollars worth of the securities of other corporations. These purchases were made possible largely by capital advanced by financial institutions. Conglomerate corporations maintain their existence only so long as they continue to generate financial profits through continued acquisitions. In many cases the conglomeration actually reverses the work of conventional accumulation. Instead of reinvesting to expand industrial capital, the conglomerator depletes industrial capital in order to create new paper values. If we examine the purpose of conglomerate acquisitions, as well as who derives profits from them, we can understand how and why the classical accumulation process is being turned inside out....

"Despite their advanced socialized form, the new modes of accumulation have a thoroughly decadent and destructive content. Unable to maintain itself profitably in the technologically mature monopoly industries, finance capital destroys them through cannibalization of their assets, disguised as "diversification". It cannot meet the financial needs of its largest utility monopoly without disorganizing its capital market, so it allows the capital plant to decay. Finally, its hunger for quick, speculative profits creates industrial monstrosities -- the conglomerates -- whose assets make no more pretense to industrial integration than those of a mutual fund. These debt-created, tax-propelled corporations are so weighted down with debt and so unprofitable that their collapse or at least their de-conglomeration can be confidently awaited....

"The new modes of accumulation amount to a primitive and socially reactionary form of planning within capitalism itself ((This is the scientific, social-relations-of-production definition of Fascism; of Fascist or hybrid state-capitalism; of Fascist planning or planning of and for autocannibalization of society -- CCS))... The next step in the socialization of the investment system must be the transformation of its social relations: the elimination of the financial oligarchy and its replacement by committees of workers operating under the control of popular assemblies...

"In the vital theoretical work that must be carried out on these questions, we believe that the central importance of finance capital as an economic integrating mechanism, coordinating the interests of the bourgeoisie as a whole, will be clarified, along with finance capital's position as the chief political obstacle to human progress. We have faith that when the American working class has this knowledge it will begin to develop its own vision of America's socialist future and act to realize it. By seizing control of America's capital and the state, it will put them to use for the benefit of the whole world's humanity. There will be many who charge that such a seizure is tantamount to communism. If so we will have to make the most of it."

(Socialist Revolution 1:6, November-December 1970, pp. 56-57; 58-63; 67-68; 75; 77; 94.)

39. "Capital-saving" technological innovations, and the critique of Marx's Law of the tendency of the Organic Composition of Capital to Rise:

(NB: capital-saving is also labour-saving, since capital is accumulated, alienated labour, and note too that "capital-saving innovation" is another name for technodepreciation of fixed capital and constant capital in general) --

"Capital-saving innovations fall into two classes, those that save fixed capital and those that save working capital. Apart from cheaper and better machines, any improvement that widens the scope of auxiliary instruments, reduces

floor space, or lengthens the physical life of a plant, belongs to the first class of innovations. Economies of working capital, on the other hand, release operating funds by reducing the stock of goods which must be carried for given output. Typically, they take the form of lower freight charges, faster handling of materials, reductions in delivery time, and fuel savings through recovery and use of waste-products. Put this way it would be surprising indeed if capital saving innovations had not proved important even in the earlier phases of capitalist development."

(Mark Blaug, "Technical Change and Marxian Economics", p. 236 in David Horowitz, Marx and Modern Economics, Monthly Review Press, 1968.)

40. Joan Robinson, "Marx and Keynes", pp. 114-115 in *ibid.*:

"Marx (or rather Engels for him) clearly admits that it is not the case that all technical progress increases capital per unit of labour. Historically, the key to development has been transport, and inventions which save time, save capital. It is therefore by no means obvious that organic composition has really been rapidly rising with the development of capitalism. Huge investments in machinery are obvious to the naked eye, but it is impossible to assess how far the saving in stocks and work in progress due to speeding up of communications and speeding up processes has in the past offset growing investment in equipment. And it is impossible to tell what the predominant type of invention will be in the future. Certainly many great capital-saving inventions (such as wireless in place of cables) have been made in recent times. This is a question to be investigated. Meanwhile, it is at least possible to imagine, for the sake of argument, that from now on capital-saving inventions will balance capital-using inventions, so that the organic composition of capital ceases to rise (capital per unit of labour employed will tend to remain constant), while technical progress continues to raise productivity just as rapidly as before. A world in which organic composition is constant (or, for that matter, falling) is perfectly conceivable. To such a world, Marx's analysis would have no application, and the whole of that part of his theory of crises which depends upon the declining tendency of profits would fall to the ground. His case for a tendency to ever-deepening crises as a necessary and inevitable feature of capitalism therefore cannot be sustained. If there is a fundamental defect in capitalism it must have deeper roots than in a mere accident of technique."

41. Mark Blaug, *op. cit.*, p. 232:

"The fact that the aggregate capital/output ratio has remained practically unchanged in advanced economies over the last 75 years is fatal to the Marxist schema. Together with the observed long-run stability in relative shares, it leads directly to the conclusion that profits per man have risen as fast as capital per man and hence that p' has not declined. In the American case, the rate of return to privately owned physical capital has in fact shown a slight tendency to fall in the twentieth century. But the reason for this is not that technical change has been excessively labour-saving; on the contrary, the evidence suggests a mild capital-saving bias in the American economy over the last four decades.

"The facts make it unnecessary to consider the deeper contradictions in Marx's argument. After all, a labour-saving slant in technical change implies that the rise in man-hour productivity is concentrated in the finishing stages of production; all cost-reducing improvements in the capital goods industries are capital-saving for the economy as a whole. Hence, the prices of consumer goods fall faster than machine prices. In terms of the labour theory of value, this means that the value of v declines faster than the value of c or s , so that it is not at all certain that Q ((roughly the same as c/v)) or s ((s/v))

will increase. The Marxian Law of the falling rate of profit, even when accepted on its own grounds, is caught up in a bewildering mesh of opposing forces whose outcome is not deducible from elements supplied by the theory....

"A recent book by an American Marxist for the first time submits the law of the falling rate of profit to a statistical test ((J.M. Gilman, The Falling Rate Of Profit, London, 1956))...

"When the ratios are converted to a stock basis, however, the data breaks clearly into two historical phases. Until 1919 capitalism in manufacture behaved very nearly as Marx had predicted: Q rose significantly and s' did not increase sufficiently to prevent p' ($= (s/v)/(c/v) + 1 = s/c+v$) from falling. Then something went wrong. The organic composition of capital stabilized in the 1920s at levels reached in 1919 and fluctuated counter-cyclically in the 1930s; it fell all through World War II and had risen little by 1950. If the decade of the 1930s is excluded, there is in fact some indication of a secular decline in Q . In addition neither s' nor p' showed any definite trend."

42. Geoff Hodgson, "The Theory Of The Falling Rate Of Profit", New Left Review, #84: March-April 1974, pp. 61-62; 63; 80:

"Just as Marx gives an inadequate explanation of a tendency for the organic composition to rise, he merely asserts that the reduction in the value of constant capital is an isolated case. Perhaps there is no less justification to assert that the reduction in the value of elements of constant capital is the underlying tendency, and the increase in the organic composition of capital is a counteracting influence or isolated case?...

"The increase of productivity is certainly a hallmark of capitalism. As a result there will be a tendency to reduce the amount of living labour required for every item of output. But we have no reason to suppose that the labour embodied in machinery per unit of output will decrease at a slower rate. The notion that productivity increases are associated with increases in the organic composition of capital is without foundation...we must bury the last iron law of Marxian political economy -- the law of the falling tendency of the rate of profit."

43. NOTE: From the point of view of the technodepreciation interpretation of the tendency of the rate of profit to fall, "capital-saving innovation", the cheapening of machinery and constant capital in general, "economizing on fixed and working capital" as an expression of the growth of the productive forces, -- is precisely the fatal problem inherent in capital as a social relation of production. That is, the facts which Blaug, Robinson, and Hodgson cite as refuting the law are precisely the processes which enforce it in reality (that is, in the actual competition-process of the many capitals, the "external" enforcement process of the law of value. ~~The matter~~ however, is presented differently by Marx in the internal, conceptual analysis, based directly upon the law of value as assumed, ~~not on its mediation~~ by the competition, multiplicity-of-capitals process, ~~for in that matter~~ Marx is unfolding the "Concept of Capital-in-General"; ~~he abstracts~~ he abstracts from the many-capitals and their process.)

We might also wonder if the rather abrupt deviation from Marx's predictions evident in Gillman's data for U.S. industry after 1919, in the twenties up to the Crash of '29, and during WWII, etc., do not reflect what Horace Robbins called the "relative economic critical point", that is, a qualitative change in the capitalist system owing to the onset of its decadent phase, and with it, of the fictive capital processes associated with the "boom" of the "Roaring 20s"; the Roosevelt "recovery" from the Great Depression, the vast production of military 'fictitious use-value' during WWII, ~~the development~~ ^{becoming} the development of the vast 'unproductive sector' of the "spectacle" and the "military industrial complex" in the '50s and after. ("disaccumulation", as self-cannibalization of capital?)

It is the progressive reduction of necessary labour time, of the time necessary to reproduce society, to replace the part of the previous social product consumed in the ^{current} annual life-process, relative to the new product of that annual life-process, and to the difference of the two, -- ~~total~~ annual product ~~minus~~ previous product consumed in producing that product -- the disposable social product or 'social free energy' (^{free time}), -- which is problematic for capital: It is, i.e., the ~~value~~ productive force which, ^{first}, grows (raises) capitalism on the basis of feudalism (or whatever form of predominantly agrarian economy, ^{in the case} precedes capitalism), then, ^{itself} grows further within capitalism as its streamlined vehicle, but which then, subsequently, out-grows the capitalist vehicle, and must discard that vehicle, or be itself discarded -- undone -- in a descent into the inferno of social cannibalism and barbarism.

Capitalism can occupy only a definite interval of social-evolutionary space-time, bounded at both historical ends or "time-sides", if that space-time is grasped as the continuum of the growth of the productive forces, or of the development of the social individual, of the self-powers of the human species. Below a certain level of the productive forces, below a certain ^{minimum} ratio (relation) of disposable annual product to necessary annual product, hence of disposable labour-time to necessary labour-time (f/n), capital is impossible, because necessary labour is too large in relation to surplus labour, i.e. the value of ^{power of} labour-power would comprise virtually the whole working day, so that the rate of profit would be virtually zero, i.e. no rate of profit is possible as an actualized social category, and hence the social existence of capital, as self-expanding value founded upon wage-labour, is ^{impossible} (though various "looting-forms" or "primitive accumulation" forms -- such as usurer's capital, mercantile capital, and agricultural slave-latifundia capital, may be possible -- the "antediluvian" or "pre-capitalist" forms of capital cited by Marx). Productivity is too low to allow the seed of capital which is contained in money, in the commodity, in exchange-value itself, and, more fundamentally, in the dispersed, unsocialized state of humanity -- the permanent state of war between kinship societies, societies whose social relation of production is predominantly the blood relation -- to sprout. As social productivity, social creativity, social power grow, the kinship-relation, and its successors -- the slave-relation, the serf-relation, the guild-relation (and other petty-bourgeois relations) -- are progressively dissolved and the expansion of mercantile-capital, circulation-capital, ^{into the sphere} of production, the capture of production itself by capital, becomes necessary to the conduct of social reproduction at the attained ~~and~~ rising scale. Later, when social productivity has "continued" or risen even further through this process, Capital becomes impossible again. Beyond a certain level of the social forces of production or of productivity; above a certain value of the ratio 'disposable product:necessary product' (measured in labour-time units), the rate or profit must again fall toward zero and negative values, as losses due to productive-force-growth ^{caused} depreciation of fixed capital, i.e. of the already, previously objectified productive forces, come to outweigh the gains to relative surplus-value realized by that productivity growth. Once again, capital cannot exist -- in this case ceases to be -- as an actualizeable social category because self-expanding exchange-value -- i.e. profitable exchange-value -- can no longer occur past a definite point on the continuum of the productive forces, cannot survive its "rarefied atmosphere" at that "altitude". That is, Capital cannot 'continue' on that continuum.

The fundamental fallacy, the essential flaw, of capital, which, at length, kills it; which, in the temporal, historical unfolding of its 'logic'; the actual self-deduction and reductio-ad-absurdum which Capital performs upon itself in time, ~~is~~ strung-out and displayed along the temporal dimension of its continuum, is the displacement ^{of value} at the root of its 'value-system'. It locates ^{self-enclosed} value in fixed capital, rather than in human creativity. It computes its measure, of success, its rate of profit, against fixed capital, as a return on fixed capital. It locates the source of wealth in fixed capital, ^{or even less capital, more wage} and measures wealth by the accumulated exchange-value, therefore by the accumulated past labour-time, embodied in its accumulated fixed capital, and not in the rising profile of human creativity, which continually reduces the labour-time represented by that accumulation.

*(The worker would require a whole working day just to keep himself alive).

labour-time, not productive-force, is its standard of riches. This fallacy in capitalist ideology and practice is revealed clearly, empirically, manifestly, not ~~in~~ ^{by} the ~~fact~~ ^{fact} of capitalist ascendancy, when use-value productivity and exchange-value productivity are difficult to distinguish, but in the subsequent period of decadence, when capital is forced to choose, and thus to manifest its nature. When capital is forced to choose between use-value productivity and exchange-value productivity, it chooses the latter. When capital is forced to show which it values more, fixed capital, embodiment of past human creation, ~~the~~ ^{the} worker, embodiment of present, living human creativeness, it chooses to maintain the value of its fixed and other ("paper") capital by sacrificing the worker, looting his standard of living and his body; by enforcing a self-cannibalization of society. When capital is forced to a discrimination, between the importance of the rate of profit versus that of the rate of social reproduction, it finally exhibits its true colors, ~~for~~ ^{it} cannibalizing the rate of social reproduction in order to shore up the rate of profit. It thus at last 'empiricizes' glaringly and totally its fundamental irresponsibility, its inherent anti-humanity (as end-in-itself (versus as transitory vehicle)).

not as a result of theoretical disputation and propaganda (alone), but
Capital is refuted ^{not as a result of theoretical disputation and propaganda (alone), but} as a result of its historical consequences in practical life, of the inferences or implications inherent in its "concept" as carried out in historical experience. It at last refutes itself "ideologically" (theoretically), i.e. at the ideological level, ^{disproves it self} in the popular consciousness, as a method of social reproduction, by trying to kill society in a vain effort to maintain itself; by attacking the process of social reproduction once it threatens to outgrow the capitalist exoskeleton. Capital attempts to sacrifice social reproduction to capital reproduction. Seeing this, society, the proletariat in particular, to prevent it, must decide to sacrifice capital to social reproduction instead, and must organize to carry out this decision.

The tendency of the rate of profit to fall is the central expression of the dialectic of Capital, because it signifies that self-expanding value tends to slow down its self-expansion in the course of that very self-expansion, as a result of the rising productivity inherent in it. Capital, self-expanding exchange-value, is only as such; as self-expanding. A non-expanding capital is a non-capital. Thus the rate of profit, bounding the rate of accumulation, the rate of self-expansion, is the prime 'vital sign' of the capitalist system. If Capital moves inherently to brake itself, to lower its own pulse ~~the~~ ^{it}, then it is tending to kill itself, to stop its own heart. Thus, capital is self-contradictory, self-destroying: its existence implies its inexistence.

The tendency of the rate of profit to fall is thus the self-negatory tendency of capital expressed in immanent, capitalist terms. It simply asserts that the fallacy, the false consciousness, the ideology and delusion at the core of capitalist practice must eventually work itself out, must reveal itself on the surface of social phenomena. The fetishism of capital, the mislocation of the source of wealth, the untrue proposition upon which capitalist ideology is based, cannot escape the practical consequences, disastrous consequences, that are the empirical, "experimental" proof that this ideology ^{is also} is ideology; untruth, and the experiential validation of theoretical truth. The fallacy of the capitalist "theory" of social reproduction, of Praxis, would eventually, if not for proletarian revolution, make social reproduction impossible. In any case, it ^{actually} ~~makes~~ ^{further} capitalist social reproduction impossible.

Capital tends to stop itself; (then) to stop social reproduction. It is up to variable capital to abolish its ^{own} capitalist form and reorganize social reproduction, with all the knowledge and creativity at its disposal, on a new basis, and centered upon the deeper source of social wealth.

The logic of Capital is thus chrono-logical; the realization of the practical truth, the objective production of the truth of praxis, takes time, occurs temporally, not timelessly, instantaneously, formally. The dialectical logos is ingredient in reality, is the very substance of time and experience. Dialectical reason, in trying to get this across to "common sense", provincial to the moment, the "local" in time, ~~it~~ ^{it} ~~tries to~~ ^{tries to} scandalize it by asserting the opposite of its one-sided perception, by declaring its commonplaces inside-out! The subjective is also outside us; the objective is also within us. The world "outside" is a Mind; the mind, the space filled with idea-objects and emotion-objects, is an "external world". Inside our minds we confront "matter" -- in the intransigence and opacity of our thoughts and feelings, requiring great energy

for their penetration and clarification, ^{which} making possible the improvement of our outer behavior -- technology, etc. Outside our minds, we confront the objective idea, the logos inherent in the behavior of the cosmos, the laws of consequence, of cause and effect, of development and unfolding. The objective world is the product of our subjective activity, of "Production" -- both ^{of} production of outer objectifications, our draping of nature with ourselves and our artifacts, our reconstruction of nature, ^{reaching} ever more deep, ^{and} our production of ideas; the activity of cognition, of mentally forming sensations and perceptions and conceptions, ^{the two in} ~~the two~~ ^{unconscious} ~~in~~ undisentagleable interconnection. The world -- as we know it -- is the ^{product} of our own subjective activity, manual and, above all, mental. The subjective world is the objective world subjectified, taken in; the objective world is the subjective world objectified, outered. The economy is not an "object". The critique of Political Economy is not a study of "things". The "quantities" c/v and s'/c+v are not measures of the objective world (only); but of the subject; of the stature of the species, of the degree of subjectivity attained by humanity within the womb of nature; of the quality of the social individual. Exchange-value measures, not a "physical" property of objects, but their social property. The law of value says that the worth of an object is, ^{in practice,} proportional to the amount of subject in it; the amount of life-time that had to pass into the natural material in order to achieve that ^{level of} organization of the material, at a given level of the productive forces. "Social relations of production" and "social force of production" are attributes, not of a thing, an artifact conceived as separate from a person, an association, ^{claiming} ~~wielding~~ it; they are rather predicates of the social individual; the gauges of his/her progress. The tendency of the rate of profit to fall is the tendency of humanity to rise out of the alienation of unfreedom; ^{of} ~~of~~ determination by an unappropriated and hence apparently alien, external nature, into self-determination, liberation, through the total appropriation of nature, including human nature; the mobilization of the nature of the cosmos by mankind.

Nor should we suppose that Communism is the final truth revealed, the conclusion of the dialectic of Nature, of that vast argument which cosmic Nature is having with itself. On the contrary, Communism is but ^{one layer deep} ~~one layer deep~~ into the "onion" -- though each ^{transition} ~~transition~~ is qualitatively different, ^{rich in its own right, and unique.} We can even begin to grasp the "fallacy of Socialism", by immanently following further the critique already lodged inside Capitalism; the quest as to the source of wealth. But just because a few human beings, theoretically inclined, can grasp in abstract form the inner dialectic of Socialist humanity, does not mean that humanity will not ^{pass} ~~pass~~ through that stage, any more than Capitalism came to an abrupt halt the instant Marx or Engels grasped the dialectic of Capital. Nor is it true that, just because we can grasp the self-contradiction of Socialism abstractly, even from this side of prehistory, that the full wealth of that experience is known in this abstraction, so that the experience is obviated and need not be traversed. Many formulated the fallacy of Capital, after a fashion, in the language of the time and of their experience, at the very inception of its epoch. And yet Capitalism ensued.

44. The following quote, emerging from the most recent discussions of the problem of the rate of profit tendency, attacks Marx's law by confronting the account given in the extant drafts of Volume III, as edited by Engels, with the results of Volume II (of Capital). It looks to the effect on the controversy, of a movement to more concrete ground, by way of a generalization of the expression for the rate of profit to admit distinctions involved in the circulation-process of capital, ^{such as} ~~such as~~ the rate of turnover of capital when not all of fixed capital is consumed by wear and tear in one production-cycle, and like considerations. ^{How} ~~it~~ still abstracts from the technodepreciation effect (see p.66):

"The conventional definition of the organic composition of capital ... relates constant to variable capital employed: while the ratio used in the determination of the rate of profit... relates constant to variable capital advanced. Neither has a unique claim to define the organic composition of capital, which in reality is a synthesis of the two. To distinguish them, we shall call the first, the conventional one... the organic composition of

capital in the commodity or, for short, the organic composition of the commodity, as it specifies the ratio in which constant and variable capital are consumed and embodied in the product. The second... we call the organic composition of capital in the process of production or, for short, the organic composition of production, as it specifies the ratio in which the two forms of capital are actually present in the process of production. These formal definitions make it clear that these two aspects of the organic composition of capital are equal only when relative turnover, t_c/t_v , equals 1. At any other value they will diverge.....

"We have seen that the rate of profit must be calculated by relating the rate of surplus value to the organic composition of production and not the organic composition of the commodity. Moreover, a rise in the organic composition of production, even where the rate of surplus value remains constant, does not necessarily lead to a fall in the rate of profit. On the contrary, where the rise in the mass of constant capital employed in the process of production is matched by a fall in the value of constant capital consumed on average by workers in the production of commodities -- i.e., by an increase in relative turnover -- the rate of profit will actually rise. As this process knows no theoretical limits and arises directly from the nature of capital, Yaffe's assertion of a falling rate of profit as a logical necessity is manifestly false, and the theory of crisis erected upon it collapses. Of course, the rate of profit may fall in practice, and such a fall may be a crucial element of the capitalist crisis. Only if and when it happens it will not be the result of predetermined logical necessity."

(Geoffrey Kay, "The Falling Rate Of Profit, Unemployment, and Crisis", Critique, Spring, 1976, pp. 67; 72-73.)

45. This source traces the history of the development of a new phase of capital (and state-capital) government finance capital, from its world-historical inception in the aftermath of World War I, in the insistence of the U.S. Government that its wartime allies repay their war-debts to the U.S. government -- a move unprecedented in the history of warfare. Its historical narration of the development of this form of debt-capital and fictitious-capital to its point of crisis, beginning in 1968, establishes a new hypothesis as to the causation of World War II, the looting of the Third World, and the nature of post-WWI capitalist imperialism. It is highly recommended as a first stepping stone to bringing the concepts addressed generally in these notes and quotes, intimately down into the texture of our actual history. Below is a brief sampling of the points documented there:

** (Export of fictitious capital)*

"The burdens imposed by governmental international finance capital thus prepared the ground for a future war, as Lenin had anticipated that private international capital and its growing concentration must do. Its destructive effect was aggravated by the fact that its financial claims had no counterpart in productive capital resources, no means by which it might be paid. It was, instead, a claim for payment of the cost of destroying Europe's resources. Keynes was quick to dispute the false analogy between the sanctity of private productive investments and the more tenuous postwar intergovernmental claims..."

Michael Hudson, Super Imperialism: The Economic Strategy of American Empire, Holt, Rinehart, & Winston (San Francisco: 1972), p. 16.

46. Lyndon LaRouche on Technodepreciation, Fictitious Capital, and the Tendency of The Rate of Profit to Fall:

"It happens that increase in the organic composition of capitals correlates in a very special way with a phenomenon conventionally termed "the tendency of

the rate of profit to fall". This term can be dangerously misleading in the hands of the amateur economist, since it may suggest a secular tendency toward declining profit rates in the annual accounting reports of particular firms, and the like. For this difficulty, one should blame Ricardo, not Marx. The error committed by virtually all Marxologists, in defiance of the explicit language of Marx's writing, is that the rising organic composition of capitals directly ("algebraically") causes the phenomena properly associated with the falling rate tendency.

"What is immediately involved is the effect of rising general social productivity on the depreciation of dead capitals. By "dead capital" one can assume, at this preliminary stage of the text, the undepreciated left-over balance of machinery, equipment, and the like at the beginning of a new cycle of production... at the point at which the mass of Fixed Capital to Circulating Capital reaches 1/1, a five percent increase in profit, through a net rise of five percent in the ratio $S/(C+V)$, is more or less exactly offset by a corresponding book loss to capitalists on account of depreciation of the mass of Fixed Capital. If the ratio continues to rise, every further gain in social productivity will tend to be more than offset by depreciation losses on account of Fixed Capital balances. Thus, there is a tendency for the rate of profit to decline -- in capitalists' terms, not current values -- as the organic composition of capitals increases. Yet, it is obviously not the rising organic composition of capitals in value terms which causes this tendency, since the charges for such productivity-caused depreciation of Fixed Capital do not involve actual value, but only fictitious (over-) valuations of Fixed Capital. Yet, virtually every Marxologist faithfully claims that Marx regarded the rising organic composition of capitals in value terms as the direct "algebraic" cause of a tendency of the rate of profit to fall... Marx devotes major portions of his writings to the problem of "overproduction of commodities". What might appear to the naive observer as a periodic excess of products is usually a reflection of a massive shortage of products (relative to human need by prevailing standards) but under conditions of such extreme overpricing of available products that even such a shortage appears to be an excess of commodities in monetary terms.

"Naive readings of Capital to the contrary, this tendency for overproduction of commodities does not lead immediately to depression... ~~Through~~ rediscounting processes always closely connected to the debt of governments, the centralized financial markets of the capitalist system generate credit... ((this)) temporarily permits the capitalist market generally to circulate almost any amount of not only real surplus values, but also the margin of overpricing of commodities, or even the purely fictitious values of sheer speculation. To offset the falling rate tendency, the capitalist system need only add the margin of discount of Fixed Capital to the aggregate selling-price of commodity production. Thus it would seem that, as long as credit-expansion is maintained in this fashion, the monetary system provides any number of built-in stabilizers capable of postponing a crisis of "overproduction" indefinitely.

"That, however, is by no means the end of the matter. The result of what appear to be short-term monetary solutions is a long-term general tendency for inflation. Ignoring sheer speculation and related matters for the moment, let us assume that the fictitious values added to circulation were limited to the amounts needed to maintain a constant rate of profit under conditions of rising productivity and high rates of organic composition. Let us call this magnitude of fictitious capitals "X". It should be obvious that, taking the economy as a whole, X corresponds to a net excess of prices over values produced, a margin which has, in value terms, no corresponding product, wage-commodities, or added means of production. Thus, although monetary expansion can readily circulate this added mass of price, no expansion of the production of wealth results from investment of X through such circulation. The result must be, in this simplified case, that the capitalized debt created for this margin of monetary expansion could never be liquidated -- that is, it could never correspond to value. It follows that the capitalized margin of debt, X, must be a self-expanding mass

of potential illiquidity in the monetary system, constnatly being enlarged by new production's overvaluation while the formerly created debt also multiplies through its own demands for debt-service augmentation...

"Credit-expansion thus accomplishes the capitalization of fictitious values, so that continuation as a short-term solution to "overproduction" results in a growing potential illiquidity in the monetary system and in debt-equity relationships generally. Long-term capitalist credit-expansion of this sort leads inevitably to what procapitalist economists generally describe as an accelerated shift in the "Phillips Curve", a point at which further credit-expansion to maintain "full production" must result in tendencies for rates of general inflation to spiral. At such a point, a capitalist economy faces the alternatives of proceeding through "full-production" credit-expansion to an inflationary explosion of Latin-American dimensions or accepting the depression.

"All of this is not only explicitly developed in Capital, but also corresponds to the gross empirical phenomena of the past century's business cycles. Yet "Marxist economists" continue to search for simple declines in immediate profit rates."

Lyn Marcus, Dialectical Economics, D.C. Heath & Co., (Lexington: 1975), pp. 8-10.

47. "The first of these steps ((in Volume III of Capital)) is the determination of a general rate of profit, not as it is actually determined but as it must exist from the standpoint of a closed model of both production and circulation. Marx proceeds to define the invariant quality of capitalist accumulation as such, its self-movement, thus embarking upon the notion of capital in general he stipulated at the outset of the volume. Here, he adduces systematically the contradiction between capitalist accumulation and the underlying basis, the contradiction between exchange-value and use-value as the form of movement of capitalist accumulation, a movement characterized by crises which represent the surfacing of the contradictions and which thus reflect the actual nature of the real movements occurring throughout the preceding period. The "internal contradictions" -- the fundamental antinomy -- thus defined, Marx turns to the actual form of movement of capitalist accumulation in a society which is by no means a closed economic model. He uncovers the means by which the capitalist credit and monetary processes -- the actual forms of the process of capitalist circulation -- reflect the internal contradictions in the form of an accumulation of fictitious capital such that all the contradictions of capital otherwise adduced actually occur not in the hypothetical forms of their formal necessity, but as contradictions associated with the accumulation of fictitious capitals in the monetary/credit facets of capitalist accumulation itself. Thus the internal contradictions of capitalist accumulation are manifest as monetary crises, crises of liquidity."

Lyn Marcus, Dialectical Economics, p. 132.

48. "What caused both the Friedman and Keynesian schemes to fail, with at least equally drastic consequences, was that built-in stabilizers of that sort cannot work any longer, for the reason we have already given in connection with the shifting values of the Philips Curve. When the ratio of fictitious accumulation (potential illiquidity) to expansion of production is at a critical stage, any monetary policy -- constipative depression, manic diarrhea, or the "safe, sane" in-between approach -- must lead to disaster. Different monetary policies are merely different ways of speeding at various rates toward the same inevitable result."

Lyn Marcus, Dialectical Economics, p. 260.

49. " If we designate the discounting of Fixed Capital for rising productivity

as x, and the gains resulting from productivity rises as y, we have two obvious ways of absorbing the discount:

1. $(S'+y)/(F+x+C+V)$ ((↓))

where F is the current value (at current socially necessary valuation) of Fixed Capital

2. $(S'+y-x)/(F+C+V)$ ((↓))

where the real relationship is

3. $(S'+y)/(F+C+V)$ ((↑)) ((this should really be $(S'+y)/(F+x+C+V)$))

In short, x is fictitious, but not for capitalist accumulation... From the standpoint of the reproductive process, the discount is fictitious, since the relationship $S'/(C+V)$ fully accounts for social reproductive costs.

"The root of the fictitious element is anarchy. The uneven distribution of dead capital among particular capitals is the root of the maintenance of such fictions. If all capitalists had the same ratios of Fixed to Circulating Capitals in an hypothetical capitalist economy which was closed for capitalist production as the only source of wealth, and if the valuation of wealth were determined by the socially necessary costs of social reproduction, this difficulty would not exist. However, in such an economy, capitalist accumulation would not be capitalist accumulation. Such a confusion between hypothetical and actual capitalist accumulation could arise if the pedagogical standpoint of Volume I of Capital were applied literally. Capitalist accumulation is not simply the accumulation of capital as determined by socially necessary labour-power at value for a closed system. That model ignores both circulation -- as we shall see in subsequent chapters -- and the fact that capitalist accumulation is not, in any case, coextensive with capitalist production.

"The fictitious element is entropy, which arises here in the general way entropy must arise in any system of corresponding design... For the real social-reproductive process, such developments for depreciation of dead capital must be a gain, since they measure negentropy!"

Lyn Marcus, Dialectical Economics, pp. 296-297

50.

50.

"The form of the contradiction of capitalist accumulation may be summarized as follows. The rising productivity of labor as a whole (cognitive advances realized as new technology according to the principle of Freedom/Necessity) devalues the balance of undepleted Fixed Capital, especially, such that the increase of the ratio

$$\frac{F}{(C+V+d+S')}$$

((ratio of Fixed to Circulating Capital, with d=capitalists' consumption, and $S' = S-d$))

to a value greater than one signifies that the expression

$$\frac{S'-x}{F+C+V}$$

(($F' = F-x$))

must decline as the expression

$$\frac{S'}{C+V}$$

rises. Or, according to this model, there is a tendency for the rate of profit to fall.

"However, we have also shown that this need not occur as a secular tendency, for the same reason that no buy-back problem could exist for capitalist accumulation. The magnitude of productivity depreciation of Fixed Capital, x, can be added to the price of total commodity output, which is then more or less readily sold at such inflated prices through corresponding expansion of the monetary system... ((inflation))

"The result of such monetary expansion must be to accumulate a mass of potentially illiquid capital holdings in the system in the form of the combined public and private (especially governmental and corporate) debt, D....

"However, in the expansion of credit (and the corresponding expansion of the debt basis for the money supply), the total debt service arising from fictitious valuations, such as x, and the expansion of the money supply to circulate S' are not efficiently distinguished. So, if E represents the debt service on account of D, and d' the incrementing of d (capitalists' consumption ((includes ^{per-~~son~~} costs of bureaucracy and other "unproductive" expenditures))), the total expansion of the monetary system must be $S' + d' + E$, and we have the ratio $(E + d')/S'$ and the ratio $(E + d)/S'$. ((fictive value to surplus-value' ratio))

"Furthermore, the mass of D is self-expanding, since it represents capitalized ((interest-commanding)) debt which must expand at rates at least competitive with the expansion of capital held against the account of productive capacities ((equity" or "stock" capital e.g.)) and the like. Since the mass of D is also being augmented from new masses of x from current production and also from sheer speculations, D is growing more rapidly than the currently determined value for $(F' + C + V)$. If the ratio of Fixed to Circulating Capitals is greater than unity, then x is increasing more rapidly than S'; thus E is increasing at an accelerating rate relative to S'.

"During part of the business cycle, the effect of this process may be dampened by the liquidity given to portions of D and, more immediately significant, E through primitive accumulation. Yet, since primitive accumulation rates tend to be constant in magnitude for a given quality of technology and level of productive capacities, this buffering of liquidity must be diminished in effect as the cycle develops.

"So the rate of growth of the ratio $(E + d)/S'$ must signify that the rates of monetary expansion required to maintain "full employment" through circulation of S' must begin to rise at an accelerating rate (shifts of the Phillips Curve), resulting in an inflationary spiral. This inflationary spiral now tends to discount the value of outstanding debt accumulation itself, which must be offset by increased prediscounting of new debt formations -- where the tradeoff for accelerating inflation is depression (through automatic accelerations in basic interest rates).

"Thus, we have the ratio $(E + d)/S'$ approaching a condition of "critical mass", at which point the alternatives are inflation of the sort exemplified by Latin America or Germany in 1923, or depression.

"That, in brief, is the business cycle, or the form in which the crises arising from internal contradictions of capitalist accumulation are exploded afresh as an expression of the contradictions accumulated as potential illiquidity in the processes of circulation."

Dialectical Economics, pp. 371-373.

51. It is not clear, from the quotations presented above, whether Marcus is correct in asserting that the analysis he presents in Dialectical Economics and other writings is actually Marx's, or whether we have here the surprising phenomenon of Marcus achieving a profound extension and correction of Marx's theory, rescuing it from its fatal defects, and yet granting credit for this innovation to Marx! Marx certainly notices an analogy between 'crisis-depreciation' and 'technodepreciation' of capital (see esp. quote #4). But nowhere does Marx explicitly connect unrecognized technodepreciation -- technodepreciation not enforced into recognition by new-entry competition -- and crisis-depreciation, with the possible exception of the parenthetical remark #35. Even there, it is not absolutely clear that the (technodepreciation of commodities on the market" referred to "crisis-depreciation" rather than the like of the slow secular depreciation leading up to WWI (see graph). Marx explicitly mentions only recognized technodepreciation, which raises the rate of profit in terms of value as labor-time socially necessary to reproduce fixed capital, in connection with the tendency of the rate of profit to fall. In quote #8 Marx mentions technodepreciation, its two moments, as causes of bankruptcy and difficulty, only as a fact of "microeconomics"; of particular firms.

Likewise, in his discussion of the discrepancies between "Money-Capital and Real Capital", or "loan capital and industrial capital" (#s 12, 18), there is no explicit discussion of unrecognized productivity-depreciation of fixed capital as an element or cause of this discrepancy. And in his discussions of "fictitious capital", Marx addresses only its speculative forms and the forms connected with the state-debt, ^(the Marxist Capital Vol. 3) that is, the forms of fictitious capital which arise within the sphere of circulation. ^(#s 13, 14) He nowhere clearly implies an awareness of Marcus' principle insight: the production of fictitious capital in the growth of the productive forces itself; the processes by which fictitious capital arises within the sphere of production and is inherent in capital-production as the central expression of its self-contradiction. It seems that Marcus has taken a perceived analogy, a datum, present in Marx's exposition, concerning the similitude of productive-force depreciation and crisis-depreciation, and discovered there a causal connection in that correlation. Marcus' theory makes crises, not just the competition of capitals, an expression and enforcement of the law of value -- of the standard of labour-time socially necessary for reproduction -- in a way that Marx nowhere, to my knowledge, makes clear. In Marcus' account, where competition fails (to bring techno-devaluation to recognition), crisis, periodically, takes over. ^{He enforces the law of value;}

However, the question remains, would Marx's presentation in the oft-mentioned but, to my knowledge, never drafted or published, analysis of competition (and credit processes), have given the technodepreciation/fictitious capital process as the "external" mediation of the law-of-value analysis given in his exposition of capital-in-general? Would he have presented what we have called "technodepreciation" as the outer, surface enforcing-mechanism of all the phenomena, and in particular of the relative diminution of necessary labor with growth of the productive force, which are arrived at conceptually in Capital?

We cannot readily answer these questions, for we possess in extant form only Marx's drafts, some edited by Engels (Volumes II and III), of the inner, conceptual analysis; his exposition of the "Concept of Capital-In-General", wherein the law of value is assumed in abstraction from its enforcement and feedback mechanisms (competition, etc.), ^{which tends to make it hold in the actual world process.}

The four volumes of Capital, themselves uncompleted, were to form only the first of six books of the full "Critique Of Political Economy", whose complete outline was to be as follows: Capital; Landed Property; Wage-Labour; State; Foreign Trade; World Market and Crises (see McLellan, Grundrisse, pp. 7-9; Nicolaus, pp. 53-55). The second and third major divisions of the first book, "Capital", were to have been "competition" and "credit" respectively, the first division, "capital in general", being the only one that was even partially completed.

This incompleteness has led to many misunderstandings of the nature of Marx's critique of political economy, ^{Because we have only the "capital-in-general"} section, topics like competition, crises, wage-labour, and the state enter only incidentally, obliquely, and "empirically" (as opposed to "conceptually", immanently), into the discussion, and are never subjected to the full focus of the Critique. The critical concept of the proletariat would have been developed in book 3 (see Capital I, p. 543). The full explanation of crises would have been unfolded in book 6. (Capital III, p. 360). The full consideration of the most immediately 'political' aspect of political economy, the state as political-economic category, belonged to book 4. The development of the self-negation of capitalism, and of the category "social revolution" as a concept of the critique of political economy, was to have occurred at the end of the sixth book, described in one of Marx's outlines thusly: "Finally the world market. Encroachment of bourgeois society over the state. Crises. Dissolution of the mode of production and form of society based on exchange value. Real positing of individual labour as social and vice versa."

Recent charges that Marx's theory in Capital is mechanistic, unpolitical; that it reifies the "objective movement of the economy", abstracts from the struggle of the proletariat, ignores the role of the state, sheds no light on the process of proletarian revolution, ignores foreign trade, colonization, and imperialism, etc. must thus be re-evaluated in the light of the recent recognition of the conceptual order and rigour of Marx's plan of presentation, and its unfinished -- or rather, scarcely commenced -- status. These relatively neglected aspects do not belong

the exposition of the concept of capital-in-general.

So must Marcus' "charging" of Marx with the theory most explicitly developed by Marcus be re-evaluated in this light.

On Marcus' theory, many of Marx's concepts must be re-conceptualized. This is true, for example, of the concept of "use-value" and the concept of "primitive accumulation". It is also true, especially, for the concept of the "organic composition of capital". Rather than C/V being a monotonically rising index of the productive forces, and a direct, "algebraic" cause of a tendency of the rate of profit to fall, it must be seen as a dancing, oscillating estimator of the vulnerability to technodepreciation, the 'technodepreciation cross-section', of the total social capital. More crucial than the constant capital to variable capital ratio, the organic composition of total of capital; is the fixed-capital composition of constant capital, in so far as the tendency of the rate of profit to fall, or the formation of fictitious capital, is concerned. It is still a moot question, ^{in my mind,} whether these reconceptualizations were intended by Marx himself for the later, more concrete layers of his own planned 6-book exposition.

52. NOTE: The Cause Of The Fall Of Capital Analyzed From The Point Of View Of The Developing Historical Subject.

The real root of "fictitious capital" is the fiction which capital itself is. The root is both the false consciousness about wealth of capitalist social individuals, and the social practices of capitalist society, which mutually ^(re)produce one another. The central ideology of capitalism is that capital in itself and by itself is profitable, is productive, is self-expanding. Capitalist practice is behavior as if this were so. This attitude, inherent in capitalist practice, whether fully conscious or not, is most nakedly manifest in capital's interest-bearing form, M-M' -- which Marx rightly calls the most fetishistic, insane form of capital -- wherein capital compounds its value as if by time alone.

Interest-bearing capital or Debt-capital, as bank capital and state finance capital, is, as we have seen (and are seeing), the finally dominant form of capital. (As usurer's capital it was also pre-eminent in the prelude to industrial capitalism proper).

Capitalist consciousness involves a totemization or fictitious valuation of subjectivity* in its objectified forms (means of production, weapons, accumulated monetary wealth and hoards, goods in general) together with a denigration of subjectivity in its direct form; a fetishization of external wealth over against its actual source.

Capital is this 'fictitious' valuation placed upon the objective result of the subjective process, ^{enforced} as a social law and a social consensus. Capitalist society measures profit as return on fixed capital ("investment"), not as return on labor-power. It neglects and even cannibalizes its true resource: self-expanding labor-power. This is the cause of fictitious capital (which is thus doubly fictitious). This is the ultimate cause of capital's demise. The continual and final devaluation of accumulated (fixed) capital has this fundamental devaluation of humanity, from ^{capital's} its inception, to avenge.

Capital (capitalist ideology; capitalist praxis) locates wealth in an illusory manner. Hence it falls when its real wealth outgrows any possibility of maintaining both this wealth and this illusion.

Real social wealth is self-expanding use-value. Capital takes into its accounts only self-expanding exchange-value. Hence its economy can work only so long as self-expanding exchange-value is able to serve as an adequate mirror for self-expanding use-value -- i.e., for the 'expansion' of labor-power, the 'expansion' of the subject, of social subjectivity in nature.

Fictitious value is merely the symptom and outcome of this essential fiction, this radical mislocation of value:

the undervaluation of humanity by itself

the elevation of the object over and above the subject

self-alienation

* (subject-hood; subject-ness; the subject-quality of humanity within nature)

Thus alienation itself is the essential cause of capital's downfall.

The wage-relationship itself; the alienation and exile of labor-power (labor-power being the actual basis of productivity) combined with the husbanding and hoarding of its accumulated external result, fixed capital, is already the seed of this fall, a seed which must germinate in the proportion that capitalism itself unfolds. (metaphorically: at night, after the shift is up, labor is turned out into the cold to fend for itself in the street. It is "laid-off" when the hard times come, to waste away. But the machinery is locked tight away, kept high and dry, out of the cold and rain, secured behind the heavy factory doors).

The essential wealth of humanity, as such, is itself as the subject within nature; its own combined (or inter-) subjectivity.

This truth had to be realized, that is, made material, objectified -- brought into empirical manifestation -- historically, through the vast labour of history.

Humanity had to come to discover itself, as it were hidden, among the vast cluttered terrain of objective value, as at the center of value.

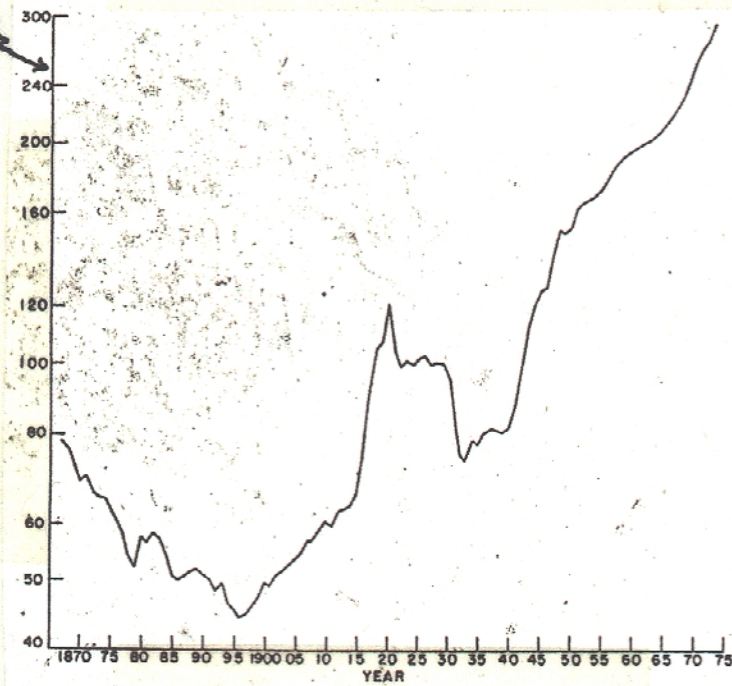
The cheapening of the elements of constant capital, that is, the growth of the productive force, is the immanent cause of capital's crisis. But the productive force is a measure of subjectivity. It is the development of the working class, of human potency (albeit disguised under a growth of subjection), of socialized creativity, which "growth of the productive forces" connotes, and which becomes the out-growing of the capitalist phase of human growth. In exchange-value terms, this process eventually expresses itself as the self-devaluation of value, the self-contraction of capital; negative profit.

The development of social subjectivity means that the value of any fixed objectification drops ceaselessly relative to the wealth-creating power of the living movement of human energy; the objectifying fecundity of social praxis. This cornucopia of human sensuous-cognitive activity can fix itself momentarily in and throw off from itself an indefinite series of transitory objectifications, without ever becoming identified with and limited to any one of these supersedeable objectifications.

All objectification, all objective wealth, is devalued continuously in the face of the unlimited and self-evolving creative power of the living fire of human energy. Wealth must then be re-conceptualized as subjective wealth; as the subject.

(log scale)

FIGURE 1. The Price Index, 1867-1973 (1929 Base)



The Great (Techno-) Devaluation

FIGURE 2. Percentage Rates of Inflation and Deflation, 1870-1973

