We call the form of surplus value considered so far *absolute surplus value* because its very existence, its rate of growth, and its every increase is at the same time an absolute increase of *created* value (of produced value). It arises, as we have seen,\(^a\) from an extension of the necessary working day beyond its limits, and its absolute magnitude is equal to the magnitude of this extension, whereas its relative magnitude—the proportional surplus value, or the rate of surplus value—is given by the ratio of this extension, this fluxion, to its fluent,\(^{176}\) necessary labour time. If the necessary labour time is 10 hours, the working day will be extended by 2, 3, 4, 5 hours. As a result, a value of 12-15 hours of labour will be created instead of one of 10. The extension of the *normal working day*, i.e. the total of necessary labour time+surplus labour time, is here the process by which surplus value grows, is increased.

Let us assume that the overall working day has reached its normal limits. Now there emerges, in the manner peculiar to and characteristic of it, capital's tendency to posit surplus value, i.e. surplus labour time. Let the normal working day consist of 12 hours, of which 10 are necessary labour time, and 2 surplus labour time. Let an extension beyond this duration, hence a growth in absolute surplus value, be out of the question. It is of course clear that such a barrier—however one may fix it—is bound to assert itself, to be reached. (One may also assume, in order to have the problem present in its purest form, that the *sum total* of absolute surplus value cannot be raised any further, since the working population is given.) In this case, therefore, where the surplus

\(^a\) See this volume, pp. 175-76.—*Ed.*
value cannot be raised any further by lengthening the overall working day, how can it be raised any further at all? By *shortening the necessary labour time*. Given an overall working day of 12 hours (10 hours necessary labour time, 2 hours surplus labour time) the surplus value or the surplus labour time may e.g. grow by 50%, may grow from 2 hours to 3 —without any extension of the overall working day—if the necessary labour time is shortened from 10 hours to 9 hours, by $\frac{1}{10}$. The quantum of surplus labour time, consequently surplus value, may grow not only through a direct increase of surplus labour time achieved by a simultaneous lengthening of the overall working day, but also through the shortening of the necessary labour time, hence the *conversion* of labour time from necessary to surplus labour time. The normal working day would not be lengthened, but necessary labour time would be reduced and there would have been a change in the ratio governing the division of the overall working day into labour which replaces wages and labour which creates surplus value.

As we have seen,\(^a\) necessary labour time (as paid labour time) is nothing but the labour time which replaces the labour time contained in the wage, in the purchasing price of labour capacity (which is in reality the labour time required for the production of the wage). It could be reduced by reducing the wage. If the value of the wage is forcibly cut down, so also is the labour time contained in the wage, hence the labour time paid for the reproduction, the replacement, of the wage. As the value fell, so would the equivalent for the value: the equivalent value corresponding to, or rather equal to, this value. This is exactly what happens in practice, of course. The price of labour capacity, like that of every other commodity, does in practice rise and fall above and below its value. But this is of no concern to us, as we proceed from the assumption that the price of the commodity corresponds to its value, or we consider the phenomena *on this assumption*. The reduction of necessary labour time which is under discussion here has therefore to be analysed under the presupposition that labour capacity is sold at its value, that the worker receives the normal wage, and therefore that no reduction occurs in the amount of the means of subsistence which are required for the normal and traditional reproduction of his labour capacity.

[III-126] // An increase in surplus value achieved by reducing wages below their average level (without increasing the productivity of labour) is an increase in profit achieved by forcing the

\(^a\) See this volume, pp. 173-76.—*Ed.*
worker below the level of his normal conditions of life. On the other hand, an increase in wages over their normal average level is, on the part of the worker, a sharing in, an appropriation of, a part of his own surplus labour (similarly assuming the productive power of labour remains constant). In the first case *the capitalist encroaches upon the vital conditions of the workman, and upon the times of labour necessary for its own sustainance.* In the second case *the workman expropriates part of his own surplus labour. In both cases the one loses what the other gains, but the workman loses in life, what the capitalist gains in money, and in the other case the workman gains in enjoyment of life, what the capitalist loses in the rate of appropriating other people's labour.*

Any reduction in necessary labour time which takes place on the assumption that the price of labour capacity is equal to its value, hence that wages are not forced down below normal wages, is possible only through an increase in the productivity of labour, or through a higher development of the productive forces of labour, which is the same thing.

We saw when we were considering the commodity\(^1\) that if the productive power of labour increases, the same use value will be produced in a shorter labour time, or a greater quantity of the same use values will be produced in the same labour time (or a shorter time, but this is included in case 2). The use value of the commodity remains the same although its exchange value has fallen, i.e. a smaller quantity of labour time is objectified in it, less labour is required to produce it. The amount of the means of subsistence required for the normal reproduction of labour capacity is not determined by their exchange value but by their use value—qualitatively and quantitatively. It is therefore not determined by the labour time required to produce them, objectified in them, but by the result of this labour time, by the real labour, to the extent that it is present in the product. Hence if the same amount of the means of subsistence can be produced in a shorter working period owing to an increase in the productivity of real labour, the value of labour capacity will fall, and along with that the labour time required for its reproduction, for the production of its equivalent value, the necessary labour time, although labour capacity will continue to be sold at its value. Just as any other commodity continues to be sold at its value if it costs \(\frac{1}{100}\) less today than before, because \(\frac{1}{100}\) less labour time is contained in it, although it continues to possess the same use value as before. Here the value of labour capacity falls, and therefore
the necessary labour time too, not because the price of labour capacity has fallen below its value but because its value has itself fallen, i.e. because less labour time is objectified in the labour capacity, and therefore less labour time is required for its reproduction. In this case surplus labour time grows because necessary labour time has diminished. A part of the overall working day which was previously reserved for necessary labour is now set free, is annexed to the surplus labour time. A part of the necessary labour time is converted into surplus labour time; hence a portion of the overall value of the product, which previously entered the wage, now enters the surplus value (the capitalist's gain). I call this form of surplus value *relative surplus value*.

It is clear from the outset that an increase in the productive power of labour can only lessen the value of its labour capacity or its necessary labour time to the extent that the products of this labour either directly enter into the worker's consumption, such as means of nourishment and heating, housing, clothing, etc., or go into the constant capital (raw material and instrument of labour) which is required for the manufacture of those products. The value of the constant capital entering into the product re-appears in the value of the product, and therefore the value of the product clearly falls, not only when there is a fall in the labour time required for its own manufacture but also, and just as much, when there is a fall in the labour time required for the manufacture of its conditions of production; that is to say the value of the raw material and instrument of labour required for the manufacture of the products which enter into the consumption of the worker, in short the value of the constant capital (*see Ramsay*177).

// The distinction between the re-appearance or simple preservation of the value in the product and the reproduction of that value is as follows: In the latter case a new equivalent replaces the exchange value lost through the consumption of the use value in which it was contained. In the first case no new equivalent is put in the place of the original value. For example, the value of the wood which re-appears in the table is not replaced by a newly created equivalent. The value of the wood only re-appears in the table because the wood previously possessed value and the production of its value is a prerequisite for the production of the table's value.//

But, secondly: Take the worker in the branch of labour in which he himself works. If, owing to a rise in the productive power of labour, a worker in a weaving-mill produces 20 yards of calico in one
hour, whereas he previously produced only 1 yard, the 20 yards, after deduction of the increased amount of constant capital contained in them, therefore in so far as they are, in general, value created by the worker himself, [III-127] possess no more value than the 1 yard, did previously. If the productive power of labour remains the same in all the other branches as it was before this transformation in the weaving trade, the worker would be unable to buy more of the means of subsistence than before with his 1 hour, despite the heightened productive power of his labour—i.e. he could only buy commodities in which 1 hour of labour is objectified, just as before. The growth of productive power in his own branch of labour, the increased productivity of his own labour, would therefore only cheapen the reproduction of his own labour capacity and hence only diminish his necessary labour time, in so far as and to the extent to which calico enters into his own consumption as, say, an element in his clothing. Only in this proportion. But this is true of every specific branch of production, hence of every individual capital, taken for itself, in the sphere of its own industrial functioning.

If we take the total capital of society, hence the whole capitalist class vis-à-vis the working class, it is clear that the capitalist class can only increase surplus value without extending the overall working day and without lessening the normal wage in so far as a greater productivity of labour, a higher development of the productive power of labour, makes it possible to maintain the working class as a whole with less labour, to produce the total amount of its means of subsistence more cheaply, and therefore to reduce the amount of labour time in total that the working class requires for the reproduction of its own wages. But this total amount consists simply of the total amount of individual means of subsistence and the total amount of the specific branches of labour; hence of the total amount of the individual branches of labour which produce these means of subsistence; hence of the total amount of the reductions in labour time on account of the increased productive power of labour in each of these individual branches. For the purpose of generalising the presentation, however, we are justified in viewing the process as if the worker lived from the use values he produces himself—and we can only view the process by picturing a particular individual capital with particular workers in a particular sphere. (It is not assumed here that the worker’s need for necessary labour time declines in the same measure as the amount of product he provides in the same period increases, but that his own product, which has now become
cheaper, enters into his own consumption in proportion as his necessary labour time declines. This is valid for the whole of society, hence for the sum total of all the individuals, since the social sum of relative surplus labour is nothing but the sum of all the surplus labours of the individual workers in the individual branches of labour. It is only that compensations and adjustments come into the picture, the consideration of which does not belong here, although they hide the true relation.

A reduction in necessary labour time is therefore an increase in surplus labour time. The one grows smaller in proportion as the other grows larger, and inversely. This rise and fall does not, however, affect the overall working day and its magnitude.) The worker himself can in fact only create relative surplus value to the extent that he creates it in the sphere of his own activity, i.e. produces products entering into his own consumption in less time than previously. The political economists therefore always take flight to this assumption, in so far as they go into the nature of relative value at all (see Mill\textsuperscript{178}).

In fact, one looks at the usual course of events. If the working day was=12 hours, surplus labour time=2 hours, and the capitalist, in consequence of increased productivity of labour, produces e.g. twice as much. Then surplus value can grow—his gain can emerge—only from two sources. Either the product of labour enters in a certain proportion into the reproduction of labour capacity, and labour capacity is cheapened in this proportion, so that the wage, i.e. the value of labour capacity falls in this ratio, hence there is also a fall in the part of the total working day required until then for the reproduction of this part of the value of labour capacity. Or the manufacturer sells the commodity above its value, i.e. as if the productivity of labour had remained the same. Only in the proportion to which he sells it above its value, hence buys all other commodities below their value, cheaper than the ratio between the amount of labour time contained in them and that contained in his commodity would require, does he posit a new surplus value. The worker, however, only receives the same normal wage as before. He therefore obtains a smaller part of the total value of the product, or a smaller part of that value is expended in the purchase of labour capacity than before the increase in the productivity of labour. A smaller part of his whole day is therefore expended in reproducing his wages, a larger part for the capitalist. It is the same thing, in practice, as if his cost of upkeep were lessened as a result of the increased productivity of his labour, or as if he could buy all other means of subsistence cheaper as a result of the greater
productivity of his labour in the same proportion as the capitalist receives new value.

[III-128] In any case, we do not need to repeat here that the general presupposition of a sale of commodities above their value negates itself, and competition in fact compensates for sale above the value by sale below the value. What is involved here is the case where an increase in the productivity of labour has not yet become universal in the same branch of business, where the capitalist therefore sells (in a certain proportion at least, for he will always sell cheaper than the other) as if more labour time had been needed for the manufacture of his product than was really necessary. He sells e.g. the product of \( \frac{3}{4} \) of an hour as the product of 1 hour, because the majority of his competitors still need 1 hour to manufacture this product. If the total working day was 12 hours, he sells, in the given case, as if it had been 15 hours. \( \left( \frac{12}{4} = 3, \ 12 + 3 = 15 \right) \) He has not lengthened the working day. If necessary labour time was=10, and surplus labour time was=2, it is still=2. Actually, however, he sells as if necessary labour time were only 7 hours and surplus labour 5 hours \( \left( 7 + 5 = 12 \right) \). In fact, the labour of his own workers relates to that of average workers in such a way that they buy with the value of 7 hours as much as the latter buy with the value of 10 (since value has not fallen in proportion to productivity). With the original ratio, he had to give the workers 10 hours out of the 12, i.e. \( \frac{5}{6} \left( \frac{12}{6} = 2; \ \frac{5 \times 12}{6} = 10 \right) \).

Now, in consequence of the rise in the productivity of labour, he sells 12 at 15. If an hour of labour were paid for as an hour that stands \( \frac{1}{4} \) above average labour, the workers, instead of 10 hours, would only have to work \( 10 - \frac{10}{4} \). If the necessary working day until then was 10 hours, and 2 hours of surplus labour, the workers would now only need to work \( 10 \times \frac{3}{4} \) hours instead of \( 10 \times \frac{4}{4} \) hours (since their labour would count for \( \frac{1}{4} \) more than the average hour of labour), hence they would need to work \( 7 \frac{1}{2} \) hours instead of 10, and the surplus value, just as before, would come to \( \frac{1}{5} \) of the necessary labour time \( \left( \frac{10}{5} = 2 \right) \). It would now be \( \frac{1}{5} \) of \( 7 \frac{1}{2} \) hours, or \( 15 \frac{1}{2} \) hours. \( \frac{1}{5} \) of \( 15 \frac{1}{2} = 1 \frac{5}{10} = 1 \frac{1}{2} \), or \( \frac{3}{2} \), or \( \frac{6}{4} \). In fact if \( \frac{3}{4} \) of an hour of this labour=1, or \( \frac{4}{4} \) of an hour of average labour, \( \frac{6}{4} \) of the same labour=\( \frac{8}{4} \), or 2 hours of labour. The working day would thereby be reduced to \( 7 \frac{1}{2} + \frac{3}{2} = 9 \) hours. The capitalist has the workers work 12 hours, as before, pays for the necessary labour time with \( 7 \frac{1}{2} \), and therefore pockets \( 4 \frac{1}{2} \) hours.

His gain derives from the fact that the necessary labour time of 10 hours has fallen to \( 7 \frac{1}{2} \), or the worker can buy all his
necessary means of subsistence with the product of $7\frac{1}{2}$ hours. It is exactly the same as if he were to produce the whole of his means of subsistence himself and were to be able to produce as much in $\frac{3}{4}$ of an hour as previously in 1 hour, owing to the higher productivity of his labour, hence producing in $7\frac{1}{2}$ hours as much as he previously produced in 10. If with the increased productivity of labour the proportion had remained the same, the overall working day would have become shorter, because necessary labour would have been lessened while the proportion between necessary labour and surplus labour would have remained the same. In practice it comes to exactly the same thing: Whether the value of labour capacity and therefore the necessary labour time is *lessened*, because the worker's product enters into his own consumption in a certain proportion and therefore the necessary labour time declines and the surplus labour time, hence also surplus value, increases in this proportion; or whether as a result of the increased productivity of labour this particular branch of labour rises above the level of the socially average worker in the same branch, therefore the value e.g. of the hour of labour rises relative to all other commodities, the capitalist pays this labour as average labour—according to the previous standard—but sells it as labour of a higher than average level. In both cases a smaller number of hours is sufficient to pay the wage, i.e. the necessary labour time has been reduced and in both cases the relative surplus value, i.e. surplus value not attained through an absolute prolongation of the working day, results from the decline in the amount of labour time required for the reproduction of the wage consequent on the increased productivity of labour; relative surplus value results in the one case directly, because the worker produces the same quantity of use values in a lesser labour time, although the product continues to be sold at its value. In the other case it results because a smaller quantity of labour time is equated with a greater quantity of average labour time as a result of the rise in productivity, and the worker therefore receives the same quantity of use values with labour time which is smaller but sold at a higher price. In both cases the relative surplus value results from a reduction in the *necessary labour time*.

The following is in any case clear in itself: If the productivity of labour grows, and the ratio remains the same, the worker would either have to work less labour time to reproduce his wages, say $7\frac{1}{2}$ instead of 10 hours, thereby shortening the working day as a whole; or he would have to receive a greater quantity of means of subsistence, his wages would rise above the [average] level. If
neither the one thing nor the other takes place, it is clear that the
result of the increased productivity of labour has only been to
increase the amount of labour he performs for the capitalist, and
to reduce the amount of labour he performs for himself.

The whole difficulty arises from this, that when the individual
capitalist raises the productivity of labour, he is not thinking
directly of a diminution of necessary labour time, but of its sale
above its value—of raising it above average labour time. Of this
raised labour time, however, a smaller proportion is needed for
the replacement of wages; i.e. the surplus labour time grows,
although this growth presents itself in a roundabout way, through
sale above value.

The working day as a whole does not grow along with the
growth in relative surplus value, hence relative labour time. It
therefore follows that there is only a fall in the proportion in which
the worker participates in his own working day. There is a fall in
relative wages, or the weight of capital rises in relation to labour.

Further: As a result of the growth in the productivity of labour
the quantity of products is increased. The same value is present in
their total amount (e.g. the total for one working day) as was
present previously in a smaller total. The individual product or
the individual commodity therefore falls in value, but it is
multiplied by a larger factor, which is indicated by the number of
products. 6×4 is not more than 12×2. Here, then, we have a
growth in the real wealth of use values, without any growth in
their exchange value or the labour time contained in them,
whereas in the first case—absolute surplus value—the amount of
products also grows, but simultaneously with their exchange value,
i.e. in proportion to the labour time contained in them.

This is to be understood as follows. If 10 [lbs] of cotton are
converted into twist in the same time as previously 1 lb, the 10 lbs
have not absorbed more spinning labour than the previous 1 lb.
The value added to the 10 lbs is no greater than the value of the
1 lb. Every 1 lb of twist contains ten times less spinning labour in
the first case than in the second. And since they both contain the same
amount of cotton, every 1 lb of twist, caeteris paribus, is $1/10$
cheaper if the spinning labour amounts to $1/10$ of the value.

[III-130] If the added day of spinning labour=10, and the value
of 1 lb of cotton=20 (for the sake of simplicity the instrument is
set=0 in both cases), in the first case 1 lb of twist=10+20=30; in
the second case 10 lbs of twist=100+10=110, making 1 lb of

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* Other things being equal.— Ed.
Relative surplus value is therefore distinguished from absolute as follows. In both, surplus value = surplus labour, or, the ratio of surplus value is equal to the ratio of surplus labour time to necessary labour time. In the first case the working day is extended beyond its limits and the surplus value grows (or the surplus labour time grows) in proportion as the working day is extended beyond its limit. In the second case the working day is given. Here, the surplus value, or the surplus labour time, is increased owing to the reduction of the portion of the working day that was required, or was necessary, for the reproduction of the wage. In the first case a given level of the productivity of labour is presupposed. In the second case the productivity of labour is raised. In the first case the value of an aliquot part of the total product or a part of the product of the working day remains unchanged; in the second the value of the part of the product changes, but its quantity (number of articles) grows in the same proportion as its value diminishes. The value of the total amount thus remains unchanged, whilst the total amount of products or use values has increased. Further the matter is to be presented simply as follows:

As we saw in our analysis of the commodity,\(^{10}\) the productivity of labour does not increase the value of the product or the commodity in which the labour manifests itself. If we presuppose that the labour time contained in the commodities is, under the given conditions, necessary labour time, socially necessary labour time\(^ {70}\)—and this is always the presupposition we start from once the value of a commodity is reduced to the labour time contained in it—what takes place is rather the following: The value of the product of labour is in an inverse ratio to the productivity of labour. This is in fact an identical proposition. It means nothing more than this: If labour becomes more productive, it can represent a greater quantity of the same use values in the same period, it can embody itself in a greater amount of use values of the same kind. Accordingly, an aliquot part of these use values, e.g. a yard of linen, contains less labour time than previously, has therefore less exchange value and indeed the exchange value of the yard of linen has fallen in the same proportion as the productivity of the labour of weaving has grown. Inversely, if more labour time than previously were required to produce a yard of linen (let us say, because more labour time was required to produce a pound of flax), the yard of linen would now contain more labour time, hence would have a higher exchange value. Its exchange value would
Relative Surplus Value

have increased in the same proportion as the labour required to produce it had become less productive.

If we therefore take the whole working day—the average normal working day—the value of the sum total of its products remains unchanged, whether the labour becomes more or less productive. For the sum total of use values produced comes to one working day, just as before, it continues to represent the same quantity of socially necessary labour time. If, on the other hand, we take an aliquot part of the daily overall production, or a part of the product, its value rises and falls in inverse ratio to the productivity of the labour contained in it. For example, if 1 quarter or 8 bushels are the product of a month’s labour, let agriculture double its productivity in one case, and halve its productivity in another case. We should then have 3 cases: 8 bushels the product of a month’s labour; 16 bushels the product of the same labour time; 4 bushels the product of the same labour time. The value of the total amount produced during the month, 8, 16 or 4 bushels, would continue to contain respectively the same quantity of necessary labour time. The value of this total amount would therefore have remained unchanged, although in one case the productivity of labour would have doubled, in the other case declined to half its original level. But in the first case 1 bushel would contain 1/8 of a month=2/16, in the second case 1/4 or 2/8=4/16, and in the third case only 1/16. With the productivity of agriculture doubled, the value of the bushels fell by a half; with productivity declining to half its original level, the value doubled. The value of a commodity can therefore never increase as a result of [increases in] the productivity of labour. This would involve a contradiction. Growth in the productivity of labour means that it brings forth the same product (use value) in less time. Growth in the exchange value of the product means that it contains more labour time than previously.

If, therefore, the value of the individual commodity stands in an inverse ratio to the productivity of labour, whilst the value of the total amount of products in which a given labour time is embodied remains untouched, unchanged, by any variation in the productivity of labour, the surplus value in contrast depends on the productivity of labour: if, on the one hand, the commodity is sold at its value, and on the other hand the length of the normal working day is given, the surplus value can only increase as a result of a rise in the productivity of labour. The surplus value is not related to the commodity; it expresses rather a relation between two parts of the overall working day—a relation namely between
the part during which the worker works to replace his wage (the value of his labour capacity) and the part during which he works for the capitalist over and above this replacement. Since these two parts together make up the whole of the working day, since they are parts of the same whole, their magnitudes clearly stand in inverse ratio to each other, and the surplus value, i.e. the surplus labour time, rises or falls according to whether the necessary labour time falls or rises. The growth or diminution of the latter, however, stands in inverse ratio to the productivity of labour.  

[III-131] But if there were to be a general doubling of the productivity of labour, i.e. in all branches of industry providing directly or indirectly the commodities (use values) required for the reproduction of labour capacity, providing products which enter into the consumption of the workers, the value of labour capacity would fall in proportion as this general productivity of labour uniformly increased, hence the labour time necessary for the replacement of this value would fall, and the part of the day which forms surplus time, which is worked for the capitalist, would increase in the same proportion as the former would decline. However, the development of the productive forces in these different branches of labour is neither uniform nor simultaneous, being subject to uneven, diverse and often mutually opposed motions. If the productivity of labour increases in a branch of industry which enters directly or indirectly into the worker's consumption, e.g. the industry supplying fabrics for clothes, we cannot say that the value of labour capacity falls in the same proportion as the productivity of this particular industry grows. It is only this means of subsistence that is produced more cheaply. The cheapening only affects an aliquot part of the worker's vital requirements. The increased productivity of labour in this one branch does not lessen the necessary labour time (i.e. the labour time required for the production of the means of subsistence needed by the workers) in proportion to the growth in productivity, but only in proportion as the product of this labour enters, on the average, into the worker's consumption. No definite calculation of this can be made for each individual branch of industry (excepting perhaps the products of agriculture).  

This does not change the general law in any way. It remains correct, just as before, that relative surplus value can only arise and increase in the proportion to which use values (means of subsistence) directly or indirectly entering into the worker's consumption are cheapened, i.e. not in the proportion to which the productivity of a specific branch of industry has grown, but
rather in the proportion to which this increase in its productivity lessens necessary labour time, i.e. produces more cheaply a product which enters into the worker’s consumption. In considering relative surplus value therefore, we not only can but we must always proceed from the presupposition that the development of productive power or the development of the productivity of labour in every particular branch in which capital investment takes place directly reduces the necessary labour time in a definite proportion, i.e. that the product produced by the worker forms a part of his means of subsistence and its cheapening therefore reduces the labour time required for the reproduction of his life in a definite proportion. Since relative surplus value arises only on this condition, we can and must always assume the presence of this condition in considering relative surplus value.

It is clear, further, that the presence and the growth of relative surplus value by no means require as a condition that the worker’s life situation should remain unchanged, i.e. that his average wage should always provide the same quantitatively and qualitatively determined amount of means of subsistence and no more. This is not the case, although relative surplus value can neither arise nor grow without a corresponding fall in the value of labour capacity or the value of wages (average wages). Indeed, relative surplus value might well rise continuously, and the value of labour capacity, hence the value of average wages, fall continuously, yet despite this the range of the worker’s means of subsistence and therefore the pleasures of his life could expand continuously. For this is conditioned by the quality and quantity of the use values (commodities) he can appropriate, not by their exchange value.

Let us assume a doubling of productivity which is universal, covering all branches of production. Assume that before this doubling the normal day was 12 hours, 10 of them necessary labour time, 2 surplus labour time. The total amount of the worker’s daily means of subsistence, which previously cost [10] hours of labour, could now be produced in 5 hours. Instead of needing 10 hours of labour to replace the value (price) of his labour capacity every day, i.e. to provide an equivalent for his daily wages, the worker would now need only [5] hours. The value of his labour capacity would have fallen by a half, for the means of subsistence required for its reproduction would now be the product of 5 hours; instead of 10 as before. If the worker now—after this revolution in the productivity of labour—received a daily wage equivalent to 6 hours, that is to say, if he had in future to work 6 hours [IV-138] a day, his material living
situation would have improved in the same proportion as if, under
the previous conditions of production, he had worked the whole
day of 12 hours for himself (i.e. for the reproduction of his wages)
and a labour time of 0 for the capitalist; as if the whole of the
working day necessary labour time had been worked, and no
surplus labour time at all. For 5:6=10:12. (5×12=6×10.)
Nevertheless, surplus labour time would have increased in this
case from 2 hours to 6 hours, and a relative surplus value of 4
hours would have been added to the absolute surplus value of 2
hours. Instead of working as before 10 hours for himself and 2
for the capitalist, hence 10/12 (=5/6), therefore 5/6 of the day, for
himself and 2/12=1/6 of the day for the capitalist, the worker now
works only 6/12 or 3/6 of the day for himself and, instead of 1/6, he
also works 3/6, half the day, for the capitalist. Necessary labour
time would have fallen from 10 to 6, hence the value of the day's
labour capacity, instead of being 10 hours, would only be 6 hours:
4 hours less, i.e. it would have fallen by 40% (10:4=100:40).
Surplus value would have increased to 300%, from 2 to 6.
\( \text{Instead of } \frac{1}{6} \text{ of the day } \frac{5}{6}, \frac{2}{6} \text{ added to } \frac{1}{6} \text{ gives } \frac{3}{6}, \text{ therefore a}\)
\(200\% \text{ increase. This for the surplus value. On the other hand, from}\)
\(\frac{5}{6} \text{ down to } \frac{3}{6} \text{ is a reduction of } \frac{2}{6}, \text{i.e. the increase on the surplus}\)
labour [time] side or the side of the capitalist is exactly as much,
viewed absolutely, as the reduction on the necessary labour time
side or the value of labour capacity side. It amounts to \(\frac{2}{6}\) of a day,
or 4 hours of labour. \(\frac{2}{6}=\frac{4}{12}.\) But if we look at the increase on
one side in proportion to the original surplus labour time, and the
decrease on the other side in proportion to the original necessary
labour time (or the value of labour capacity), the increase on one
side and the decrease on the other are expressed in different
proportions, although the absolute magnitude of the time subtracted
from one side and added to the other is the same identical
magnitude.

Thus in the above case: \(\frac{10}{12} \text{ or } \frac{5}{6} \text{ are related to } \frac{6}{12} \text{ or } \frac{3}{6} \text{ or}\)
\(\frac{5-2}{6} \text{ as } 5:3, \text{ as } 60\% \text{ (should be } 40\%, \text{ see the other page}^{181}), \text{ for}\)
\(5:3=100:60 \text{ (5×60=300 and } 3×100 \text{ similarly=300), while } \frac{2}{12} \text{ or}\)
\(\frac{1}{6} \text{ is related to } \frac{6}{12} \text{ or to } \frac{1+2}{6} \text{ (3/6) as } 1:3, \text{i.e. } 100:300, \text{ hence as}\)
\(300\%. \text{ Therefore, although the absolute increase in surplus labour}\)
[time]=the absolute decrease in necessary labour time, which has
occurred as a result of the raised productivity of labour, the
proportion in which the value of labour capacity declines or the
necessary labour time falls is not identical with the proportion in
which the surplus labour time or the surplus value rises, but depends rather on the original proportion in which surplus labour time and necessary labour time shared in the normal overall working day, participated in it. //

// It follows from this that in the proportion in which total surplus labour time (both the part of it which arose from the reduction of necessary labour time consequent on the increase in the productivity of labour, and the part which arose from the lengthening of the working day up to its normal limits) already forms a greater part (a more significant portion) of the overall working day, any increase in the productive power of labour and resultant reduction in necessary labour time (or increase in relative surplus value) can only increase the proportional surplus value in a smaller ratio. Or that a reduction of necessary labour time causes an increase in surplus labour time in a proportion which is smaller, the greater the already achieved total magnitude of surplus labour time, and greater, the smaller the achieved total magnitude of the surplus labour time. Therefore (and this must be dealt with in more detail under profit\textsuperscript{182}) the more advanced the industry, the smaller the proportional growth of surplus value, if productive power continues to increase in the same degree. Productive power in general, or productive power altogether, to the extent that it influences the reproduction of labour capacity. In other words, the proportion in which an increase in the [IV-139] productive power of labour reduces necessary labour time (hence the value of labour capacity) and raises surplus labour time, hence surplus value, stands in an inverse relation to the proportion in which necessary labour time and surplus labour time originally, i.e. each time before the coming of the new increase in productive power, shared in, or participated in, the overall working day.

Assume that the working day=12 hours, 10 hours of necessary labour, and 2 hours of surplus labour. Let there be a general doubling of productive power. Now 5 hours would suffice for necessary labour time, surplus labour time would be increased by 5 hours, by the same amount as the decrease in necessary labour time (hence in the value of labour capacity)—i.e. 5 hours. Necessary labour time would have declined from 10 to 5, i.e. by half=50%. // (If the necessary labour time were to decline from 10 to 6, this would be a reduction of 4 hours. 10:4=100:40, therefore by 40%. I said 60% before\textsuperscript{181} This is wrong, because I calculated 10:6=100:60, whereas in fact what we are concerned with is the ratio of 10 to the remainder of the 10 when 6 is taken away from it, hence the ratio of 10 to 4. After all, the labour time has not
been reduced by 6 hours, i.e. not by 60%.) On the other hand
surplus labour time has risen from 2 to 7 hours (with the addition
of 5 hours of surplus labour time), and 2:7=100:350 (2×350=700
and 7×100 also=700); hence a rise to 350%. It would have increased
to three and a half times its original magnitude.

Let us now assume that once this proportion has become
established, with the overall working day falling into 5 hours of
necessary labour, 7 hours of surplus labour, the general productive
power of labour is redoubled, i.e. necessary labour time
diminishes by 2½ hours, surplus labour time therefore rising by
the same 2½ hours; hence from 7 to 9½ hours. Here the
necessary labour time has again fallen by 50%, and surplus labour
time risen in the ratio 14/2 (7) to 19/2 (9½), thus 14:19.
14:19=100:x; x=1900/14,=135 5/7%. (19×100=1,900 and 14×135 5/7
(or 135 10/14) also=1,900). Therefore, although in both cases the
productive power of labour has doubled and the necessary labour
time has therefore fallen by a half, by 50%, surplus labour time or
surplus value would have risen to 350% in one case and only to
135 5/7% in the other. (The proportion in which the productive
generally increases would always be the same,=the proportion in
which the necessary labour time fell as compared with itself, i.e. with its
extent before this increase in productive power.) But in the first case the
surplus labour time amounted to only 1/6 of the whole working
day, 2 hours,=2/12, before the doubling of the productive power
took effect, while in the second case it amounted to 7 hours or 7/12.
(The same peculiarity holds for the increase of money, as has been
demonstrated by Jacob, for example. It grew more in the 18th
century than in the 17th. But the proportional increase was
smaller.3)

[IV-140] If we now take an actual case, in which productive
power is e.g. doubled in one branch, but not in the other branches
at the same time, perhaps remaining unaltered in the branches of
production which provide constant capital for this one branch, so
that the expenditure on raw materials remains the same, i.e. grows
along with the increase in productive power, and the expenditure
on machinery increases, even if not in the same ratio, it is clear
that the profit, i.e. the ratio of the surplus value to the total value
of the capital expended, does not increase in the same proportion
as the necessary labour falls through the increase in productive

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a W. Jacob, An Historical Inquiry into the Production and Consumption of the
power. There are two reasons why this does not happen. Firstly because with the more developed productive power of labour, surplus value does not grow in the same proportion as necessary labour diminishes. Secondly because this surplus value, which has grown in a smaller proportion, is calculated on capital which has increased its value approximately in proportion to the heightening of productive power. //

//One can calculate the diminution in necessary labour time in two ways: 1) in proportion to its own magnitude before the increase in the productive power of labour; 2) in proportion to the whole of the working day. It is clear in the first calculation that—presupposing an overall heightening of productive power—necessary labour time (and therefore the value of labour capacity) declines in the same measure as productive power increases; but the proportional growth of surplus labour time or surplus value depends on the proportion in which the overall working day was originally divided between necessary labour time and surplus labour time. Thus if the working day was 12 hours originally, divided into 10 of necessary and 2 of surplus labour, and if the productive power of labour doubled, necessary labour time would fall from 10 to 5, i.e. by 50%, while productive power doubled. (This proportion is expressed in the case of productive power by a 100% growth, in the case of necessary labour time by a 50% fall. That necessary labour time falls from 10 to 5, i.e. by 50%, means that in 1 hour I can produce as much as I did previously in 2, i.e. twice as much, i.e. the productive power of labour has increased by 100%.) Surplus labour, on the other hand, has grown from 2 to 7, i.e. to 350% (a threefold increase, 2×3, or [6] hours, and a rise by a half, $\frac{2}{2}=1$, thus the whole has gone up from 2 to 7), because it originally only amounted to 2 hours out of 12. If it had originally already amounted to 3 hours, and necessary labour only 9 hours, the latter would have fallen by $\frac{4}{2}$ hours, again by 50%, while surplus labour would have risen from 3 to $7\frac{1}{2}$; i.e. to 250% (for $3:7\frac{1}{2}$, or $\frac{6}{2}:15/2$, or $6:15=150:250$. $15\times100=1500$ and $6\times250=1500$). If we now consider the whole of the working day, the ratio is not altered. [Necessary] labour time originally amounted to 10 hours or $\frac{10}{12}$ of the working day; now it only amounts to $\frac{5}{12}$ in the first case. (In the second it was originally $\frac{9}{12}$ of the working day, and afterwards came to no more than $\frac{4}{12}$.)

It is all the same whether I compare necessary labour time with itself or with the working day as a whole. All that is added is the divisor 12. This fix has therefore been dealt with.//
Now back to page 138 before the bracket. The worker's life situation would have improved despite the fall in the value of his labour capacity, the reduction by 4 hours in his necessary labour time and the increase of 4 hours in his surplus labour time for the capitalist, because he himself would have received a share of 1 hour in the time now set free. I.e., the labour time he worked for himself, i.e. for the reproduction of his wages, would not have been reduced to the full extent of the shortening of this necessary labour time resulting from the [increased] product of the labour. He would receive more use values of less value—i.e. containing less labour time than previously. But the degree in which new surplus labour would have been formed in general, in which relative surplus value would have arisen, would correspond completely to the degree in which a part of his necessary labour time had been converted into surplus labour time for the capitalist, or in which the value of his labour capacity had declined. This is enough here. Later on the proportional elements in the matter must in general be put together (see also above). Thus this in no way alters the nature and the law of relative surplus value—that a greater part of the working day is appropriated by capital as a result of rises in productivity. Hence the preposterousness of wanting to refute this law by statistical demonstrations that the material condition of the worker has improved here or there, in this or that aspect, [IV-141] as a result of the development of the productive power of labour.

// Standard. October 26, 1861. We read here of proceedings taken by the firm of John Bright and Co. against its workers, before the Rochdale magistrates,

* to prosecute for intimidation the agents of the Carpets' Weavers' Trades Unions. Bright's partners had introduced new machinery which would turn out 240 yards of carpet in the time and with the labour previously required to produce 160 yards. The workmen had no claim whatever to share in the profits made by the investment of their employers' capital in mechanical improvement. Accordingly, Messrs. Bright proposed to lower the rate of pay from 1 1/2d. per yard to 1d., leaving the earnings of the men exactly the same as before for the same labour. But there was a nominal reduction, of which the operatives, it is asserted, had not had fair warning beforehand.*184 // [IV-141]

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* See this volume, p. 246, the bracket before "Instead".— Ed.
* Ibid.— Ed.
The surplus value capital receives through the development of the productive forces does not flow from an increase in the amount of products or use values created by the same amount of labour, but from a reduction in necessary labour and an increase of the same proportion in surplus labour. The surplus value capital receives through the production process consists in nothing more than the excess of surplus labour over necessary labour.

Surplus value exactly equals surplus labour; an increase in surplus labour is exactly measured by a reduction in necessary labour. With absolute surplus value the reduction in necessary labour is relative, i.e. necessary labour falls relatively because overtime is increased directly. If the necessary labour = 10 hours, and the surplus labour = 2 hours, and if the latter is now increased by 2 hours, i.e. the total working day is lengthened from 12 hours to 14, the necessary labour remains 10 hours, as it was before. But previously its ratio to the surplus labour was 10:2, i.e. 5:1, and now it is 10:4 = 5:2, or, in other words, previously it was equal to \(\frac{5}{6}\) of the working day, now it is only \(\frac{5}{7}\). Here, therefore, necessary labour time is reduced relatively, because total labour time, and therefore surplus labour time, has grown absolutely. In contrast to this, if the normal working day is given, and the increase in relative surplus value occurs through an increase in productive forces, the necessary labour time is lessened absolutely and the surplus value is thereby increased both absolutely and relatively without any increase in the value of the product. In the case of absolute surplus value, therefore, there is a relative fall in the value of wages as compared with the absolute growth in surplus value; whereas in the case of relative surplus value there is an absolute fall in the value of wages. Nevertheless, the first case is always worse for the worker. In the first case the price of labour falls absolutely. In the second case the price of labour may rise.

2) The surplus value of the capital is increased not by the multiplier of the productive power but by the fraction of the working day which originally represented the necessary labour time, divided by the multiplier of the productive power.

3) The greater the surplus value prior to the new increase in productive power, i.e. the greater the part of the day worked for no return already is, and the smaller therefore the paid part of the day, the fraction of the day which forms the worker's equivalent, the less the growth in surplus value which capital obtains from the new increase in productive power. Its surplus value rises, but in an ever smaller proportion to the development of the productive
forces. The barrier remains the ratio between the fraction of the day which expresses necessary labour and the whole of the working day. Movement can only take place within these limits. The smaller the fraction allotted to necessary labour, and the greater therefore the surplus labour, the smaller the ratio in which an increase in productive power lessens necessary labour time, since the denominator of the fraction is that much larger. The rate of capital’s self-valorisation therefore grows more slowly in the measure to which it is already valorised. This does not, however, happen because the wage or the worker’s share in the product has risen but because the fraction of the working day which represents necessary labour has already fallen very low in proportion to the working day as a whole. [IV-138a]

[IV-141] A certain development of the productivity of labour is in general presupposed, even for the existence of absolute surplus value, i.e. surplus labour in general, and therefore for the existence of capitalist production, as for all earlier modes of production in which one part of society works not only for itself but also for the other part of society.

* “The very existence of the former (the master-capitalists) as a distinct class is dependent on the productiveness of industry”* (Ramsay, An Essay on the Distribution of Wealth etc., Edinburgh, [London,] 1836, [p.] 206).

* “If each man’s labour were but enough to produce a his own food, there could be no property”* (this word is used here for capital) (Piercy Ravenstone, Thoughts on the Funding System, and its Effects, London, 1824, p. 14).

In any case, the capital-relation develops at a historical stage of the economic formation of society which is already the result of a long series of previous developments. The level of the productivity of labour from which it proceeds is not of natural origin but is something created historically; by that time labour has long emerged from its first raw beginnings. It is clear that if a country possesses soil that is naturally fertile, waters teeming with fish, rich coal deposits (combustible materials in general), metal mines, etc., in comparison with other countries, where these natural conditions for the productivity of labour are present to a lesser degree, less time is required in the first country to produce the necessary means of subsistence, hence a greater quantity of excess labour for others over and above labour for oneself is possible from the outset; and therefore absolute surplus labour time, thus absolute

a Ravenstone has: “procure”.—Ed.
surplus value, is greater here from the outset. Capital (or any other relation of production whereby surplus labour is enforced) is therefore more productive here than under less favourable natural conditions.

The ancients were already aware that natural cheapness of labour capacity, i.e. of its cost of production and reproduction, was a great factor in industrial production. For example, it says in Diodorus' Historical Library, b. 1, ch. 80, in relation to the Egyptians:

"It is altogether incredible how little trouble and expense the bringing up of their children causes them. They cook for them the first simple food that comes to hand; they also give them the lower part of the papyrus stem to eat, if it can be roasted in the fire, and the roots and stalks of marsh plants, some raw, some boiled, and some roasted. Most of the children go without shoes and unclothed, since the air is so mild. Hence a child, until he is grown up, costs his parents no more than twenty drachmas altogether. This is the main reason why the population of Egypt is so numerous, and, therefore, why it has been possible to undertake so many great works."

//Once the ratio of surplus value is given, its amount depends on the size of the population; if the size of the population is given, it depends on the ratio of surplus to necessary labour.//

All that follows from this is that, in places where the capital-relation predominates (or a similar relation of production which enforces absolute surplus labour, for this natural fertility only facilitates the prolongation of surplus labour time and its existence; it does not create relative surplus value in our sense), the productivity of capital is at its greatest—i.e. the most surplus labour is available and therefore the most surplus value, or the value of labour capacity is naturally at its lowest, which is the same thing—where the natural conditions of labour, [IV-142] hence in particular the soil, are at their most fruitful. This by no means implies that the most fertile countries are the most well suited to the development, thus also the fruitfulness, of the capital-relation itself. When Ricardo speaks of the fertility of the soil as one of the main conditions for the productivity of labour, he assumes capitalist production, and the proposition is only uttered on this assumption. He is naturally inclined everywhere to presuppose bourgeois relations of production as given. This does not interfere with the development of his argument as he deals exclusively with production in this particular form. The following passage is important, both for the concept of surplus labour in general and

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\[ a \] Diodor von Sicilien, Historische Bibliothek. Übers. von Julius Friedrich Wurm (Abth. 1), Bändchen 1, Stuttgart, 1827, p. 126. — *Ed.*
for the misunderstanding about the point we have just touched on.

"In different stages of society, the accumulation of capital, or of the means of employing labour* is more or less rapid, and must in all cases depend on the productive powers of labour. The productive powers of labour are generally greatest, where there is an abundance of fertile land (Ricardo).^{a}

"If, in the first sentence, the productive powers of labour mean the smallness of that aliquot part of any produce that goes to those whose manual labour produced it, the sentence is nearly identical, because the remaining aliquot part is the fund whence capital can, if the owner pleases, be accumulated. But then this does not generally happen where there is most fertile land. It does in North America, but that is an artificial state of things. It does not in Mexico. It does not in New Holland. The productive powers of labour are, indeed, in another sense, greatest where there is much fertile land, viz. the power of man, if he chooses it, to raise much raw produce in proportion to the whole labour he performs. It is, indeed, a gift of nature, that men can raise more food than the lowest quantity that they could maintain and keep up the existing population on; but 'surplus produce' (the term used by Mr. Ricardo p. 93) generally means the excess of the whole price of a thing above that part of it which goes to the labourers who made it; a part, which is settled by human arrangement, and not fixed" (Observations on Certain Verbal Disputes in Political Economy, Particularly Relating to Value, and to Demand and Supply, London, 1821, pp. 74-75).^{c}

This man does not see that in fact "the smallness" or bigness "of that aliquot part that goes" to the labourer depends on the proportional quantity of raw produce which "the whole labour" of a man can perform daily. He is only right against Ricardo to the extent that he says: Natural fertility brings it about that with one day's labour I could produce, if I chose, much more than what is absolutely necessary for existence (the lowest quantity to keep the existing population upon). It does not mean that I work a lot, hence produce a lot; still less that the work I do over and above what is necessary forms the fond of capital. This "is settled by human arrangement". For Ricardo the capital-relation is itself a naturally given relation and is therefore presupposed everywhere.

If capitalist production is presupposed, necessary labour time, i.e. the time required for the reproduction of the worker, will differ in different countries according to how favourable the

*It is only in such passages as this that the nature of capital breaks through in Ricardo. So capital is not the means of labour for producing a certain result, but it is "the means for employing labour", and this involves that the possessor of the means, or those means themselves, employs labour, the means are the power over labour."^{186}

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^{b} Old name of Australia.— Ed.

^{c} Marx reproduces the above two paragraphs in English.— Ed.
natural conditions of labour are, and therefore according to its natural level of productivity, and it will stand in inverse relation to the productivity of labour, hence it will be possible for surplus labour time or surplus value to be greater in one country than in the other, in direct relation, even if the same number of hours is worked.

All this concerns* the very existence of absolute surplus labour, and its relative quantity in different countries according to their respective natural facilities for production*. We do not have to deal with this here.

[IV-143] Since it is assumed that the normal working day is already divided into necessary labour and absolute surplus labour, the existence, and indeed a definite level, of the latter is presupposed, hence a definite natural basis for it is also presupposed. The question here is rather the productive power of labour—hence the shortening of necessary labour time, the prolongation of surplus labour time—in so far as it is itself the product of capitalist (in general, of social) production.

The chief forms are: Cooperation, Division of Labour, and Machinery or the application of scientific power, etc.

a) COOPERATION

This is the basic form. Division of labour presupposes cooperation or is only a specific form of cooperation. The same is true of a workshop based on the use of machinery, etc. Cooperation is the general form on which all social arrangements for increasing the productivity of social labour are based, and it merely receives further specification in each of these. But cooperation is itself at the same time a specific form, existing alongside its more highly developed and closely specified forms (just as it is a form which transcends its hitherto developments).

As a form which is distinct from its own further developments or specifications, and which exists in distinction, separately from them, cooperation is the most rooted in nature, the crudest and the most abstract of its own varieties; but in any case it continues in its simplicity, in its simple form, to be the basis and prerequisite of all its more highly developed forms.

Cooperation is therefore first of all the direct collective labour—unmediated by exchange—of many workers in order to produce the same result, the same product and the same use value (or utility). In production under slavery. (Cf. Cairnes.)

It is firstly the collective labour of many workers. Hence its initial
prerequisite is the existence of an agglomeration, a heaping up of many workers in the same area (in one place), all working at the same time; or this already constitutes the material existence of cooperation. This prerequisite underlies all its more highly developed forms.

The simplest, as yet not further specified mode of cooperation is evidently the performing, not of different operations, but of the same one by people working simultaneously and in association in the same area; but their activity must be simultaneous in order to bring about a definite result or to achieve this within a definite time. This side of cooperation, too, persists in its more highly developed forms. Many people do the same thing at the same time under the division of labour as well. Even more so in the automatic workshop.

Hunting presents one of the oldest forms of this kind of cooperation. The same can be said of war, which is only a man-hunt, a more highly developed hunt. The effect produced by, for example, the charge of a cavalry regiment could not be produced by the individual members of the regiment, taking each one in isolation, even though during the charge each individual only acts as an individual, in so far as he acts at all. The gigantic structures erected by the Asiatics are another example of this kind of cooperation, indeed the importance of this simple form of cooperation emerges very strikingly in building. An individual may build a hut, but the construction of a house requires that many people should do the same thing at the same time. An individual may row a small boat; a large skiff requires a definite number of oarsmen. In the division of labour this side of cooperation emerges in the principle of the proportion of multiples, which are to be apportioned to each particular branch. In the automatic workshop the main effect stems not from the division of labour but from the sameness of the work performed by many people at once. For example, the spinning mules set in motion simultaneously by the same motor are watched over simultaneously by so and so many spinners.

The merit of Wakefield's new system of colonisation is not that he discovered or [IV-144] promoted the art of colonisation, nor that he made any fresh discoveries whatsoever in the field of political economy, but that he naively laid bare the narrow-mindedness of political economy without being clear himself as to

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a See this volume, p. 288.— Ed.
the importance of these discoveries or being to the slightest degree free from that narrow-mindedness.

The point is that in the colonies, particularly in their earliest stages of development, bourgeois relations are not yet fully formed; not yet presupposed, as they are in old established countries. They are in the process of becoming. The conditions of their origin therefore emerge more clearly. It appears that these economic relations are neither present by nature, nor are they things, which is the way the political economists are rather inclined to view capital, etc. We shall see later how Mr. Wakefield solves this mystery in the colonies, to his own astonishment. Here we shall confine ourselves, for the time being, to citing a passage which bears on this simple form of cooperation:

*"There are numerous operations of so simple a kind as not to admit a division into parts, which cannot be performed without the cooperation of many pairs of hands. For instance the lifting of a large tree on a wain, keeping down weeds in a large field of growing crops, shearing a large flock of sheep at the same time, gathering a harvest of corn at a time when it is ripe enough and not too ripe, moving any great weight; everything in short, which cannot be done unless a good many pairs of hands help each other in the same undivided employment, and at the same time"* (E. G. Wakefield, A View of the Art of Colonization etc., London, 1849, p. 168).

Catching fish for example. Result when many act at once—as in hunting. Building railways. Digging canals, etc. This kind of cooperation in the public works of the Egyptians and Asiatics. The Romans employed their armies like this in public works. (See the passage in Jones.)

We have already seen, in considering absolute surplus value, that once the rate is given the amount of surplus value depends on the number of workers simultaneously employed; so far, therefore, on their cooperation. However, it is precisely here that the difference between absolute and relative surplus value—in so far as the latter presupposes an increase in and therefore a development of the productive power of labour—emerges in striking fashion. If, in place of 10 workers, each of whom works 2 hours of surplus labour, 20 workers are employed, the result will be 40 surplus hours instead of 20, as in the first case. 1:2 = 20:40. The ratio is the same for the 20 as for the one. Here we only have the addition or multiplication of the hours worked by the individuals. Cooperation as such makes absolutely no difference to the ratio here. Now, in contrast, we are considering cooperation as a natural force of social labour, in so far as the labour of the

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*a See this volume, p. 259.—Ed.
b Ibid., 185-90.—Ed.*
individual attains a productivity by means of cooperation which it would not have attained as the labour of the isolated individual. E.g. if 100 people mow simultaneously, each of them only works as an individual and does the same work. But the result achieved, that in this definite period of time, before the hay has rotted, etc., the mowing has been done—this use value has been produced—is alone the result of the fact that 100 people have *simultaneously* borne a hand in this work. In other cases an actual increase of strength occurs. E.g. in lifting etc. Loading a heavy burden. A power is created here which is not possessed by the individual in isolation, but only when he works together with others *at the same time*. In the first case he could not extend his sphere of action as far afield as would be necessary for the achievement of the result. In the second case he could not develop the necessary power at all, or only with infinite loss of time. The time taken by 10 people to load a tree into a cart is less than one-tenth of the time one individual would take to achieve the same result (if he could do it at all). The result is that through cooperation things can be produced in a shorter time than would be possible for the same individuals when working in the same numbers but scattered about in isolation, or use values can be produced which would otherwise be impossible to produce at all. An individual cannot do in 100 days, indeed often 100 individuals cannot do in 100 days, what 100 can do in one day through cooperation. Here, therefore, the productive power of the individual is increased by the social [IV-145] form of labour. Since this makes it possible to produce more in less time, the necessary means of subsistence or the conditions required for their production can be produced in less time. Necessary labour time diminishes. Relative surplus time is thereby made possible. The latter can be extended, the former reduced.

"The strength of each man is very small, but the union of a number of very small forces produces a collective force which is greater than the sum of these partial forces, so that merely by being joined together these forces can reduce the time required, and extend their field of action" (G. R. Carli, note 1, p. 196, to Pietro Verri, *Meditazioni sulla economia politica etc.*, Custodi, *Parte Moderna*, Vol. XV).a

//It may perhaps be recalled here that in many branches of industry this simple form of cooperation permits the communal use of the conditions of labour, e.g. fuel, buildings, etc. But this does not concern us here. It should rather be considered under Profit.189 Here we only need to look at how far the ratio of

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a Marx quotes in Italian.— *Ed.*
necessary to surplus labour is directly affected, not the ratio of surplus labour to the total amount of capital laid out. This must also be kept in mind in the sections that follow. //

//It is not absolutely necessary for the workers to be united together in the same location. If 10 astronomers make the same observations from the observatories of different countries, etc., that is not a division of labour but the performance of the same labour in different places, a form of cooperation. // But also, at the same time, concentration of the means of labour.

Extension of the sphere of action; curtailment of the time during which a particular result is attained; and finally, the creation of forces of production the isolated worker is completely incapable of developing: all these are characteristic both of simple cooperation and of its more differentiated forms.

In simple cooperation it is only the amount of human force which produces the effect. The place of the one individual with two eyes, etc., is taken by a many-eyed, many-armed, etc., monster. Hence the gigantic works of the Roman armies. The great public works of Asia and Egypt. Here, where the state spends the revenue of the whole country, it has the power to set in motion great masses of people.

*"It has happened in times past that these Oriental States, after supplying the expenses of their civil and military establishments, have found themselves in possession of a surplus which they could apply to works of magnificence or utility, and in the construction of these their command over the hands and arms of almost the entire non-agricultural population [...] and this food, belonging to the monarch and the priesthood, afforded the means of creating the mighty monuments which filled the land ... in moving the colossal statues and vast masses, of which the transport creates wonder, human labour almost alone was prodigally used ... topes and reservoirs of Ceylon, the Wall of China, the numerous works of which the ruins cover the plains of Assyria and Mesopotamia"* (Richard Jones, Text-book of Lectures on the Political Economy of Nations, Hertford, 1852, p. 77).

*"The number of the labourers, and the concentration of their efforts sufficed."*

// The number and concentration of workers is the basis of simple cooperation.//

*"We see mighty coral reefs rising from the depths of the ocean into islands and firm land, yet each individual depositor is puny, weak and contemptible. The non-agricultural labourers of an Asiatic monarchy have little but their individual bodily exertions to bring [IV-146] to the task; but their number is their strength, and the power of directing these masses gave rise to the palaces and temples etc. It is that confinement of the revenues which feed them, to one or a few hands, which makes such undertakings possible"* (i.e., [p.] 78).

// Continuity of labour is, in general, peculiar to capitalist production; but it only develops fully with the development of fixed capital, which we shall discuss later.190 //
This power of the Egyptian and Asiatic kings and priests or the Etruscan theocrats in the ancient world has in bourgeois society passed to capital and therewith to the capitalists.

Simple cooperation, as also its more developed forms, and altogether any means of heightening the productive power of labour, fall under the labour process, not the process of valorisation. They heighten the efficiency of labour. The value of the product of labour, on the other hand, depends on the necessary labour time required for its manufacture. Efficiency of labour can therefore only reduce the value of a particular product, it cannot raise it. But all the methods which are employed to heighten the efficiency of the labour process reduce necessary labour time (to a certain degree), and thus increase surplus value, the part of the value which accrues to the capitalist, although the value of the total product remains determined as before by the total quantity of labour time employed.

"The mathematical principle that the whole is equal to the sum of its parts becomes false when applied to our subject. Regarding labour, the great pillar of human existence, it may be said, that the entire product of combined exertion infinitely exceeds all which individual and disconnected efforts could possibly accomplish" (Michael Thomas Sadler, *The Law of Population*, Vol. 1, p. 84).

*Cooperation*—i.e. its application by the capitalist, i.e. the owner of money or commodities—naturally requires concentration in his hand of means of labour, and likewise of means of subsistence (the part of capital exchanged for labour). The employment of one man for 360 days during the year requires a capital 360 times smaller than the employment of 360 men on one and the same day.

The social productive power which arises from cooperation is a *free gift*. The individual workers or rather labour capacities are paid, and paid as separate ones. Their cooperation, and the productive power which arises therefrom, is not paid for. The capitalist pays 360 workers; he does not pay for the cooperation of the 360 workers: for the exchange between capital and labour capacity takes place between capital and the individual labour capacity. It is determined by the exchange value of the latter, which is just as independent of the productive power this labour capacity attains under certain social combinations as it is of the fact that the time for which the worker works and can work is longer than the labour time required for his own reproduction.

Cooperation, which is a productive power of social labour, appears as a productive power of capital, not of labour. And this transposition takes place within capitalist production in respect of
all the productive powers of social labour. This refers to real labour. Just as the general, abstractly social character [IV-147] of labour—i.e. the exchange value of the commodity—presents itself as money, and all the qualities the product possesses as the representation of this general labour present themselves as qualities of money, in the same way does the concrete social character of labour present itself as the character and quality of capital.

In fact: Once the worker enters into the actual labour process he is already incorporated qua labour capacity into capital, he no longer belongs to himself but to capital, and therefore the conditions under which he works are rather the conditions under which capital works. However, before he steps into the labour process he enters into contact with the capitalist as the individual owner or seller of a commodity; this commodity is his own labour capacity. He sells it as an isolated commodity. It becomes social once it has entered into the labour process. The metamorphosis his labour capacity undergoes thereby is something external to it, in which it does not participate; it is rather something which is done to it. The capitalist buys not one but many individual labour capacities at the same time, but he buys them all as isolated commodities, belonging to isolated, mutually independent commodity owners. Once they enter into the labour process, they are already incorporated into capital, and their own cooperation is therefore not a relation into which they put themselves; it is the capitalist who puts them into it. Nor is it a relation which belongs to them; instead, they now belong to it, and the relation itself appears as a relation of capital to them. It is not their reciprocal association, but rather a unity which rules over them, and of which the vehicle and director is capital itself. Their own association in labour—cooperation—is in fact a power alien to them; it is the power of capital which confronts the isolated workers. In so far as they have a relation to the capitalist as independent persons, as sellers, it is the relation of isolated, mutually independent workers, who stand in a relation to the capitalist but not to each other. Where they do stand in a relation to each other as functioning labour capacities, they are incorporated into capital, and this relation therefore confronts them as a relation of capital, not as their own relation. They find that they are agglomerated. The cooperation which arises from this agglomeration is for them just as much an effect of capital as the agglomeration itself. Their interconnection and their unity lies not in themselves but in capital, or, the social productive power of their labour arising therefrom is
a productive power of capital. Just as the power of individual labour capacity not only to replace but to increase itself—surplus labour—appears as a capacity of capital, so does the social character of labour and the productive power which arises from that character.

This is the first stage at which the subsumption of labour under capital no longer appears as a merely formal subsumption but changes the mode of production itself, so that the capitalist mode of production is a specific mode of production. The subsumption is formal, in so far as the individual worker, instead of working as an independent commodity owner, now works as a labour capacity belonging to the capitalist, and therefore under his command and supervision; also works no longer for himself but for the capitalist; the means of labour, moreover, no longer appear as means to the realisation of his labour: his labour appears instead as the means of valorisation—i.e. absorption of labour—for the means of labour. This distinction is formal in so far as it can exist without causing the slightest alteration of any kind in the mode of production or the social relations within which production takes place. With cooperation a specific distinction already enters the picture. The work takes place under conditions in which the independent labour of the individual cannot be carried on—and indeed these conditions appear as a relation dominating the individual, as a band with which capital fetters the individual workers.

The collaboration of many people, whose association itself is a relation alien to them, whose unity lies outside them, gives rise to the necessity for command, for overall supervision, as itself a condition of production, as a new kind of labour, Labour of Superintendence, made necessary and conditioned by the cooperation of the workers, just as in any army there is a need for people with the power of command, a need for command, if it is to function as a unified body, even when all its members belong to the same arm of the service. This command is an attribute of capital, although the individual capitalist can in his turn hand over its implementation to specialised workers, who nevertheless represent capital and the capitalist over against the army of workers. (Slavery, Cairnes)

In so far as specialised work of this kind arises out of functions created by capitalist production itself, it is of course absurd to use capital’s performance of these functions to prove the necessity of its existence. It is a tautology. It is as if one were to wish to justify slavery to the Negroes by saying that as slaves they needed the
overseer with his whip, who was as necessary to their production as they themselves. But he is necessary only because and in so far as they are slaves—on the basis of slavery. In contrast to this, in so far as cooperation requires a director, as in an orchestra for example, the form this takes under the conditions of capital and the form it might take otherwise, e.g. in the case of association, are completely different things. In the latter case it is a specialised function of labour alongside others, but not as the power that brings about the workers' own unity as something alien to them, and the exploitation of their labour as an act committed upon them by an alien power.

Cooperation may be continuous; it may also be merely temporary, as in agriculture with the harvest, etc.

The essence of simple cooperation remains *simultaneity* of action, a simultaneity whose results can never be attained by the temporal succession of the activities of the individual workers.

What remains most important is: This first transposition of the social character of labour as social character of capital, of the productive power of social labour as productive power of capital; and finally the first transformation of the formal subsumption under capital into a real alteration of the mode of production itself.

[IV-138a] Destutt de Tracy distinguishes as means for increasing the productivity of labour:

1) Concours de forces. (Simple cooperation.)

"Is it a matter of defending oneself? Ten men can easily resist an enemy who would have destroyed all of them by attacking them one after another. Is a heavy object to be moved? The burden heavy enough to oppose an invincible resistance to the efforts of a single individual yields straight away to several people acting together. Is it a question of undertaking a complex piece of labour? Many things must be done simultaneously. One person does one thing, while another does something else, and they all contribute to an effect that a single man would be unable to produce. One rows while the other holds the rudder, and a third casts the net or harpoons the fish; in this way fishing enjoys a success that would be impossible without this cooperation" (l.c., p. 78).b

In this second form of cooperation there is already a division of labour taking place, because many things must be done simultaneously, but this is not a division of labour in the true sense. The 3 people can alternately row, steer and fish, although in the act of cooperation each of them only does the one thing. The real division of labour, in contrast, consists in this, that

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a Destutt de Tracy, *Traité de la volonté et de ses effets*, Paris, 1826, p. 80.— Ed.

b Here and below Marx quotes in French.— Ed.
"when a number of men work for each other, each of them can devote himself exclusively to the occupation for which he is most suited, etc." (I.c., p. 79).

[IV-138a]

[IV-149] b) **DIVISION OF LABOUR**

The division of labour is a particular, differentiated, further developed form of cooperation, a powerful means of heightening the productive power of labour, performing the same work in less labour time, hence reducing the labour time necessary for the reproduction of labour capacity and extending surplus labour time.

Simple cooperation involves many people working together to perform the same work. In the division of labour many workers cooperate under the command of capital to produce different parts of the same commodities, each particular part requiring a specific kind of labour, a specific operation, and each worker or definite multiple quantity of workers performing one specific operation only, with the others performing others and so forth; the totality of these operations, however, producing a single commodity, a particular specific commodity; the latter therefore representing the totality of these specific forms of labour.

We say commodity from a twofold point of view. Firstly, a commodity produced under the division of labour can itself be a semi-manufacture, a raw material, a material of labour for another sphere of production. A product of this kind therefore by no means needs to be a use value which has taken on its final form, the form in which it ultimately enters consumption.

If different production processes are required for the manufacture of a use value, e.g. printed calico—spinning, weaving, printing—the printed calico is the result of these different production processes and of the totality of the specific modes of labour, spinning, weaving, printing. No division of labour in the sense we are now considering has yet taken place on that account. If the spun yarn is a commodity, the woven cloth a commodity, and the printed calico a specific commodity alongside the other two commodities—those use values which are the product of processes which must precede the printing of calico—no division of labour in the sense we are now considering takes place, although there is a social division of labour, because the yarn is the product of spinners, the cloth is the product of weavers and the calico is the product of printers. The labour necessary for the production of printed calico is divided into spinning, weaving and printing and
each of these branches forms the occupation of a particular section of workers, each of whom performs only the one particular operation of spinning or weaving or printing. Here, then, what is needed is firstly a totality of particular kinds of labour, in order to produce the printed calico; and secondly the subsumption of different workers under each of these particular labour operations. But it cannot be said that they cooperate in producing the *same commodity*. They rather produce commodities independent of each other. The yarn is on our assumption as much a commodity as the printed calico. The existence of a use value as a commodity does not depend on the nature of that use value, hence it does not depend, either, on its distance from or nearness to the shape in which it finally enters consumption, whether as means of labour or means of subsistence. It depends solely on this, that a definite quantity of labour time is represented in the product and that it forms the material for the satisfaction of certain needs, whether these are the needs of a further production process or those of the consumption process. On the other hand, if the printed calico first came onto the market as a *commodity* after having passed through the processes of spinning, weaving and printing, it would have been produced by *division* of labour.

We have seen that the product only becomes a commodity at all, and the exchange of commodities as a condition of production only takes place at all, given a social division of labour, [IV-150] or a division of social labour. The specific commodities are the repositories of specific modes of labour, and the producer or owner of the individual commodity only takes possession of his aliquot part of social production, i.e. of the products of all the other branches of labour, through exchange, namely the sale of his product, through the conversion of his commodity into money. That he produces a commodity at all implies that his labour is one-sided and does not *directly* produce his means of subsistence, that these are rather obtained only by the exchange of his labour for the products of other branches of labour. This social division of labour, which is presupposed in the existence of the product as a commodity and of the exchange of commodities, differs essentially from the division of labour we are investigating here. The latter presupposes the former as its point of departure and basis.

A division of labour occurs in the former case in so far as every

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commodity represents the other commodity, hence every commodity owner or producer represents a specific branch of labour vis-à-vis the other one; and the totality of these specific branches of labour, their existence as the whole gamut of social labour, is mediated through the exchange of commodities, or, more closely defined, the circulation of commodities, which as we have seen includes the circulation of money. A considerable division of labour in this sense may take place without there being any division of labour in the other sense. But the second type cannot occur without the first under conditions of commodity production, although it can occur where products are not produced as commodities at all, where production does not, in general, take place on the basis of the exchange of commodities. The first division of labour shows itself in the fact that the product of a specific branch of labour confronts as a specific commodity the producers of all other branches of labour as independent commodities differing from it. The second division of labour, in contrast, takes place when a specific use value is produced before it comes onto the market, enters into circulation, as a specific, independent commodity. In the first case the different kinds of labour complement each other through the exchange of commodities. In the second there is direct, cooperative action by the different kinds of labour, not mediated through the exchange of commodities, with the aim of manufacturing the same use value under the command of capital. In the first division of labour the producers meet as independent commodity owners and representatives of specific branches of labour. In the second they appear rather as dependent, since they only produce a complete commodity, indeed only produce a commodity at all, through their cooperation, and each of them represents not a specific piece of work, but rather the individual operations which are combined, which meet, in a specific piece of work, while the commodity owner, the producer of the complete commodity, confronts the dependent workers as capitalist.

Adam Smith constantly confuses these very different senses of the division of labour, which admittedly complement each other, but are also in certain respects mutually opposed. In order to avoid confusion, more recent English writers call the first type division of labour and the second subdivision of labour, although this fails to bring out the conceptual distinction.  

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Pins and twist are two specific commodities; each of them represent a specific branch of labour and their producers confront each other as commodity owners. They represent a division of social labour, each section of which confronts the other as a specific sphere of production. In contrast to this, the different operations required for the production of a pin constitute a division of labour in the second sense if they represent just as many modes of labour under which particular workers are subsumed—it being presupposed, namely, that the particular parts of the pin do not emerge as specific commodities. Characteristic of this kind of division of labour is the differentiation of the operations within the sphere of production which belongs to a particular commodity, and the distribution of each of these operations among particular workers, whose cooperation creates the whole product, the commodity, but whose representative is not the worker but the capitalist. [IV-151] Even this form of the division of labour, which we are considering here, by no means exhausts the subject of the division of labour, which is in a certain respect the category of categories of political economy. But here we have only to consider it as a particular productive power of capital.

It is clear, 1) that this division of labour presupposes the social division of labour. First the exchange of commodities develops the differentiation of social labour, and then the branches of labour become so widely separated that each specific branch is traced back to a specialised kind of labour, and the division of labour, its analysis, can take place within this specialised labour. It is equally clear, 2) that the second division of labour must, in its turn, extend the first—reacting back upon it. Firstly in so far as it, like all other productive forces, reduces the amount of labour required for a particular use value, therefore sets labour free to take part in a new branch of social labour. Secondly, and this is specific to it, in so far as it is able in its analysis to split up a speciality in such a way that the different components of the same use value are now produced as different commodities, independent of each other, or also that the different varieties of the same use value, which previously all fell to the share of the same sphere of production, are now allotted to different spheres of production through the analysis of the individual varieties.

The one is division of social labour into different branches of labour, the other is division of labour in the manufacture of a commodity, hence not division of labour in society but social division of labour within one and the same workshop. Division of
labour in the latter sense presupposes manufacture, as a specific mode of production.

Adam Smith does not distinguish these two senses of the division of labour. The second division of labour therefore does not appear with him as something specific to capitalist production.

The chapter on the division of labour with which he opens his work (book I, chapter I) (On the Division of Labour) begins like this:

"The effects of the division of labour, in the general industry of society, will be more easily understood by considering in what manner these effects operate in some particular manufactures" [Garnier, p. 11] [Vol. I, p. 15].

The division of labour within the atelier (which really means workshop, factory, mine, or farm here, the only assumption being that the individuals employed in the production of a particular commodity cooperate under the command of capital), the capitalist division of labour, is only of interest to him, and he only discusses it in particular, as being a more easily comprehensible, more tangible and clearer example of the effects of the division of labour within society in general and upon the "general industry of society". The following passage proves this:

"It is commonly supposed that this division is carried furthest in some manufactures which produce articles of little value; not perhaps that it really is carried further in them than in others of more importance: but in those trifling manufactures which are destined to supply the small wants of but a small number of people, the whole number of workmen must necessarily be small; and those employed in every different branch of the work can often be collected into the same workhouse, and placed at once under the view of the spectator. In those great manufactures, on the contrary, which are destined to supply the wants of the great body of the people, every different branch of the work employs so great a number of workmen that it is impossible to collect them all [IV-152] into the same workhouse. We can seldom see more, at one time, than those employed in one single branch of the work. Though in such manufactures, therefore, the work may really be divided into a much greater number of parts than in those of the first kind, the division is not near so obvious, and has accordingly been much less observed" [I.e., pp. 11-12].

Firstly, this passage demonstrates the small scale on which industrial enterprises still operated in Adam Smith's time.

Secondly, the division of labour in a workshop and the division of a branch of labour within society into distinct, mutually independent branches, are only subjectively different matters for him, not objectively. In the first case one sees the division at a glance, in the second case one does not. The change is not in the real situation but only in the way the observer sees it. For example, if one looks at the whole of the iron-producing industry, starting from the production of pig iron and going through all the different types of product into which the industry is divided, each
of which forms an independent branch of production, an *independent* commodity, whose connection with its preceding or subsequent stages is mediated by the exchange of commodities, the social division of this branch of industry probably involves more subdivisions than we meet with inside a pin factory.

Hence Adam Smith does not grasp the division of labour as a particular, specifically distinct form characteristic of the *capitalist* mode of production.

The division of labour, as we regard it here, presupposes firstly that the social division of labour has already attained a considerable level of development, that the various spheres of production are separated from each other, and that within each sphere there are further divisions into independent subspecies; indeed, capital can only develop on the basis of a circulation of commodities which is already relatively extensive, and is identical with a relatively extensive development of the division (autonomisation) of branches of business within society as a whole. Once this is presupposed, hence e.g. once the production of cotton yarn exists as an independent, autonomous branch of business (hence is no longer e.g. a subsidiary occupation of the countryside), the second prerequisite for the division of labour, which precedes this one and exists before it, is that many workers in this branch should be associated in a workshop under the command of capital. This association, the agglomeration of workers under the command of capital, which is the condition for *capitalist* cooperation, comes about for two reasons. Firstly, surplus value does not depend only on its rate; its absolute amount, magnitude, depends at the same time on the number of workers who are simultaneously being exploited by the same capital. Capital functions as capital in proportion to the number of workers it simultaneously employs. The independence of the workers in their production is thereby at an end. They work under the supervision and command of capital. In so far as they work together and are interconnected, this interconnection exists in capital, or, this interconnection itself is for them merely external, a mode of capital's existence. Their labour becomes *compulsory labour* because once they enter into the labour process it belongs not to them but already to capital, is already incorporated in capital. The workers are subjected to the *discipline* of capital and placed in completely changed conditions of life. The first manufactories in Holland, and in all countries where they developed independently and were not imported ready-made from abroad, were little more than conglomerations of workers who produced the same commodity, with the means of
labour being concentrated in the same workshop under the command of the same capital. A developed division of labour was not a feature of those places, the development rather took place first within them as its natural basis. In the medieval guilds the master [IV-153] was prevented from becoming a capitalist by the guild regulations, which restricted to a very low maximum the number of workers he was permitted to employ at any one time.

Secondly, the economic advantages which arose from the common utilisation of the buildings, of furnaces, etc., and soon gave these manufactories such an advantage in productivity over the patriarchal or guild-based enterprises—apart from any effect of the division of labour—do not belong to our subject here, as we have only to consider, not the economy made on the conditions of labour, but the more productive application of variable capital; the extent to which these means directly raise the productivity of the labour employed in a particular sphere of production.

Even where a particular branch of business—see e.g. Blanqui—a is very subdivided, but patriarchal, so that the product of each part exists as a specific commodity independently of the others, or is only mediated by the exchange of commodities, association in a single workshop is by no means merely formal. In these circumstances the work almost always takes the form of domestic-rural subsidiary labour, there thus being no absolute subsumption of the worker under an entirely one-sided and simple operation. It is not his exclusive task. But then the main feature is lacking. These workers work with their own means of labour. The mode of production itself is in fact not capitalist, instead, the capitalist merely steps between these independent workers and the definitive purchaser of their commodities as middleman, as merchant. This form, in which capital has not yet taken control of production itself, still predominates over much of the Continent; it always constitutes the transition from the subsidiary industries of the countryside to the capitalist mode of production proper. Here the worker himself appears as commodity owner, producer and seller, and the capitalist still confronts him as buyer of commodities, not of labour. The basis of capitalist production is therefore still absent.

Where, as in Blanqui's example, the division of labour exists in the form of independent branches of production, a multiplicity of time-consuming and unproductive intermediate processes takes place, conditioned by the existence of the different stages of the

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a See this volume, pp. 285-86.—Ed.
commodity as commodities in their own right, and by the fact that their interconnection in the overall production of the commodity has first to be mediated through the exchange of commodities, through sale and purchase. Working for each other in the different branches is subject to all kinds of accidents, irregularities and so on, for it is the compulsion of the workshop which first introduces simultaneity, regularity and proportionality into the mechanism of these different operations, in fact first combines them together into a uniformly operating mechanism.

If the division of labour—once it proceeds, now on the basis of the existing workshops, to a further subdivision of the operations and subsumption under them of definite multiple numbers of workers—if the division of labour carries itself further, it is also its opposite. For in so far as the disjecta membra poetae were previously autonomous, existing side by side as an equal number of independent commodities, and hence as the products of an equal number of independent commodity owners, the division of labour is also their combination in one mechanism; an aspect entirely overlooked by Adam.

Later on we shall investigate in more detail why the division of labour within society, a division which through the exchange of commodities emerges as the totality of production and only has an impact on its individual representatives through competition, the law of supply and demand, develops further at the same pace as, goes hand in hand with, the division of labour within the workshop, the division of labour characteristic of capitalist production, in which the independence of the workers is completely annihilated and they become parts of a social mechanism standing under the command of capital.

[IV-154] This much is clear. Adam Smith did not grasp the division of labour as something peculiar to the capitalist mode of production; something whereby, in addition to machinery and simple cooperation, labour is transformed not only formally, but in its reality—through subsumption under capital. He conceives it in the same way as Petty and others of his predecessors after Petty. (See the East Indian pamphlet.)

Like his predecessors, Smith in fact still views the division of labour from the standpoint of antiquity, in so far as they lump it

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a "Scattered limbs of the poet" (Horace, Satirarum, I, 4).—Ed.
b See this volume, pp. 312-16.—Ed.
c W. Petty, An Essay Concerning the Multiplication of Mankind; [H. Martyn,] The Advantages of the East-India Trade to England (see this volume, pp. 286-87.—Ed.
together with the division of labour within society. They only differ from the conception held by the classical world in their view of the result and purpose of the division of labour. They conceive it as from the outset a productive force of capital, in so far as they stress and almost exclusively discuss the fact that the division of labour cheapens commodities, reduces the amount of necessary labour time required to produce a particular commodity, or increases the quantity of commodities that can be produced in the same necessary labour time, thereby lessening the exchange value of the individual commodities. They lay all their emphasis on this aspect—exchange value—and the modernity of their point of view consists in this. And this is of course the decisive point if the division of labour is conceived as a productive force of capital, for it is such a force only in so far as it cheapens the means of subsistence required for the reproduction of labour capacity, reduces the amount of labour time needed for their reproduction. The ancients, on the other hand, had their eyes fixed exclusively on use value, in so far as they made any attempt at all to reflect upon and understand the division of labour. The consequence of the division of labour for them was that the products of the individual branches of production attained a better quality, whereas the quantitative point of view predominates among the moderns. The ancients, therefore, consider the division of labour not in relation to the commodity but in relation to the product as such. What interests the commodity owners who have become capitalists is the influence of the division of labour on the commodity; its influence on the product as such only has a bearing on the commodity in so far as it is a matter of the satisfaction of human needs in general, a matter of use value as such. The historical background of the Greeks' views is always Egypt, which they regarded as the model of an industrial country, in just the same way as Holland and later England were regarded by the moderns. The division of labour therefore occurs with them, as we shall see later, in relation to the hereditary division of labour and the caste system deriving from it, as it existed in Egypt.

Adam Smith confuses the two forms of the division of labour later on too. Thus he says further in the same book I, chapter I:

"The division of labour, so far as it can be introduced, occasions, in every art, a proportionable increase of the productive powers of labour. The separation of different trades and employments from one another seems to have taken place in consequence of this advantage. This separation, too, is generally carried furthest in those countries which enjoy the highest degree of industry and improvement; what is the work of one man in a rude state of society being generally that of several in an improved one" [Garnier, p. 15] [Vol. I, p. 18].
Adam Smith explicitly picks out the quantitative point of view, i.e. the curtailment of the labour time needed for the production of a commodity, as the exclusive consideration, in the passage where he is enumerating the advantages of the division of labour:

"This great increase in the quantity of work which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances" ([Garnier,] Book I, Chapter I [p. 18]) [Vol. I, p. 21].

According to him these advantages consist in 1) the dexterity the worker attains in his one-sided branch [IV-155] of labour:

"First, the improvement of the dexterity of the workman necessarily increases the quantity of the work he can perform; and the division of labour, by reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman." (Hence rapidity of the operations.)

Secondly: saving of the time which gets lost in moving from one task to another. In that connection both "change of place" and "different tools" are required.

"When the two trades can be carried on in the same workhouse, the loss of time is no doubt much less. It is even in this case, however, very considerable. A man commonly saunters a little in turning his hand from one sort of employment to another" [Garnier, pp. 20, 21] [Vol. I, p. 23].

Finally Smith mentions

"that the invention of all those machines by which labour is so much facilitated and abridged seems to have been originally owing to the division of labour" [Garnier, p. 22] [Vol. I, p. 24]

(invented by the workers themselves, the whole of whose attention is exclusively directed towards a simple object). And even the influence exerted on the invention of machinery by philosophers or men of speculation is due to the social division of labour, for it is through it that

"philosophy or speculation becomes, like every other employment, the principal or sole trade occupation of a particular class of citizens" [Garnier, p. 24] [Vol. I, p. 25].

Adam Smith remarks that if on the one hand the division of labour is the product, the result, of the natural diversity of human talents, the latter are to a much greater degree the result of the development of the division of labour. In this he follows his teacher Ferguson.

"The difference of natural talents in different men is, in reality, much less than we are aware of; and the very different genius which appears to distinguish men of different professions, when grown up to maturity, is not so much the cause as the effect of the division of labour.... All must have had the same duties to perform" (without the division of labour and without exchange, which he makes into the basis of the
division of labour), "and the same work to do, and there could have been no such
difference of employment as could alone give occasion to any great difference of
talents". "By nature a philosopher is not in genius and disposition half so different
from a street porter, as a mastiff is from a greyhound" [Garnier, pp. 33-35]
[Vol. I, pp. 33-35].

Smith explains the very existence of the division of labour by referring to

"men's inclination to trade and exchange", without which "every man must have
procured to himself every necessary and conveniency of life" ([Garnier,] Book I,
Chapter II, [p. 34]) [Vol. I, p. 34].

Thus he assumes exchange in order to explain the division of
labour, and assumes the division of labour IN ORDER THAT THERE BE
SOMETHING TO EXCHANGE.

The naturally evolved division of labour precedes exchange, and the
exchange of products as commodities first develops between
different communities, not within the same community. (The division of
labour rests in part not only on the naturally evolved differences
between human beings themselves, but on natural elements of
production found available by these different communities.) Of
course, the development of the product into a commodity and the
exchange of commodities react back onto the division of labour, so
that exchange and division enter into a relation of interaction.

[IV-156] Smith's main merit in dealing with the division of
labour is that he stresses it and puts it in the forefront, indeed
views it directly as a productive power of labour (i.e. capital). In
his conception of it, however, he is dependent on the contemporary
level of development of manufacture, which was still far
removed from the modern factory. Hence also the relative
preponderance conceded to the division of labour over machinery,
which still appears merely as its appendage.

In the whole section on the division of labour Adam Smith
essentially follows his teacher Adam Ferguson, often to the extent of
copying from him ([A. Ferguson,] Essai sur l'histoire de la société
civile, translated by M. Bergier, Paris, 1783). Under conditions of
barbarism the human being inclines to sloth:

"He is, perhaps, by the diversity of his wants, discouraged from industry; or, by
his divided attention, prevented from acquiring skill in any kind of labour"
([A. Ferguson, I.c.,] Vol. II, p. 128).^a

Among the different circumstances which gradually lead men
"to subdivide their professions without any conscious end in
mind", Ferguson similarly indicates "the prospect of being able to

^a Here and below Marx quotes Ferguson in French.— Ed.
exchange one commodity for another”, although he does not imitate Smith’s one-sidedness in giving it as the sole reason. He goes on to say:

“The artist finds, that the more he can confine his attention to a particular part of any work, his productions are the more perfect, and grow under his hands in the greater quantities. Every undertaker in manufacture finds, that the more he can subdivide the tasks of his workmen, and the more hands he can employ on separate articles, the more are his expenses diminished, and his profits increased. The progress of commerce is but a continued subdivision of the mechanical arts” ([p.] 129).

Adam Smith asserts that originally the workers invented the machine, because, owing to the division of labour,

“when the whole of every man’s attention is directed towards some one object”, they devised “all those machines by which labour is so much facilitated and abridged” ([Garnier,] Book I, Chapter I [p. 22]) [Vol. I, p. 24].

Adam Ferguson speaks of

“the methods, the means, the devices ... which the artist, attentive to his own affair, has invented, to abridge or to facilitate his separate task” (p. 133).

Adam Smith says:

“In the progress of society, philosophy or speculation becomes, like every employment, the principal or sole occupation of a particular class of citizens” ([Garnier,] Book I, Chapter I [pp. 23-24]) [Vol. I, p. 25].

Adam Ferguson:

“This method, which yields such great advantages in regard of industry, can be applied with equal success to more important things, in the various departments of policy and war ... in this age of separations, [thinking] itself may become a peculiar craft” (pp. 131, 136).

Ferguson, like Adam Smith, makes special mention of the application of science to industrial practice (p. 136).

What distinguishes him from Adam Smith is the fact that he brings out more sharply and emphatically the negative aspects of the division of labour (and with Ferguson the quality of the commodity still plays a role, while Adam Smith, from the capitalist point of view correctly, leaves it aside as a mere accident).

“It may even be doubted, whether the measure of national capacity increases with the advancement of arts. Many mechanical arts require no capacity; they succeed perfectly without recourse to sentiment and reason; and ignorance is the mother of industry as well as of superstition. Reflection and fancy are subject to err; but a habit of moving the hand, or the foot, is independent of either. One might therefore say that perfection, in regard of manufactures, consists in the ability to proceed without consulting the mind” (especially, and this is an important point with regard to the workshop) “in such a manner that the workshop may [IV-157], without any great effort of imagination, be considered as an engine, the parts of which are men” (pp. 134, 135).
The concept of manufacture comes out much more clearly here than in Adam Smith. Furthermore, Ferguson emphasises the change in the relationship between manufacturer and worker which occurs as a result of the division of labour.

"Even in manufacture, the genius of the master, perhaps, is cultivated, while that of the inferior workman lies waste.... The general officer may be a great proficient in the knowledge of war, while the soldier is confined to a few motions of the hand and the foot. The former may have gained, what the latter has lost" (pp. 135, 136).

What he says of the general in relation to the ordinary soldier is true of the capitalist or his manager in relation to the army of workers. The intelligence and independent development which were applied on a small scale in autonomous work are now applied on a large scale for the whole workshop, and monopolised by the boss; the workers are thereby robbed of these attributes.

"He [the general] may practise on a larger scale all the arts of preservation, of deception and of stratagem, which the savage exerts in leading a small party, or merely in defending himself" (p. 136).

Hence Ferguson also expressly treats of the "subordination" consequent on the "separation of arts and professions" (l.c., p. 138). Here the antagonism of capital, etc.

With regard to entire nations, Ferguson has this to say:

"Nations of tradesmen come to consist of members who, beyond their own particular trade, are ignorant of all human affairs" (p. 130). "We make a nation of helots, and have no free citizens" (l.c., p. 144).

He contrasts this with classical antiquity, although he points out at the same time that slavery was the foundation for the more complete all-round development of the free citizens. (See the Frenchman, who indulges in more speechifying on the whole of this Fergusonian theme, but wittily.)

Thus if one takes Ferguson, who was Smith's teacher directly, and Petty, whose example of watchmaking was replaced by Smith with the one of the pin factory, Smith's originality consists only in his putting the division of labour in the limelight and his one-sided (hence economically correct) estimation of it as a means for increasing the productive power of labour.

It says in A. Potter, Political Economy, New York, 1841 (Part 2 of which is almost exclusively a reprint of Scrope's Political Economy, London, 1833):

*"The first essential towards production is labour. To play its part efficiently in this great business, the labour of individuals must be combined; or, in other words, the labour required for producing certain results must be distributed among several individuals, and those individuals thus be enabled to cooperate" * (Scrope, p. 76).
Potter remarks on this, in a note on the same page:

*"The principle here referred to is usually called the division of labour. The phrase is objectionable, since the fundamental idea is that of concert and cooperation, not of division. The term of division applies only to the process; this being subdivided into several operations, and these being distributed or parcelled out among a number of operatives. It is thus a combination of labourers effected through a subdivision of processes."* It is: COMBINATION OF LABOUR.


On the way in which the division of labour increases the productivity of labour, he says among other things:

*"The effects of the division of labour, and of the use of machines ... both derive their value from the same circumstance, their tendency, to enable one man to perform the work of many"* *(p. 317).*

*"It produces also an economy of time, by separating the work into its different branches, all of which may be carried into execution at the same moment ... by carrying on all the different processes at once, which an individual must have executed separately, it becomes possible to produce a multitude of pins for instance completely finished in the same time as a single pin might have been either cut or pointed"* *(p. 319).*

This goes beyond Adam Smith's second argument above, that the single worker who passes through the whole circuit of the different operations loses time in the transition from one operation to another.

The different operations performed successively by a worker in a patriarchal or craft-based business in order to make his product, which are mutually intertwined as different modes of his activity, and follow each other in chronological sequence; the different phases through which his work passes, and in which it undergoes variation, are separated from each other, isolated, as independent operations or processes. This independence becomes solidified, personified, when each simple and monosyllabic process of this kind becomes the exclusive function of a particular worker or a definite number of workers. They are subsumed under these isolated functions. This work is not divided among them; they are divided among the various processes, each of which becomes the exclusive life-process of one of them—in so far as they function as productive labour capacity. The heightened productivity and complexity of the production process as a whole, its enrichment, is therefore purchased at the cost of the reduction of labour capacity.

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* See this volume, p. 273.— Ed.
in each of its specific functions to nothing but a dry abstraction—a simple quality, which appears in the eternal uniformity of an identical function, and for which the whole of the worker’s productive capacity, the multiplicity of his capabilities, has been confiscated. The processes separated out in this way, and performed as functions of these living automatons, allow combination precisely through their division and autonomy; allow these different processes to be carried out *simultaneously* in the same workshop. Here division and combination condition each other. The overall production process of a single commodity appears now as a combined operation, a complex of many operations, all of which complement each other independently, and can be carried out *simultaneously* alongside each other. The complementarity of the different processes is here transferred from the future to the present, whereby a commodity which is begun at one side is finished at the other. At the same time, since these different operations are performed with virtuosity, because they have been reduced to simple functions, there is added to this *simultaneity*, which is in general characteristic of cooperation, a *reduction in labour time*, which is attained in each of the simultaneous and mutually complementary functions which are combined together into a single whole; so that within a given time not only more *whole commodities*, more commodities *finished and ready for use* are in general delivered, but also *more* finished commodities. Through this combination the workshop becomes a mechanism of which the individual workers form the different elements.

But the combination—cooperation, as it appears in the division of labour, no longer as the parallel existence of the same functions or their temporary subdivision, but as the separation of a totality of functions into their constituent elements, and the unification of these different components—now has a twofold existence: it exists on the one hand, if we look at the production process itself, in the workshop as a whole, which, as a total mechanism of this kind (although in fact it is nothing other than the manifestation of the workers’ cooperation, their social mode of action in the production process) confronts the workers as [IV-159] an external power, dominating and enveloping them, in fact as the power of capital itself and a form of its existence, under which they are individually subsumed, and to which their social relation of production belongs. On the other hand, it exists in the finished product, which is in turn a commodity belonging to the capitalist.

For the worker himself no combination of activities takes place. The combination is rather a combination of the one-sided
functions under which every worker or number of workers is subsumed, group by group. His function is one-sided, abstract, partial. The totality which is formed from this is based precisely on his merely partial existence and isolation in his separate function. It is therefore a combination of which he forms a part, but it depends on the fact that his labour is not combined. The workers form the building blocks of this combination. However, the combination is not a relation that belongs to them, nor is it subsumed under them as a united group. This point is also directed against Mr. Potter's pretty phrases about combination and concert as opposed to division.

Here the capitalist mode of production has already seized upon the substance of labour and transformed it. The subsumption of the worker under capital is no longer merely formal: the fact that he works for someone else, under alien command and alien supervision. Nor is the situation any longer merely as it was in the case of simple cooperation, where the worker cooperates with many others, performing the same work with them at the same time, while his work as such remains unchanged and a merely temporary connection is created, a contiguity, which by the nature of things may easily be dissolved and which in most cases of simple cooperation takes place only for specific, limited periods, to satisfy exceptional requirements, as with harvesting, road-building, etc. Nor is it like manufacture in its simplest form, where the main thing is the simultaneous exploitation of many workers and a saving on fixed capital, etc., and where the worker only formally becomes a part of a whole, whose head is the capitalist, but in which he is not further affected—as a producer—by the fact that many other workers are doing the same thing alongside him, also making boots, etc. With the transformation of his labour capacity into what is merely a function of part of the complete mechanism, the whole of which forms the workshop, he has altogether ceased to be the producer of a commodity. He is only the producer of a one-sided operation, which in general produces something solely in connection with the whole of the mechanism that forms the workshop. He is thus a living constituent of the workshop, and has himself become an accessory to capital through the manner of his work, since his skill can only be exercised in a workshop, only as a link in a mechanism which confronts him as the presence of capital. Originally he had to sell to the capitalist, instead of the commodity, the labour that produced the commodity, because he was not in possession of the objective conditions for the realisation of his labour capacity. Now he has to sell it because his labour
capacity only continues to be labour capacity in so far as it is sold to capital. Thus he is now subsumed under capitalist production, has now fallen under the control of capital, no longer just because he lacks the means of labour, but because of his very labour capacity, the nature and manner of his labour; now capital has in its hands no longer just the objective conditions, but the social conditions of subjective labour, the conditions under which his labour continues to be labour at all.55

The increase of productive power which arises from the division of labour, this social mode of existence of labour, is therefore not only capital’s, instead of the worker’s, productive power. The social form of the workers’ combined labours is the existence of capital over against the worker; combination confronts him as a paramount destiny to which he has fallen victim through the reduction of his labour capacity to an entirely one-sided function, which is nothing apart from the mechanism as a whole, [IV-160] and therefore depends entirely upon it. He has himself become a mere detail.

Dugald Stewart, l.c., calls the workers subordinated to the division of labour

*“living automatons ... employed in the details of the work”,* while the *“employer will be always on the stretch to economize time and labour”* (p. 318).

Dugald Stewart cites maxims from classical antiquity relating to the division of labour within society.

“Cuncta nihilque sumus.” “In omnibus aliquid, in toto nihil.”* a “πολλ’ ἡπίστατο ἔργα, χακῶς δ’ ἡπίστατο πάντα.”* b 198

(this from the Margites, cited in the Second Alcibiades, one of the spurious dialogues of Plato).c

Thus, in the Odyssey, XIV, 228:

“ἄλλος γὰρ τ’ ἄλλους ἄνιψ ἐπιτερπεταὶ ἔργοις”,d

and the statement by Archilochus, quoted in Sextus Empiricus

“ἀλλος ἄλλῳ ἔπ’ ἔργῳ καρδίην οἰνίνεται”.e

Thucydides makes Pericles contrast the agriculturalists of Sparta, where consumption was not mediated through the

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a “We are everything and nothing”. “We can do something of everything, but nothing as a whole”.— Ed.

b “He knew many crafts, but he knew all of them badly”.— Ed.

c Pseudo-Plato, Alcibiades II 147b.— Ed.

d “For different men take joy in different works”.— Ed.

e “Men differ as to what things cheer their hearts” (Sextus Empiricus, Adversus mathematicos, XI, 44).— Ed.
exchange of commodities, hence no division of labour took place either, with the Athenians, describing the Spartans as "αὐτοφάγοι" (working not for gain but for subsistence).

This is what Pericles says about nautical matters in the same speech (Thucydides, Book I, Chapter 142):

"Seamanship, like any other skill, is a matter of art, and practice in it may not be left to odd times, as a sideline; on the contrary, no other pursuit may be carried on as a subsidiary occupation"

We shall come to Plato directly, although he actually belongs before Xenophon. The latter, who possesses a considerable amount of bourgeois instinct, and is therefore often reminiscent of both bourgeois morality and bourgeois political economy, looks more closely than Plato at the division of labour, in so far as it takes place in the individual workshop as well as on a broad scale. The following account by Xenophon is interesting, 1) because he shows the dependence of the division of labour upon the size of the market; and 2) because in contrast to Plato he does not confine himself to the division of occupations, but rather stresses the reduction of labour to simple labour brought about by the division of labour, and the skill which can more easily be attained under that system. Although as a result he is much closer to the modern conception, he still retains the attitude which is characteristic of the ancients: he is concerned only with use value, with the improvement of quality. He is not interested in the curtailment of labour time any more than is Plato, even in the one passage where, exceptionally and in passing, the latter indicates that more use values are provided. Even here it is only a matter of an increased quantity of use values; not of the effect of the division of labour on the product as commodity.

Xenophon relates that it is not only an honour to receive food from the table of the King of Persia, but a joy as well (because the food tastes better).

"But the food that is sent from the king's board really is much superior in the pleasure it gives to the palate as well. That this should be so, however, is no marvel. For just as all other arts are developed to superior excellence in large cities, in the same way the food at the king's palace is also elaborately prepared with superior excellence. For in small towns the same workman makes dining couches and doors and ploughs and tables and often this same artisan builds houses, and even so he is thankful if he can only find [IV-161] enough employers to allow him to make a living. And it is of course impossible for a man of so many trades to be proficient in all of them. In large cities, on the other hand, where every workman finds many customers, one

a "Working for themselves".— *Ed.

b Xenophon uses the word ἔργοδότης. Marx comments in brackets: "ἔργοδότης is an employer who contracts the work out".— *Ed.
trade alone, and often even less than a whole trade, is enough to support a man: one man, for instance, makes shoes for men, another for women. It happens that one man earns a living by only stitching shoes, another by cutting them out, another by cutting the uppers to shape, while there is another who performs none of these operations but only assembles the parts. It follows therefore that he who performs the simplest work MUST NEEDS DO THE THING BEST (he is compelled to provide the best work). Exactly the same thing holds true with the art of cooking. He for whom one and the same man arranges the dining couches, lays the table, bakes the bread, prepares now one sort of dish and now another, he must take things as they come. But where it is all one man can do to stew meats and another to roast them, for one man to boil fish and another to bake them, for another to bake bread, and not every sort at that, but where it suffices if he makes one kind that has a high reputation—everything that is prepared in this manner will, I think, necessarily be worked out with superior excellence. Thus Cyrus by far exceeded everyone when, as a sign of attention, he sent someone food prepared in this way.” (With this kind of preparation, the food at Cyrus’ table surpassed all others in its excellence.) (Xenophon, Cyropaedia, ed. E. Poppe, Lipsiae, 1821, Book VIII, Ch. II.)

Plato’s discussion in the Republic forms the direct basis and point of departure for a group of English writers who wrote about the division of labour after Petty and before Adam Smith. See e.g. James Harris (later Earl of Malmesbury), the 3rd treatise of Three Treatises etc., 3rd ed., London, 1772, in which however he presents the division of employments as the natural foundation of society (pp. 148-55). He himself says in a footnote that he drew the whole argument from Plato.

In the 2nd book of the Republic, which we cite from the edition by Baiter, Orelli etc., Zurich, 1839, Plato starts with the origin of the πόλις (city and state coincide here).

“The polis ... comes into existence ... once each of us is no longer self-sufficient, but has need of many.” [IV-162] “It” [the polis] “is founded by our needs.”

Now the most immediate requirements are enumerated: food, a dwelling-place, clothing:

“The first and most important requirement is the procurement of food in order to be able to exist and live... The second is the construction of a dwelling-place, the third the making of clothes and the like.”

How should the πόλις satisfy these different needs? One man becomes a farmer, another a house-builder, others become weavers, cobbler, etc. Should each of them divide his labour time, cultivating the land in one part of it, building in the second, weaving in the third, etc., in order to satisfy his different requirements himself, or should he devote the whole of his labour time exclusively to one single occupation, so that he, e.g., produces corn, weaves, etc., not only for himself but also for the others? The second plan is better. For, in the first place, people differ in their natural aptitudes, which means that their capacity to perform different kinds of work differs. //To the range of different needs
there corresponds a range of different aptitudes, enabling the
individuals to perform the different kinds of work necessary for
the satisfaction of those needs.// Someone practising one single
skilled craft will perform his task better than one who exercises
many skills. If something is carried on merely as a subsidiary
occupation, the appropriate time for production will often be
allowed to slip by. The work cannot wait for the leisure of the
person who has to perform it; rather must the person doing the
work be guided by the conditions of his production, etc.
Therefore he should not do it as a sideline. Hence if one person
exclusively does one particular kind of work (in accordance with
the nature of the thing, and at the right time) and does not
concern himself with other work, everything will be produced in
greater quantity, better, and more easily.

The main emphasis lies on the better: the quality. The word
πλείων only occurs in the passage we are about to quote; otherwise
it is always καλλιτ. b

“How will our polis be able to supply all these demands? Will one man have to
be a farmer, another a builder, and a third a weaver?” etc.... “Is each one of them
to bring the product of his work into a common stock? Should our one farmer, for
example, provide food enough for four people and spend the whole of his time
and industry in producing corn, so as to share with the rest; or should he take no
notice of them and grow just a quarter of this corn, for himself, in a quarter of the
time, and divide the other three quarters between building his house, weaving his
clothes, and making his shoes, so as to save the trouble of sharing with others and
attend himself to all his own concerns?... The first plan is easier, of course....
Firstly, no two people are born exactly alike. They have different aptitudes, which
fit them for different occupations.... And will a man do better working at many
trades, or keeping to one only? Keeping to one.... Also, work may be ruined, if you
let the right time go by.... For the workman must wait upon the work; it will not
wait upon his leisure and allow itself to be done in a spare moment.—Yes, he
must.—So the conclusion is that more will be produced of every thing and the work will
be more easily and better done, when every man is set free from all other occupations to do,
at the right time, the one thing for which he is naturally fitted.”

Plato goes on to show how a further division [IV-163] of labour
or the setting up of different branches of business becomes
necessary. E.g.

“If the farmer is to have a good plough and hoe and other farming tools, he
will not make them himself. Nor will the house-builder, or the weaver” etc. “Now
how does the individual gain a share in the excess product of the other producers,
and how do the others participate in the excess of the first individual’s product?
Through exchange, through selling and buying.” 199

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a More.— Ed.
b Better.— Ed.

21-1098
Plato then examines different kinds of trade and therefore different kinds of trader. Wage labourers are also mentioned, as a particular kind of human being owing their existence to the division of labour.

"There are also the services of yet another class, who have the physical strength for heavy work, though on intellectual grounds they are hardly worth including in our society—wage labourers, as we call them, because they sell the use of their strength for wages."

After he has indicated a large number of different occupations made necessary by the further refinement of city life, etc., he comes to the separation of the craft of war from other crafts, and therefore to the formation of a special warrior estate.

"We agreed ... that no one man can practise many trades satisfactorily....—Well, how do things stand now? Is not the conduct of war an art?...—But we would not allow our shoemaker to try to be also a farmer or weaver or builder, because we wanted our shoes well made. We gave each man one trade, for which he was naturally fitted; he would do good work, if he confined himself to that all his life, free from other occupations and never letting the right moment slip by. Now in no form of work is efficiency so important as in war.... So it is our business ... to select those men who are by nature fitted to be guardians of the polis" (I.e., pp. 439-41 passim).

Different activities are required to satisfy the different needs there are in a community; different gifts enable people of different natures to perform one activity better than another. Hence the division of labour and the different social estates corresponding to it. What Plato always emphasises as the main point of the system is that it allows each piece of work to be done better. Quality, use value, is for him, as for all other writers of antiquity, the decisive point, and the exclusive way of looking at things. For the rest, the basis of his whole conception is an Athenian idealisation of the Egyptian caste system.

The writers of antiquity in general ascribed the remarkable level of industrial development attained by the Egyptians to their hereditary division of labour and the caste system which was based on it.

"In Egypt ... the arts, too, have ... reached the requisite degree of perfection. For it is the only country where craftsmen may not in any way interfere in the affairs of other classes of citizens, but must follow that calling alone which by law is hereditary in their clan.... Among other peoples it is found that tradesmen divided their attention between too many objects.... At one time they try agriculture, at another they take to commerce, at another again they busy themselves with 2 or 3 occupations at once. In free countries they mostly frequent the popular assemblies.... In Egypt, on the contrary, a craftsman is severely punished if he meddles with affairs of state, or carries on several trades at once. Thus," says Diodorus, "there is nothing to disturb their application to their calling.... In
addition to having inherited from their forefathers ... numerous rules of their trade, they are [IV-164] eager to discover still more advantageous ways of practising it” (Diodorus, Historische Bibliothek, b. I, ch. 74).

With Plato the division of labour is presented as the economic foundation of a community in which each member is dependent on the others, and does not satisfy the whole range of his needs himself, independently, without any connection with other people. The division of labour within the community develops out of the many-sidedness of needs and the one-sidedness of aptitudes, which differ with different people, who therefore perform more successfully in one occupation than in another. The main point for him is that if one person makes a craft into his exclusive vocation, he does it better, and adapts his activity completely to the requirements, the conditions, of the work he has to perform, whereas if he engages in it as a sideline, the work has to wait for the opportunities left to him by his involvement in other matters. This point of view, that the τέχνη¹ cannot be carried on as a παπεργον, subsidiary occupation, also appears in the passage from Thucydides, cited earlier.

Xenophon goes further, in that he firstly emphasises the reduction of labour to the simplest possible activity, and secondly makes the degree to which the division of labour can be implemented dependent on the extension of the market.

For comparison.

Blanqui distinguishes, in the passage we referred to earlier,² between the “regulated and in some degree forced labour of workers under the system of large-scale manufacture”³ and the industries of the countryside, carried on as handicrafts or as subsidiary domestic work.

“The disadvantage of manufacture ... is that it subjugates the worker, placing him ... and his family, at the discretion of the work.... Compare, for example, the industry of Rouen or Mulhouse with that of Lyons or Nîmes. Both have as their aim the spinning and weaving of two yarns: one of cotton, the other of silk; and yet they do not resemble each other at all. The former only takes place in giant establishments, with much expenditure of capital ... and with the aid of veritable armies of workers, confined in their hundreds, nay their thousands, in gigantic barrack-like factories, as high as towers, and studded with windows resembling loopholes. The latter, in contrast, is entirely patriarchal; it employs a large number of women and children, but without exhausting or ruining them; it allows them to stay in their beautiful valleys of the Drôme, the Var, the Isère, the Vaucluse, cultivating their silkworms and unwinding their cocoons; it never becomes a true factory industry. However, although it is applied to as high a degree in this

¹ Skill.—Ed
² See this volume, p. 270.—Ed
³ Marx quotes in French.—Ed
industry as in the first one, the principle of the division of labour takes on a special character here. There do indeed exist winders, throwsters, dyers, sizers, and finally weavers; but they are not assembled in the same workshop, nor are they dependent on a single master; they are all independent. Their capital, which is made up of their tools, their looms, and their braziers, is not large, but it is sufficient to put them on a certain footing of equality with their employer. Here there are no factory regulations, no conditions to submit to; everyone makes his own stipulations, in complete freedom” (A. Blanqui aîné, *Cours d'économie industrielle*, ed. etc. by A. Blaise, Paris, 1838-39, pp. 44-80 passim).\(^a\)

On the basis of modern industry an OUT OF DOORS factory system is growing up once again which shares all the disadvantages of the original system without enjoying any of its advantages. But this does not belong here, and will be dealt with later.\(^b\)

[IV-165] “Everyone knows from experience that if the hands and the intelligence are always applied to the same kind of work and the same products, these will be produced more easily, in greater abundance, and in higher quality, than if each individual makes for himself all the things he needs.... In this way, men are divided up into various classes and conditions, to their own advantage and to that of the commodity” (Cesare Beccaria, *Elementi di economia pubblica*, Custodi, *Parte Moderna*, Vol. XI, [p.] 28).\(^b\)

“For in so vast a city” (as London) “manufactures will beget one another, and each manufacture will be divided into as many parts as possible, whereby the work of each worker will be simple and easy. As for example in the making of a watch: if one man shall make the wheels, another the spring, another shall engrave the dialplate, and another shall make the cases, then the watch will be better and cheaper, than if the whole work be put upon one man” (W. Petty, *An Essay Concerning the Multiplication of Mankind etc.*, 3rd ed., [London.] 1698, [p. 35]).

He then goes on to explain how the division of labour brings it about that specific manufactures are concentrated in specific towns, or streets of great towns.

Here “the commodity peculiar to those places is made better and cheaper than elsewhere” (l.c.).

Lastly he goes into the commercial advantages, such as the saving on unnecessary incidental expenses, like carriage charges, etc., whereby in consequence of this distribution of interrelated manufactures in one place the prices of their products are reduced and the profit from foreign trade is increased (l.c., [p.] 36).

What from the outset distinguishes Petty’s conception of the division of labour from that of classical antiquity is his grasp of its influence on the exchange value of the product, on the product as commodity—its cheapening.

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\(^a\) Marx quotes in French.—*Ed.*

\(^b\) Marx quotes in Italian.—*Ed.*
The same point of view is put forward, but expressed more emphatically, as the curtailment of the labour time necessary for the production of a commodity, in The Advantages of the East-India Trade to England Considered etc., London, 1720. What is important is to make each commodity with "the least and easiest labour". If a thing is made with "less labour", it is made "consequently with labour of less price". Thus the commodity is cheapened, and then competition will make it a universal law to reduce labour time to the minimum necessary for its production.

"If my neighbour, by doing much with little labour, can sell cheap, I must contrive to sell as cheap as he"* [p. 67].

He lays particular stress on the following aspect of the division of labour:

*"The more variety of artists to every manufacture, the less is left to the skill of single persons"* [p. 68].

Later writers such as Harris (see above) merely develop Plato's arguments. Then Ferguson. What distinguishes Adam Smith—who in some respects lags behind his predecessors—is that he employs the phrase "increase of the productive powers of labour". Adam Smith's conceptions still remain located in the epoch of large-scale industry's infancy. How much this is the case is shown by his view of machinery as merely the corollary to the division of labour; with him, the workers still make mechanical inventions in order to ease and shorten their labour.

Division of labour through simplification facilitates learning a trade; therefore lessens the overall production costs of labour capacity.

[IV-166] The workshop, which is based on the division of labour, always involves a certain hierarchy of skills, since some operations are more complex than others, some require more physical strength, some a more delicate touch or greater dexterity. In the workshop, as Ure says,

"a workman is assigned to each operation, his wage corresponding to his skill.... It is still the adaptation of the labours to the different individual capacities ... the division of labour in manifold gradations ... the division of labour according to different degrees of skill". 

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a Marx quotes this sentence in English and adds its German translation.— Ed.
b See this volume, p. 282.— Ed.
c See this volume, pp. 273-76.— Ed.
d A. Ure, Philosophie des manufactures etc., Vol. I, Brussels, 1836, pp. 28, 30. Marx used this French translation of Ure. He quotes in a mixture of German and French.— Ed.
The dexterity of the individual continues to be important.

It is in fact an analysis of the process into operations which can each be performed by an individual worker; each operation is separated from the one that accompanies it, but the fundamental principle remains that of viewing it as a function of the worker, so that in analysis it is distributed among different workers and groups of workers according to their level of skill, physical development, etc. The process is not yet analysed as such, independently of the worker who performs it, whereas in the automatic factory, the system

"decomposes a process into its basic constituents, and embodies each part in the operation of an automatic machine", whereupon one can "entrust a person of ordinary capacity with any of the said elementary parts after a short probation" [p. 32].

"The master manufacturer, by dividing the work to be executed into different operations, each requiring different degrees of skill or of force, can purchase exactly that precise quantity of both which is necessary for each operation; whereas, if the whole work were executed by one worker, that person must possess sufficient skill to perform the most delicate, and sufficient strength to execute the most laborious, of the operations" (Ch. Babbage, On the Economy of Machinery etc., London, 1832, Ch. XIX).

"When—according to the particular nature of the products of each kind of manufacture—the most advantageous method of dividing the manufacturing process into partial operations and the number of workers to be employed in them have been ascertained by experience, then all factories the number of whose workers is not a direct multiple of that number will produce with less economy" (Babbage, l.c., Ch. XXII).

If e.g. 10 workers are needed for various operations, the number of persons employed must be a multiple of 10.

"If that is not the case, the workers cannot each of them constantly be used to perform the same operation in the manufacturing process.... That is one cause of the colossal size of industrial establishments" (l.c.).

Here, as with simple cooperation, we again have the principle of multiples. But now in proportions that are determined in their proportionality by the division of labour itself. In general, it is clear that the larger the scale on which the work is done, the further the division of labour can be carried. In the first place, the correct multiple can be applied in that way. Secondly, the extent to which the operations are subdivided and to which the whole of an individual worker's time can be absorbed by one operation naturally depends on the magnitude of the scale.

If, therefore, the division of labour requires a greater capital, because more raw material is worked up over the same period of

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See this volume, p. 256.—Ed.
time, whether it is implemented at all depends on the scale on which the work is done, hence on the number of workers who can be simultaneously employed. A greater capital—i.e. its concentration in one hand—is necessary for the development of the division of labour, which in turn uses the productive power attained thereby [IV-167] to work up a greater amount of material, thus increasing the size of this component of capital.

"He who was reduced to doing a very simple operation in a manufactory entered into dependence upon the man who wished to employ him. He no longer produced a complete piece of work, but only part of one, and to do this he had as much need for the assistance of the labour of others as he did for raw materials, machinery, etc.... He was always in a subordinate position over against the head of the workshop ... he confined his demands to what was strictly necessary to make possible the continuation of the labour he offered, while the head of the workshop alone profited from the whole of the increase of the powers of production which was brought about by the division of labour" (Sismondi, Nouveaux principes etc., Vol. 1, pp. 91-92).a

* "Division of labour shortens the period required for learning an operation"* (F. Wayland, The Elements of Political Economy, Boston, 1843, p. 76).

* In establishing a manufactory, it is important so to adjust the number and kind of workmen, that, when the different operations of a process have been assigned to different persons, these persons may be in such proportions as exactly and fully to employ each other. The more perfectly this is accomplished, the greater will be the economy and, this having been once ascertained, it is also evident that the establishment cannot be successfully enlarged, unless it employ multiples of this number of workmen* (i.e., p. 83).

At the end of his section on the division of labour Adam Smith once again slips back into the assumption that the various workers among whom the labour is divided are the owners and producers of commodities (we shall see that he abandons this illusion later).

"Every workman has a great quantity of his own work to dispose of beyond what he himself has occasion for; and every other workman being exactly in the same situation, he is enabled to exchange a great quantity of goods of his own production for a great quantity, or, what comes to the same thing, for the price of a great quantity of theirs" [Garnier, pp. 24-25] [Vol. I, p. 26].

The transmission of skill from generation to generation is always important. This aspect is decisive in the case of the caste system, as later with guilds.


"For dividing labour, and distributing the powers of men and machinery, to the greatest advantage, it is in most cases necessary to operate upon a large scale; in other words, to produce wealth in great masses. It is this advantage which gives

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a Marx quotes Sismondi partly in German and partly in French.—Ed.
The division of labour—or rather the workshop based on the division of labour—merely increases the surplus value received by the capitalist (at least this is its only direct effect, and the direct effect is the only thing we are concerned with here). Or, in other words, this increase in the productive power of labour only stands the test as a productive force of capital in so far as it is applied to use values which are consumed by the workers, hence curtails the labour time necessary for the reproduction of labour capacity. From precisely this circumstance, that the division of labour on a large scale is chiefly applied just to object of common use, Parson Wayland draws the opposite conclusion, that it is the poor, and not the rich, who benefit from its advantages. The parson is in one sense correct, with regard to the middling class. But here we are not concerned at all with the non-conceptual relation between poor [IV-168] and rich, but with the relation of wage labour and capital. The passage from the parson runs as follows:

*"The greater the cost of the product, the smaller will be the number of persons who are able to purchase it. Hence, the less will be the demand; and hence, also, the less opportunity will there be for division of labour. And, besides, the greater the cost of the article, the greater amount of capital is required in order to produce it by division of labour.... Hence it is, that division of labour is but sparingly used in the manufacture of rich jewelry, and in articles of expensive luxury; while it is so universally used in the production of all articles of common use. Hence we see, that the benefits of the use of natural agents and of division of labour, are vastly greater and more important to the middling and lower classes than to the rich. These means of increased production, reduce the cost of the necessaries and of the essential conveniences of life to the lowest rate, and, of course, bring them, as far as possible, within the reach of all"* (F. Wayland, The Elements of Political Economy, Boston, 1843, [pp.] 86-87).

In addition to an increase in the amount of capital, the division of labour requires for its application, as a basic prerequisite, the cooperation, agglomeration, of workers, which will in any case only occur where the population has reached a certain density. // It is required at the same time that the population should be taken from its scattered dwellings in the countryside and collected together in the centres of production. On this see Steuart. This to be discussed in more detail in the section on accumulation. //

*"There is a certain density of population which is convenient, both for social intercourse, and for that combination of powers by which the produce of labour is increased"* (James Mill, Elements of Political Economy, London, 1821, [p.] 50).

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a Marx quotes in French.—Ed.
The development of the division of labour leads to the disappearance of every individual product of labour—although such a product is still entirely possible when the subsumption of labour under capital is purely formal. The finished commodity is the product of the workshop, which is itself a mode of existence of capital. The fact that the exchange value of labour itself—labour, not its product—becomes the only thing the worker is able to sell, is due not only to the nature of the contract between capital and labour but also to the mode of production itself. Labour becomes in fact the worker's sole commodity, and the commodity altogether becomes the general category under which production is subsumed. Our starting-point was the commodity as the most general category of bourgeois production. It first becomes a general category of this kind through the transformation which the mode of production has itself been subjected to by capital.60

* "There is no longer any thing which we can call the natural reward of individual labour. Each labourer produces only some part of a whole, and each part, having no value or utility of itself, there is nothing on which the labourer can seize, and say: it is my product, this I will keep for myself"* ([Th. Hodgskin.] *Labour defended against the claims of Capital etc.*, London, 1825, p. 25).

"The progress of wealth has brought about the division of conditions and that of trades: what is exchanged is no longer each person's *superfluous product* but *subsistence itself*. In this new situation, the life of each man who works and produces depends not on the completion and success of his labour, but on its *sale*" (Sismondi, *Études*, Vol. 1, p. 82).a


In so far as in the division of labour one aspect of the worker's natural individuality, as a natural basis, is further developed, it is put in place of his overall capacity for production and trained up to a specific skill, which can only prove itself useful by being exercised in the context of the workshop as a whole; exercised as a particular function of the workshop.

[IV-169] Storch, like Adam Smith, conflates the two types of division of labour, except that with him one type appears as the most extreme development of the other; one appears as the *point of departure* for the other, which is a step forward.

"The division of labour proceeds from the separation of the most widely different professions to the point where several workers divide between them the preparation of one and the same product, as in manufacture" (This should read not product but commodity. Different people work on the same *product* in the

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a Marx quotes in French.—*Ed.*
other division of labour too.) (H. Storch, Cours d'économie politique, avec des notes etc. par J.-B. Say, Paris, 1823, Vol. 1, p. 173).a

"It is not sufficient that the capital required for the subdivision of trades should be in readiness in society; it must also be accumulated in the hands of the entrepreneurs in sufficiently large quantities to enable them to work on a large scale. The more the division of trades increases, the greater an outlay of capital in tools, raw material, etc., is required for the constant employment of a given number of workers. Increase of the number of workers with the division of labour. Increased amount of capital in buildings and means of subsistence" (Storch, l. c., pp. 250, 251).

* "Labour is united ... whenever employments are divided.... The greatest division of labour takes place amongst those exceedingly barbarous savages who never help each other, who work separately from each other; and division of employment, with all its great results, depends altogether on combination of labour, cooperation"* (Wakefield, note to his edition of A. Smith, Wealth of Nations, London, 1835, Vol. 1, p. 24).

This distinction between the separation of employments and the "division of labour" is Wakefield's hobbyhorse. What he vaguely feels is precisely the distinction, not emphasised by Adam Smith, between the division of labour within society and that within the workshop. Adam Smith has the employments cooperate with one another by means of exchange, and not only knows—which is a matter of course—but says expressly that the division of labour within the individual manufactory automatically implies its combination. What is a real step forward in Wakefield—and we shall come to this later—is his feeling that the latter division of labour, based on free bourgeois labour, is a form peculiar to the capitalist mode of production and therefore only occurring under definite social conditions.67

Adam Smith makes exchange the foundation of the division of labour, whereas it is (but does not have to be) the opposite, its result. Hodgskin remarks correctly that a division of employments, hence of social labour, takes place in all countries and under all political institutions. It exists originally in the family, where it emerges spontaneously from physiological differences, differences of sex and age. Variations in individual organisation, in physical and mental capacities, form a fresh source for the division of employments. But then, owing to the diversity of natural conditions, differences in the soil, in the distribution of water and land, mountain and plain, climate, situation, the presence of minerals in the earth and peculiarities of its own spontaneous creations, there is added the difference in the naturally available instruments of labour, which divides the employments of different

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a Marx quotes partly in German and partly in French.— Ed.
Relative Surplus Value

tribes, and it is in the exchange between them that we have, in general, to look for the original transformation of product into commodity (see Th. Hodgskin, *Popular Political Economy etc.*, London, 1827, Chs IV, V and VI). Where the population is stagnant, as in [IV-170] Asia, the division of labour is stagnant too.

*“Improved methods of conveyance, like railroads, steam vessels, canals, all means of facilitating intercourse between distant countries act upon the division of labour in the same way as an actual increase in the number of people; they bring more labourers into communication etc.”* [p. 119].

*Population and the progress of the same is the chief basis for the division of labour.*

*“As the number of labourers increases, the productive power of society augments in the compound ratio of that increase, multiplied by the effects of the division of labour and the increase of knowledge”* (l.c., p. 120).

“It is by means of an additional capital only, that the undertaker of any work can ... make a more proper division of labour among his workmen. When the work to be done consists of a number of parts, to keep every man constantly employed in one way, requires a much greater capital than where every man is occasionally employed in every different part of the work” (A. Smith, [Garnier,] Book II, Ch. III [pp. 388-39]) [Vol. II, pp. 115-16].

“The productive powers of the same number of labourers cannot be increased, but in consequence either of some addition and improvement to those machines and instruments which facilitate and abridge labour; or of a more proper division and distribution of labour” (l.c.).

“The owner of capital which employs a great number of labourers, necessarily endeavours, for his own advantage, to make such a proper division and distribution of tasks, that the labourers may be enabled to produce the greatest quantity of work possible. For the same reason, he endeavours to supply them with the best machinery which either he or they can think of. What takes place among the labourers in a particular workhouse, takes place, for the same reason, among those of a great society. The greater their number, the more they naturally divide themselves into different classes and subdivisions of employment. More heads are occupied in inventing the most proper machinery for executing the work of each, and it is, therefore, more likely to be invented” (A. Smith, [Garnier,] Book I, Ch. VIII [pp. 177-78]) [Vol. I, pp. 145-46].


“Society as a whole has this in common with the interior of a workshop, that it too has its division of labour. If one took as a model the division of labour in a modern workshop, in order to apply it to a whole society, the society best organised for the production of wealth would undoubtedly be that which had a single chief employer, distributing tasks to the different members of the community according to a previously fixed rule. But this is by no means the case. While inside the

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a See this volume, pp. 163-64.—Ed.
modern workshop the division of labour is meticulously regulated by the authority
of the employer, modern society has no other rule, no other authority for the
distribution of labour than free [IV-171] competition" (Misère de la philosophie,
Paris, 1847, p. 130).a

"Under the patriarchal system, under the caste system, under the feudal and
guild system, there was division of labour in the whole of society according to fixed
rules.... As for the division of labour in the workshop, it was very little developed in
all these forms of society. It can even be laid down as a general rule that the less
authority presides over the division of labour inside society, the more the division
of labour develops inside the workshop, and the more it is subjected there to the
authority of a single person. Thus authority in the workshop and authority in
society, in relation to the division of labour, are in inverse ratio to each other" (l.c.,
pp. 130, 131).b

"The accumulation and concentration of instruments and workers preceded the
development of the division of labour inside the workshop.... The development of
the division of labour supposes the assemblage of workers in a workshop.... Once
the men and the instruments had been brought together, the division of labour,
such as it had existed in the form of the guilds, was reproduced, necessarily
reflected inside the workshop" (l.c., [pp.] 132, 133).c

"The concentration of the instruments of production and the division of labour
are as inseparable one from the other as are, in the political sphere, the
concentration of public powers and the division of private interests" (l.c., p. 134).d

The prerequisites for adopting the division of labour are therefore:

1) Conglomeration of workers, for which a certain density of
population is necessary. Means of communication can replace
density to a certain degree. Depopulation of the country (see the 18th
century). In a thinly populated country this conglomeration could
only take place at a few points. However, conglomeration is also
brought about if agriculture only requires a sparse population,
and the mass of the population, separated from the land, can
therefore conglomerate around the available means of production,
the centres of capital. Relative concentration on the one side can be
brought forth by relative rarefaction on the other, even with a
given population, the existence of which originally remains rooted
in the non-capitalist mode of production.

What is needed first, therefore, is not an increase in the
population, but an increase in the purely industrial population, or
a different distribution of the population. The first condition for
this is that the population directly employed in the production of

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a K. Marx, The Poverty of Philosophy (present edition, Vol. 6, p. 184). Here and
further on, Marx quotes from this work in the language of the original
(French).— Ed.

b Ibid., pp. 184-85.— Ed.

c Ibid., p. 186.— Ed.

d Ibid., p. 187.— Ed.
the means of subsistence, in agriculture, be diminished, that people be separated from the land, from mother earth, and that they be thereby set free (free hands, as Steuart says 156), mobilised. The separation from agriculture of the kinds of work bound up with it, and the—progressive—limitation of agriculture to fewer hands, is the main condition for the division of labour and for manufacture in general, if it is to emerge not in individual cases, at isolated points, but playing a predominant role. // All this belongs to accumulation. // The same population, distributed differently, does not need a greater supply of the means of life, but only a different apportionment, distribution, of them. The capitalist who applies the division of labour, hence employs a greater number of workers agglomerated at one point, pays larger amounts in wages than the master craftsman, requires more variable capital, which is ultimately reduced to means of subsistence; but for this it is necessary that the same wage that was previously paid to the workers by 100 people [IV-172] should now be paid by one. All we have here, then, is a greater concentration of variable capital in fewer hands, and the same thing goes for the means of subsistence for which these wages are exchanged. What is required here is not an increase in this part of capital but only its concentration; just as we have, not a bigger population, but a greater agglomeration of the population under the command of one and the same capital.

2) Concentration of the instruments of labour.

The division of labour leads to a differentiation and accordingly a simplification of the instruments which serve as means of labour; and therefore to their improvement. But under the division of labour the means of labour remains an implement of labour, an instrument which can only be employed thanks to the personal dexterity of the individual worker. It is the conductor of his own skill; in reality it is an artificial organ added on to his natural organs. The same number of workers requires a greater variety of instruments, not more of them. In so far as the workshop is a conglomeration of workers it also presupposes an agglomeration of instruments. And in any case this part of constant capital grows only in the same proportion as does the variable capital, which is laid out in wages, or the number of workers employed simultaneously by the same capital.

The other conditions of labour, particularly accommodation, factory buildings, can be regarded as a new addition to constant capital, since in the days before manufacture the workshop did not yet exist separately from the private house.
With this exception, a greater concentration takes place of the part of capital which consists of the means of labour; not necessarily a growth in capital and by no means a relative growth in capital as compared with the component laid out in wages.

3) *Increase in raw material.* The part of capital laid out in raw material grows *absolutely* against the part laid out in wages, since the same quantity of raw material absorbs a smaller quantity of labour time, or the same quantity of labour time realises itself in a greater quantity of raw material. Nevertheless, this can also have occurred *originally,* without an absolute increase in the raw material in a country. The same amount of raw material available in a country may absorb less labour, i.e. a smaller number of workers over the whole country may be employed in working it up, in transforming it into new product, although this number of workers is now concentrated in larger groups at various points under the command of individual capitalists, instead of being scattered over a wide area, as previously.

In absolute terms, therefore, nothing is required for *manufacture,* i.e. for the workshop based on the division of labour, but a change in the distribution of the different constituents of capital, concentration instead of dispersal. As long as they are dispersed, these conditions of labour do not yet exist as capital, although they do exist as the material constituents of capital, in the same way as the working part of the population exists, although not yet in the quality of wage labourers or proletarians.

*Manufacture* (as distinguished from the mechanical workshop or the *factory*) is the mode of production or form of industry which specifically corresponds to the division of labour. It emerges independently, as the *most developed* form of the capitalist mode of production, before the invention of machinery proper (although machines and particularly fixed capital are already being employed).

[IV-173] With Petty and the apologist for the *East India Trade,* cited earlier (with the moderns, therefore)\(^a\) it is from the outset a characteristic feature of their discussion of the division of labour that the cheapening of the commodity—the diminution of the labour socially necessary for the production of a particular commodity—is the main aspect considered. With Petty this is mentioned in connection with foreign trade. With the *East Indian* it is presented directly as a means of underselling competitors on the

\(^a\) See this volume, p. 288.—*Ed*
world market, just as he presents world trade as itself a means for attaining the same result in less labour time.

In Book I, Chapter I, where he treats the division of labour *ex professo*, Adam Smith discusses at the end of the chapter the extraordinary multiplicity of the kinds of work, either derived from different countries or present in their many-sidedness in a single “civilised country”, i.e. a country where the product universally assumes the commodity form, which contribute to provide e.g. the furniture, the clothing, the tools of an ordinary day labourer.

“Observe,” begins this conclusion, “the accommodation of the most common artificer or day labourer in a civilised and thriving country, and you will perceive that the number of people of whose industry a part, though but a small part, has been employed in procuring him this accommodation, exceeds all computation. The woolen coat, for example, which covers the day labourer, as coarse and rough as it may appear, is the produce of the joint labour of a great multitude of workmen” and so on [Garnier, p. 25] [Vol. I, p. 26].

And Adam Smith concludes his reflections with these words:

“Perhaps the accommodation of an European prince does not always so much exceed that of an industrious and frugal peasant, as the accommodation of the latter exceeds that of some African king, the absolute master of the lives and liberties of ten thousand naked savages” [Garnier, p. 28] [Vol. I, pp. 28-29].

The whole of this passage as well as this way of viewing the matter is copied from de Mandeville, *The Fable of the Bees*, first published in 1705 as a *poem*, with the 2nd part, which consists of a series of six dialogues (prose), having been published in 1729. In 1714 he added the prose notes which make the bulk of the first volume of the work as we have it now. It says there, among other things:

*“If we trace the most flourishing nations in their origin, we shall find, that, in the remote beginnings of every society, the richest and most considerable men among them were a great while destitute of a great many comforts of life that are now enjoyed by the meanest and most humble wretches; so that many things which were once looked upon as the inventions of luxury are now allowed even to those that are so miserably poor as to become the objects of public charity.... A man would be laughed at that should discover luxury in the plain dress of a poor creature that walks along in a thick parish gown, and a coarse shirt underneath it; and yet what a number of people, how many different trades, and what a variety of skill and tools must be employed to have the most ordinary Yorkshire cloth?”* etc. ([Remark P., Vol. I, pp. 181-83 of 1724 ed.]).

“What a bustle is there to be made in several parts of the world before a fine scarlet or crimson cloth can be produced; what multiplicity of trades and artificers must be employed! Not only such as are obvious, as woolcombers, spinners, the weaver, the cloth-worker, the scourer, the dyer, theetter, the drawer, and the packer; but others that are more remote, and might seem foreign to it,—as the mill-wright, the pewturer, and the chemist, which yet all are necessary, as well as a great number of handicrafts, to have the [IV-174] tools, utensils, and other...
implements belonging to the trades already named.* He then goes over the contribution to this of shipping, foreign countries, in a word the world market (Search into the Nature of Society (APPENDED TO THE SECOND EDITION), pp. 411-13).

The content of all this enumeration is merely this: Once the commodity becomes the general form of the product, or production takes place on the basis of exchange value and therefore of the exchange of commodities, the production of each individual, first of all, becomes one-sided, whereas his needs are many-sided. Innumerable independent branches of labour must therefore contribute to satisfy the needs, even the simplest needs, of the individual. Secondly: The whole range of the objective conditions which are required for the production of a single commodity, such as the raw materials, instruments, matières instrumentales, enter into the production of that commodity as commodities, are conditioned by the sale and purchase of these elementary constituents of the commodity, which have been produced independently of each other. This takes place to the extent that the individual elements which are required for the production of a commodity exist as commodities outside it, hence originally enter into this individual branch of production as commodities from outside, through the agency of circulation. That is to say, this takes place the more the commodity becomes the general elementary form of wealth, i.e. the more production ceases to be for the individual the direct creation of his own means of subsistence, and becomes trade, as Steuart says, with the commodity therefore ceasing to be the form of the part of the individual's production which goes beyond the individual's needs, i.e. the part which is superfluous and therefore saleable for the individual. Here the product as such is still the basis and production is for subsistence. Here the production of commodities still rests on the foundation of a production the main product of which does not become a commodity. It is not yet a situation where subsistence itself depends on sale; where the producer, unless he produces a commodity, produces nothing at all; where to be a commodity is therefore the general, elementary, necessary form of his product, which alone makes it into an element of bourgeois wealth. This distinction is strikingly demonstrated when one compares large-scale modern agriculture with the agriculture in which production for the individual's own subsistence still forms the basis, and which itself creates most of the conditions for its production; so that these conditions do not

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* See this volume, pp. 80-81.— Ed.
enter it as quantities of commodities, through the agency of circulation.

In reality, therefore, the views expressed by de Mandeville and others mean nothing more than that the commodity is the general elementary form of bourgeois wealth; that what is decisive for the producer is no longer the use value of the product but its exchange value alone, the use value being only the vehicle of the exchange value for him; that he must in fact produce not merely a particular product, but money. This prerequisite, that the product is universally produced as a commodity, hence is mediated by the conditions of its own production as commodities, by circulation, into which they enter, implies an all-embracing division of social labour, or, in other words, the separation of the various mutually conditioning and complementing labours into independent branches of labour only brought into contact with each other through the circulation of commodities, through sale and purchase. Or, it is identical with this situation, since for products to confront each other generally as commodities presupposes a mutual confronting of the activities producing them [...]\(^a\) This way of viewing things is therefore historically important [...]\(^a\)

[V-179]\(^204\) At this stage of the development of society it is more interesting to examine the contrast with the situation where the individual family itself directly satisfies almost all its needs, as we see in e.g. Dugald Stewart, l.c., p. 327[-28]:

*"In some parts of the Highlands of Scotland, not many years ago, every peasant, according to the Statistical Accounts, made his own shoes of leather tanned by himself. Many a shepherd and cottar too, with his wife and children, appeared at church in clothes which had been touched by no hands but their own, since they were shorn from their sheep and sown in their flaxfields. In the preparation of these, it is added, scarcely a single article had been purchased, except the awl, needle, thimble, and a very few parts of the iron work employed in the weaving. The dyes, too, were chiefly extracted by the women from trees, shrubs, and herbs"* (Lectures on Political Economy, Vol. 1, l.c.). [V-179]

[V-175] In contrast to this, at a more advanced stage of the development of bourgeois society, of the kind that already faced Adam Smith, the simple reproduction of these Mandevillian, Harrisian, etc., reflections does not appear without an admixture of pedantic childishness; and in particular the churning out of such remarks by Smith has the effect that he fails to grasp the division of labour clearly and definitely as a specifically capitalist mode of production; while, on the other hand, the extraordinary importance he attaches to the division of labour in manufacture

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\(^a\) The manuscript is damaged here.—Ed.
shows that in his time the modern factory system was only in its origins. Ure remarks on this, correctly:

“When Adam Smith wrote his immortal work on the elements of political economy, automatic machinery being hardly known, he was properly led to regard the division of labour as the grand principle of manufacturing improvement... But what was in Dr. Smith's time a topic of useful illustration, cannot now be used without risk of misleading the public as to the real principle of modern industry... The scholastic dogma of the division of labour into degrees of skill has been exploited by our enlightened manufacturers” (Andrew Ure, *Philosophie des manufactures etc.*, Vol. I, Ch. 1) (first appeared in 1835).

This strikingly demonstrates that the division of labour dealt with here—and, in fact, by Adam Smith too—is not a general category common to most states of society, and the most varied ones, but a particular historical mode of production, corresponding to a particular historical stage of development of capital; indeed a mode of production which belonged, in the all-embracing and predominant form in which one sees it in Adam Smith, to the stage of development of capitalist production reached by his own epoch and since then already overcome and passed.

In the passage we have just cited, Ure says,

1) “He” (Adam Smith) “therefore concludes that to each of these operations a workman can naturally be appropriated, with a wage corresponding to his skill. This *appropriation* forms the very essence of the division of labour.”

So we have firstly the *appropriation* of the worker to a particular operation, his subsumption under it. From now on he belongs to this operation, which becomes the exclusive function of his labour capacity now reduced to an abstraction.

Firstly, then, labour capacity is *appropriated* to this specific operation. Secondly, however, since the basis of the operation itself remains the human frame, it happens that this appropriation is at the same time, as Ure says,

“a distribution, or rather *adaptation of labour* to the different individual abilities”.

That is, the operations themselves are adapted in the course of division to the natural and acquired abilities of the workers. This is not a dissolution of a process into its mechanical components, [V-176] but a dissolution that takes into account the fact that these individual processes have to be performed as functions of human labour capacities.

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a Marx quotes Ure in French.—*Ed.*
In the volume of notes he added to his translation of Adam Smith, Germain Garnier, in Note 1 to Smith's chapter on the division of labour, pronounced himself opposed to popular education. Garnier says it is contrary to the division of labour, and with it

"our whole social system would be proscribed" (l.c., Vol. V, p. 2). a

Some of his comments are worth noting here.

"The labour which feeds, dresses and houses all the inhabitants of a country is a burden which lies on society as a whole, but which it necessarily transfers to one part of its members alone" (l.c., p. 2).

And the greater the industrial progress of society, the more do its material demands grow,

"and consequently the more labour will be employed in producing them, preparing them" (the means of subsistence in general) "and bringing them to the consumers. At the same time, however, and as a consequence of the same progress, the class of people released from this manual labour increases in size relatively to the other class. The latter, therefore, has at once more people to provide for and more abundant and elaborate provisions to furnish for each of them. Thus, the more society prospers, i.e. the more its industry, its commerce, its population grows, etc. ... the less time does the man destined to a mechanical trade have to spare. The richer society becomes, the more valuable" (this should rather be "the greater the value of") "the time of the worker".... "Thus, the more society advances towards a state of splendour and power, the less time the working class will have to give to studying and to intellectual and speculative work" (pp. 2-4).

That is to say, the free time of society is based on the absorption of the worker's time by compulsory labour 154, thus he loses room for intellectual development, for that is time. 153

"From another angle, the less time the working class has to exploit the domain of knowledge, the more time remains for the other class. If the men of this latter class can devote themselves consistently and assiduously to philosophical observations or literary compositions, it is because they are free from all concern for the production, manufacture or transportation of the objects of their daily subsistence, and because other people have undertaken the burden of these mechanical operations for them. Like all other divisions of labour, that between mechanical and intellectual labour becomes more pronounced and more clear-cut in proportion as society advances towards a wealthier condition. This division, like every other, is an effect of past and a cause of future progress.... Ought the government then to work to counteract this division of [V-177] labour and hinder its natural course? Ought it to expend a part of the public money in the attempt to confound and blend together two classes of labour which are themselves striving towards separation?" (l.c., pp. 4, 5).

The amount of production grows when the efficiency of labour and at the same time the extent and intensity of labour time is

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a Here and below Marx quotes Garnier in French.— Ed.
increased, the number of workers remaining the same. On this presupposition, the further growth of production is conditioned by a growth or increase in the number of wage labourers facing capital. This number is in part directly increased by capital, when previously independent craftsmen, etc., are subjected to the capitalist mode of production and thereby converted into wage labourers; and similarly when the introduction of machinery, etc., effects the conversion of women and children into wage labourers. Thus the number of workers undergoes a relative increase even though the total population remains the same. But capital also produces an absolute increase in the number of people, above all of the working class. The population can only grow absolutely, leaving aside the operations we have just mentioned, if not only more children are born but more children grow up, can be nourished until they are old enough to work. The development of the productive forces under the régime of capital increases the quantity of means of subsistence annually produced and cheapens them to such an extent that the average wage can be calculated to allow the reproduction of the workers on a larger scale, even though the wage itself falls in value, represents a smaller quantity of materialised labour time. The wage level may even sink, if only the magnitude of the wage's value does not fall in exactly the same proportion as the productive power of labour rises. On the other hand, the life-situation in which capital places the working class, its conglomeration, its deprivation of all the other pleasures of life, the utter impossibility of attaining a higher social standing and maintaining a certain decorum, the vacuity of their lives, the mixing of the sexes in the workshop, the isolation of the worker himself, all these things impel marriage at an early age. The curtailment and practically the abolition of the necessary period of apprenticeship, the early age at which children can themselves step forward as producers, the shortening therefore of the period during which they must be provided for, increases the stimulus to a more rapid production of human beings. If the average age of working-class generations declines, there is always available on the market a superfluous and constantly increasing mass of short-lived generations, and that is all capitalist production needs.

On the one hand, therefore, it can be said (see Collins, etc.) that a country is the richer, the more proletarians it has, and that the growth of wealth is displayed in the increase of poverty. On the other hand, there is a relative growth in the number of people not

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a See this volume, p. 206.— Ed.
dependent on manual labour, and although the mass of workers grows, the population of the social strata they have to provide for materially through their labour grows in the same proportion. (Colins, Sismondi, etc.) The rising productivity of capital is directly expressed in the rising quantity of surplus labour appropriated by capital, or the rising amount of profit, which is an amount of value. Not only is this amount of value growing: the same magnitude of value is represented in an incomparably greater amount of use values. The revenue of society (we disregard wages), the part of the revenue which is not [V-178] re-converted back into capital, therefore grows, and thereby also the substance on which lives the stratum of society not directly involved in material production. This applies, in particular, to the part of society which concerns itself with the sciences; just as to the part concerned with the business of circulation (trade, the money business), and to the idlers, who only consume; as well as to the serving part of the population. This section of society amounts e.g. in England to 1 million people, more than all the workers directly employed in weaving and spinning in the FACTORIES.\textsuperscript{9} With the separation of bourgeoisie from feudal society this part of the population is very much reduced. At a more developed stage this VOLUNTARY SERFDOM (see Quesnay on servants\textsuperscript{206}) undergoes an extraordinary increase along with luxury, wealth and the display of wealth. The working class has to feed, and to work for, this gang—who have become separated from the working class—since they themselves are not directly involved in material production. (The same goes for armies.) \textsuperscript{[V-178]}

\textsuperscript{[V-179]}\textsuperscript{207} Although the number of workers grows absolutely, it declines relatively, not only in proportion to the constant capital which absorbs their labour, but also in proportion to the part of society not directly involved in material production or indeed engaged in no kind of production whatsoever.

* "In every stage of society, as increased numbers and better contrivances add to each man's power of production, the number of those who labour is gradually diminished.... Property grows from the improvement of the means of production; its sole business is the encouragement of idleness. When each man's labour is barely sufficient for his own subsistence, as there can be no property" //capital//, "there will be no idle men. When one man's labour can maintain five, there will be four idle men for one employed in production: in no other way can the produce be consumed ... the object of society is to magnify the idle at the expense of the industrious, to create power out of plenty.... The industry which produces is the

\textsuperscript{a} Return to an Address of the Honourable. The House of Commons, dated 24 April 1861.—Ed.
The Production Process of Capital

parent of property; that which aids consumption is its child.... It is the growth of property, this greater ability to maintain idle men, and unproductive industry, that in political economy is called capital"* (Piercy Ravenstone, M.A., Thoughts on the Funding System, and Its Effects, London, 1824, pp. 11-13).

"The less numerous the exploiting population, the less of a burden it is to those it exploits" (Colins, L'économie politique. Source des révolutions et des utopies prétendues socialistes, Vol. 1, Paris, 1856, [p.] 69).a

"If one understands by social progress, in a harmful direction, the increase of poverty resulting from a rise in the numbers of the exploiting class and a fall in the numbers of the exploited class, then there has been, from the 15th to the 19th century, social progress, in a harmful direction" (l.c., [pp.] 70-71). [V-179]

[V-178] The separation of science from labour, in so far as it concerns labour itself—the separation of science from the industrial and agricultural workers to become, in its application, the industries and agriculture, is a subject which belongs to the section on machinery.208

(Otherwise all these reflections belong to the concluding chapter on capital and labour.)50

The mediaeval master is a craftsman as well, and works himself. He is a master of his craft. With manufacture—based as it is on the division of labour—this comes to an end. Apart from the commercial business he conducts as a buyer and seller of commodities, the activity of the capitalist consists in applying all possible methods of exploiting labour, i.e. making it productive, to the maximum.

* "The class of capitalists are from the first partially, and then become ultimately completely discharged from the necessity of manual labour. Their interest is that the productive powers of the labourers they employ should be the greatest possible. On promoting that power their attention is fixed, and almost exclusively fixed. More thought is brought to bear on the best means of effecting all the purposes of human industry; knowledge extends, multiplies its fields of action, and assists industry"* (Richard Jones, Text-book of Lectures on the Political Economy of Nations, Hertford, 1852) (Lecture III).

** "The employer will be always on the stretch to economize time and labour"* (Dugald Stewart, l.c., p. 318).

** "These speculators, who are so economical of the labour of workers they would have to pay" (J. N. Bidaut, Du Monopole qui s'établit dans les arts industriels et le commerce, Paris, 1828, p. 13).a

** "The numerical increase of labourers has been great, through the growing substitution of female for male, and above all childish for adult labour. Three girls at 13, at wages of 6 to 8 sh. a week, have"* (in a large number of cases) ** "replaced the one man of mature age, at wages varying from 18 to 45 sh."* (Thomas [de] Quincey, The Logic of Political Economy, Edinburgh, 1844, [p.] 147, footnote).

** "Economies in the cost of production can only be economies in the quantity of labour employed in production" (Sismondi, Études etc., Vol. I, p. 22).a

a Marx quotes in French.— Ed.
Adam Smith remarks as follows on the growth of capital, which is a prerequisite of the division of labour, since the division of labour simultaneously increases the number of workers employed:

"The quantity of materials which the same number of people can work up, increases in a great proportion as labour comes to be more and more subdivided; and as the operations of each workman are gradually reduced to a greater degree of simplicity, a variety of new machines come to be invented for facilitating and abridging these operations."

(This is peculiar logic—because labour is reduced to an ever greater degree of simplicity, machines are invented to facilitate and abridge it. Hence because labour is facilitated and abridged by the division of labour! He ought to have said, the tools which when combined later give rise to the machine are simplified and subdivided.)

"As the division of labour advances, therefore, in order to give constant employment to an equal number of workmen, an equal stock of provisions, and a greater stock of materials and tools than what would have been necessary in a ruder state of things, must be accumulated beforehand. But the number of workmen in every branch of business generally increases with the division of labour in that branch, or rather it is the increase of their number which enables them to class and subdivide themselves in this manner" (A. Smith, [Garnier], Vol. II, introduction to Book II, pp. 193-94) [Vol. II, pp. 2-3].

In the same place, Adam Smith presents the capitalist to us as always on the watch for ways of raising the productive power of labour. Here the accumulation of capital is a prerequisite for the division of labour and machinery (since this appears as a capitalist mode of production), and, inversely, accumulation is the result of this raising of the productive forces. We read in the same place:

"As the accumulation of stock is previously necessary for bringing about this great increase in the productive powers of labour, so that accumulation naturally leads to this increase. The person who employs his stock in maintaining labour, necessarily wishes to employ it in such a manner as to produce as great a quantity of work as possible. He endeavours, therefore, both to make among his workmen the most proper distribution of employment, and to furnish them with the best machines which he can either invent or afford to purchase. His abilities, in both these respects, are generally in proportion to the extent of his stock, or to the number of people whom it can employ. The quantity of industry, therefore, not only increases in every country with the increase of the stock which employs it, but, in consequence of that increase, the same quantity of industry produces a much greater quantity of work" ([Garnier], pp. 194-95) [Vol. II, p. 3].

"Not beyond a fourth part of our whole population provides everything which is consumed by all" (Th. Hodgskin, Popular Political Economy, London, [Edinburgh], 1827, [p.] 14).

"The base and petty management, which follows him" (the day-labourer) "with wary eyes, overwhelms him with reproaches when he grants himself the slightest relaxation, and claims he is stealing from it when he allows himself an instant of rest" (S. N. Linguet, Théorie des loix civiles, Vol. II, London, 1767, p. 466).
In Book I, Chapter 1, where Adam Smith treats the division of labour *ex professo*, he only touches lightly on its (evil) consequences, but in Book V, in contrast, which deals with the revenue of the state, he follows Ferguson in speaking out directly on this subject. We read there Book V (Ch. I, Article II):

"In the progress of the division of labour, the employment of the far greater part of those who live by labour, that is, of the great body of the people, comes to be confined to a few very simple operations, frequently to one or two. But the understandings of the greater part of men are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects are perhaps always the same, or very nearly the same, has no occasion to exert his understanding or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of developing or exercising these faculties, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his moral faculties ... the uniformity of his stationary life naturally corrupts the courage of his mind.... It corrupts even the activity of his body, and renders him incapable of exerting his strength with vigour and perseverance in any other employment than that to which he has been bred. His dexterity at his own particular trade seems, in this manner, to be acquired at the expense of his intellectual, social, and martial virtues. But in every improved and civilised society this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall.... It is otherwise in the *barbarous* societies as they are commonly called, of hunters, of shepherds, and even of husbandmen in that rude state of husbandry which precedes the improvement of manufactures and the extension of foreign commerce. In such societies the varied occupations of every man oblige every man to exert his capacity by continual efforts, etc.... Though [V-182] in a rude society there is a good deal of variety in the occupations of every individual, there is not a great deal in those of the whole society.... In the civilised state, on the contrary, though there is little variety in the occupations of the greater part of individuals, there is an almost infinite variety in those of the whole society" [Garnier, pp. 181-84] [Vol. III, pp. 295-98].

//DIGRESSION: (ON PRODUCTIVE LABOUR)///

A philosopher produces ideas, a poet poems, a clergyman sermons, a professor compendia and so on. A criminal produces crimes. If we take a closer look at the connection between this latter branch of production and society as a whole, we shall rid ourselves of many prejudices. The criminal produces not only crimes but also criminal law, and with this also the professor who gives lectures on criminal law and in addition to this the inevitable compendium in which this same professor throws his lectures onto the general market as "commodities". This brings with it augmentation of national wealth, quite apart from the personal enjoyment which—as a competent witness, Professor Roscher, [tells] us (see ...)²⁰⁹—the manuscript of the compendium
Page 182 of Notebook V of the Economic Manuscript of 1861-63
brings to its originator himself. The criminal moreover produces the whole of the police and of criminal justice, constables, judges, hangmen, juries, etc.; and all these different lines of business, which form just as many categories of the social division of labour, develop different capacities of the human mind, create new needs and new ways of satisfying them. Torture alone has given rise to the most ingenious mechanical inventions, and employed many honourable craftsmen in the production of its instruments. The criminal produces an impression, partly moral and partly tragic, as the case may be, and in this way renders a “service” by arousing the moral and aesthetic feelings of the public. He produces not only compendia on Criminal Law, not only penal codes and along with them legislators in this field, but also art, belles-lettres, novels, and even tragedies, as not only Müllner’s Schuld and Schiller’s Räuber show, but Oedipus and Richard the Third. The criminal breaks the monotony and everyday security of bourgeois life. In this way he keeps it from stagnation, and gives rise to that uneasy tension and agility without which even the spur of competition would get blunted. Thus he gives a stimulus to the productive forces. While crime takes a part of the redundant population off the labour market and thus reduces competition among the labourers—up to a certain point preventing wages from falling below the minimum—the struggle against crime absorbs another part of this population. Thus the criminal comes in as one of those natural “counterweights” which bring about a correct balance and open up a whole perspective of “useful” occupations. The effects of the criminal on the development of productive power can be shown in detail. Would locks ever have reached their present degree of excellence had there been no thieves? Would the making of bank-notes have reached its present perfection had there been no [V-183] forgers? Would the microscope have found its way into the sphere of ordinary commerce (see Babbage\(^a\)) but for trading frauds? Does not practical chemistry owe just as much to the adulteration of commodities and the efforts to show it up as to the honest zeal for production? Crime, through its ever new methods of attack on property, constantly calls into being new methods of defence, and so is as productive as strikes for the invention of machines. And if one leaves the sphere of private crime: would the world market ever have come into being but for national crime? Indeed, would even the nations have arisen? And

\(^a\) Ch. Babbage, Traité sur l'économie..., Paris, 1833, p. 279.— Ed.
has not the Tree of Sin been at the same time the Tree of Knowledge ever since the time of Adam?

In his *Fable of the Bees* (1705) Mandeville had already shown that every possible kind of occupation is productive, and had given expression to the tendency of this whole line of argument:

*"That what we call Evil in this World, Moral as well as Natural, is the grand Principle that makes us Sociable Creatures, the solid Basis, the *Life and Support of all Trades and Employments* without exception; there we must look for the true origin of all Arts and Sciences; and the moment Evil ceases, the Society must be spoiled if not totally destroyed."*

Only Mandeville was of course infinitely bolder and more honest than the philistine apologists of bourgeois society.

What strikes us in looking at the division of labour, as with all forms of capitalist production, is the character of the antagonism.

[Firstly.] In the division of labour within the workshop, the workers are quantitatively distributed, in strict system, between the individual operations according to certain numerical proportions, as required by production as a whole, by the product of their combined labours. If instead we look at the whole of society—the social division of labour—there are now too many producers to be found in one branch of business and now in another. Competition, through which the price of a commodity is now raised above its value and now lowered beneath it, constantly adjusts these inequalities and disproportions, but just as constantly reproduces them. It is the movement of commodity prices, mediated by competition, that regulates the distribution of the mass of producers among the specific branches of production, bringing about a constant efflux from, or influx into, particular spheres of production—the so-called law of supply and demand, which on the one hand determines prices, and on the other hand is determined by them. Even without going into this point more closely, one's eye is immediately struck by the difference between this anarchic distribution of labour within society and the regulated, fixed distribution within the workshop itself.

*Secondly.* There are different branches of business within society which themselves merely represent the different phases of production a product must pass through in order to attain its ultimate, its final form, the form in which its use value is a finished product, as for example flax cultivation, the spinning of flax, and weaving of linen cloth. These different branches are brought into contact with each other through the circulation of commodities, so

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that they ultimately cooperate in the manufacture of a product. The flax confronts the spinner [V-184] as a commodity, the yarn confronts the weaver as a commodity. Here the purchase and sale of commodities mediate the connection which exists internally—as an inner necessity—between these branches of production which operate independently of each other. In contrast to this, the division of labour within manufacture presupposes a direct combination of the various operations which provide a particular product. This product first becomes a commodity as a result of these combined operations. But the portion of the product created by each of these partial operations is not converted into a commodity. Here cooperation is not mediated through the product of one process entering into the other process as a commodity and thus causing the divided labours to supplement each other. Instead, the direct combination of labours is the prerequisite here for the entry of their joint product into the market as a commodity.

_Thirdly:_

// After relative surplus value, absolute and relative surplus value are to be considered in combination. Then their proportional rise and fall. After this, or rather before it, the alteration the mode of production itself undergoes in becoming capitalist. No longer a merely formal subsumption of the labour process under capital. The different means whereby capital creates relative surplus value, raises the productive forces, and increases the mass of products, are all social forms of labour; but they appear, even within production, rather as social forms of capital—modes of capital's existence. So that one not only sees how capital produces, but how capital is itself produced—its own genesis. It then also emerges that this particular form of the social relation of production, the form through which past labour becomes capital, corresponds to a particular stage of development of the material production process, to particular material conditions of production, which are themselves first created historically, conditions of production whose point of departure naturally belongs to a pre-capitalist stage of social production; their formation and development coincides with the genesis of capital itself, until the movement of production starts to take place on the capitalist basis now obtained, from which point there occurs simply an expansion and reproduction of those conditions of production. Moreover, this genesis of capital appears at the same time as a process of divestiture of labour, of alienation, whereby its own social forms are presented as alien powers. Also, in view of the mass of people
required by capitalist production, capital appears as a social form, not as a form of the labour of the independent individual. After this we need to show how far capital is productive, which leads on to questions about productive and unproductive labour. Then wages and surplus value as revenue, in general the form of revenue, which we need for the transition to the accumulation of capital.

Within the workshop, the different operations are separated out systematically, according to a plan, and different workers are assigned to them according to a rule which they are faced with as a compelling and alien law imposed on them from outside. The interconnection of the combined labours, their unity, similarly confronts the individual worker as the will, personal unity, command and overall supervision of the capitalist; just as their own cooperation itself appears to them not as their deed, their own social existence, but as the presence of the capital that keeps them together, as a form of existence of capital in the direct production process, the labour process. Within society, in contrast, the division of labour appears free, i.e. in this case accidental, admittedly bound together by an inner connection, which however presents itself as just as much the product of circumstances as of the arbitrary actions of the mutually independent individual commodity producers. Although the division of labour as a specifically capitalist mode of production, the division of labour within the workshop, is essentially different from the division of labour in the whole of society, they condition each other. This means in fact only that large-scale industry and free competition are mutually conditioning forms, creations of capitalist production. Nevertheless, we need to avoid any introduction of competition here, for this is the impact of capitals upon each other, hence already presupposes the development of capital as such.

The commodity, as the most elementary form of wealth, was our point of departure. Commodity and money are both elementary modes of the presence, of the existence, of capital, but they first develop into capital under specific conditions. The formation of capital can only take place on the basis of the production and circulation of commodities, hence at a stage of commerce which is already given, and has already grown to a certain volume, whereas the production and circulation of commodities (which includes the circulation of money) on the contrary by no means require capitalist production for their existence, appearing rather as the necessary, given, historical prerequisite of capitalist production.
On the other hand, it is only on the basis of capitalist production that the commodity first becomes the general form of the product, that every product has to assume the form of a commodity, that sale and purchase seize hold of not only surplus production but also subsistence itself, and that the different conditions of production themselves enter extensively into the production process itself as commodities, mediated through sale and purchase. If, therefore, on the one hand the commodity appears as the prerequisite for the formation of capital, on the other hand the commodity, as the general form of the product, appears just as much as essentially the product and result of capital. Production assumes in part the form of the commodity under other modes of production. Capital, in contrast, necessarily produces commodities, produces its product as commodity, or it produces nothing. Therefore the general laws formulated in respect of the commodity, e.g. that the value of the commodity is determined by the socially necessary labour time contained in it, first come to be realised with the development of capitalist production, i.e. of capital. This demonstrates how even categories belonging to earlier epochs of production receive a specifically distinct character—an historical character—on the basis of a different mode of production.

The conversion of money—which is itself only a converted form of the commodity—into capital only takes place once labour capacity (not the worker) has been converted into a commodity, hence the category of the commodity has already from the outset taken possession of a whole sphere which was otherwise excluded from it. Only when the working mass of the population have ceased to enter the market as commodity producers, and begun to sell, instead of the product of labour, labour itself, or rather their labour capacity, does production in its entire extent, in its entire breadth and depth become the production of commodities, with all products being converted into commodities, and the objective conditions of every individual sphere of production entering into it as themselves commodities. Only on the basis of capital, of capitalist production, does the commodity in fact become the general elementary form of wealth. But this already implies that the development of the division of labour in society, where it appears in an accidental form, and the capitalist division of labour within the workshop, condition and produce each other. For the producer to produce commodities alone, i.e. for the use value of the product to exist for him exclusively as a means of exchange, it is necessary that his production should be based
entirely on the social division of labour, that he therefore should satisfy only an entirely one-sided need through his production. On the other hand, however, this general production of products as commodities only takes place on the basis of capitalist production and in the measure of its spread. If, for example, capital has not yet taken control of agriculture, a great part of the product will still be produced directly as means of subsistence, not as commodity; a great part of the working population will not yet have been turned into wage labourers, and a great part of the conditions of labour will not yet have been converted into capital.

Capitalist production, hence the division of labour within the workshop according to certain rules, directly increases the free division of labour within society (quite apart from the extension of the sphere of exchange, the world market, conditioned by mass production), by making the labour of a particular number of workers more effective, therefore by constantly setting free a part of the labour force for new kinds of employment and thereby simultaneously developing needs which were so far latent or not present at all, and modes of labour to satisfy those needs. This process is also promoted by the increase of the population, by the cheapening of the means of subsistence required for the reproduction and multiplication of labour capacities; also by the fact that the surplus value, which becomes a part of revenue, now seeks to realise itself in the most diverse use values.

Where the commodity appears as the dominant form of the product, and the individuals, in order to produce anything at all, must produce not merely products, use values, means of subsistence, where the use value of a commodity is for them, rather, simply a material repository of exchange value, a means of exchange, money potentiia, where they therefore have to produce commodities, their relation to each other—in so far as the material interchange between their activities, their relation within production generally, comes into consideration—is that of owners of commodities. But just as the commodity first develops in the exchange of commodities—i.e. the circulation of commodities—so also does the owner of commodities develop in the characters of seller and buyer. Sale and purchase, first the representation of the product as commodity, then the representation of the commodity as money and the metamorphosis of the commodity, in which it presents itself in successive stages as commodity, money, and commodity once again, these are the movements through which the production of the mutually independent individuals is socially mediated. The social form of their product and their production,
i.e. the social relation into which the commodity producers as such enter, is constituted precisely by the representation of their product as commodity and money, and the acts of sale and purchase, the movements in which their product alternately assumes these different functions.

Therefore, whatever the necessary inner connection arising out of the nature of their needs and the manner of the activities themselves that produce them, which binds together the different use values, hence also the different modes of labour producing them, contained within them, so as to form a whole, a totality, a system of activities and riches—in whatever relation the use value of one commodity as a means of consumption or a means of production is a use value for the other owners of commodities—the social relation into which the owners of commodities enter is the representation of their product as commodity and money, and the movement in which they confront each other as vehicles for the metamorphosis [V-187] of the commodities. So that if the existence of the products for each other as commodities and therefore the existence of the individuals as owners of commodities, further developed as sellers and buyers, in and for itself presupposes the social division of labour—for without this the individuals would not produce commodities but rather directly use values, means of subsistence for themselves—this presupposes further a particular division of social labour, namely a division which is formally absolutely accidental, and is left to the free will and dealings of the commodity producers.

Where this freedom is restricted, the restriction does not come about through the influence of the state or any other external factor, but through the conditions of existence, the characteristics, that make a commodity a commodity. It must possess a use value for society, i.e. the buyers, hence it must satisfy certain real or imagined needs. Here is a basis on which the individual producer of commodities builds, but it is his affair whether he satisfies existing needs or calls forth new ones with his use value, or whether he has miscalculated and produced something useless. His task is to discover a buyer for whom his commodity has a use value. The second condition he has to fulfil is not to utilise more labour in making his commodity than the labour time socially necessary for its production, and this means that he does not need more labour time to produce it than the average producer who is producing the same commodity. The production of the product as a commodity—if the commodity is the necessary form of the product, the general form of production, and hence the satisfac-
tion of the requirements of life is mediated through sale and purchase—therefore necessitates a social division of labour which admittedly rests on a basis of needs, an interconnection of activities, etc., in its content, but in formal terms this interconnection is only mediated through the representation of the product as commodity, the confrontation of the producers with each other as owners of commodities, as sellers and buyers. It therefore appears as on the one hand equally the product of a concealed natural necessity, which appears in the individuals only as a need, a requirement, a capacity, etc., and on the other hand the result of their independent wills, conditioned only by the essence of the product—namely that it must be both use value and exchange value.

On the other hand: the product only assumes the form of the commodity generally—the relation of the producers to each other as sellers and buyers only becomes the social connection that rules over them—where labour capacity has itself become a commodity for its owner, where the worker has therefore become a wage labourer and money has become capital. The social connection between the owner of money and the worker is also only a connection between owners of commodities. The relation is modified, brings forth new social relations, through the specific nature of the commodity the worker has to sell and the peculiar manner in which the buyer consumes it, and equally the special purpose for which he buys it. Capitalist production brings with it, among other things, the division of labour within the workshop, and it is this, like the other means of production employed by capital, which further develops mass production, hence the irrelevance of the use value of the product for the producer, production merely for sale, production of the product merely as a commodity.

This explains, therefore, how the free, apparently accidental, uncontrolled division of labour within society, which is left to the commodity producers to deal with at their discretion, corresponds with the systematic, planned, and regulated division of labour within the workshop, which proceeds under the command of capital, and how both develop in step with each other, and produce each other through mutual interaction.

In contrast to this, in forms of society where social division itself appears as a fixed law, an external norm, and is subject to rules, the division of labour, as forming the basis of manufacture, does not take place, or exists only sporadically and in its initial stages.

For example, the guild regulations establish a very low
maximum for the number of journeymen a master can set on. This is precisely what prevents him from becoming a capitalist. The division of labour is thereby of itself excluded from the workshop. (This must be dealt with somewhat more extensively.)

Plato's main argument for the division of labour, that if one person does several different kinds of work, i.e. if he does one or the other of them as a subsidiary occupation, the product must wait until an occasion offers itself to the worker for dealing with it, whereas the work ought to be determined in the opposite way, by the requirements of the product, has recently been put forward by the bleachers and dyers against their inclusion in the Factory Acts //the Bleaching and Dyeing Works Act came into operation on 1st August 1861//. For according to the Factory Act, whose provisions in this connection are reproduced for bleaching, etc.,

*“during any meal time which shall form any part of the hour and a half allowed for meals no child, young person, or female shall be employed or allowed to remain in any room in which any manufacturing process is then carried on; and all the young persons and females shall have the time for meals at the same period of the day”* (Factory Report for the half year ending 31st Oct. 1861).

*“The bleachers complain of the required uniformity of meal times for them, on the plea that whilst machinery in factories may be stopped without detriment at any moment, and if stopped the production is all that is lost, yet in the various operations of singeing, washing, bleaching, mangling, calendering and dyeing, none of them can be stopped at a given moment without risk of damage ... to enforce the same dinner hour for all the workpeople might occasionally subject valuable goods to the risk of danger from incomplete operations”* (l.c., pp. 21, 22).

(The same dinner hour was fixed because otherwise it would have been impossible to check whether the workers had received their mealtimes at all.)

Different Kinds of Division of Labour

"Among peoples which have reached a certain level of civilisation, we meet with three kinds of division of labour: the first, which we shall call general, brings about the division of the producers into agriculturalists, manufacturer, and traders, it corresponds to the three main branches of the nation's labour; the second, which one [V-189] could call particular, is the division of each branch of labour into species. It is thus, for example, that in primitive industry one needs to distinguish the trade of the ploughman from that of the mineworker, etc. The third division of labour, which one should designate as a division of tasks, or of labour properly so called, is that which grows up in the individual crafts and trades, and which consists in the division made by numerous workers between themselves of the tasks which need to be performed to manufacture a single object of use and commerce, each of

a See this volume, p. 283.—Ed.
them having only one kind of work to perform, not resulting in itself in the production of the whole of the manufactured object; the latter result only occurs thanks to the combination of the labour of all the workers who are occupied in the manufacture of the product. Such is the division of labour which is established in the majority of the manufactories and workshops, where one sees a greater or lesser number of workers engaged in producing a single kind of commodity, all of them carrying out different tasks” (F. Skarbek, Théorie des richesses sociales, 2nd ed., Vol. I, Paris, 1839, pp. 84-86).a

“The third kind of division of labour is that which occurs within the workshop itself.... It arises from the moment when there emerge capitals destined to establish manufactures and heads of workshops who make all the advances necessary to put the workers to work, and who are able, thanks to their reserves, to wait for the return of the outgoings utilised in the manufacture of the products they provide for exchange” (l.c., pp. [94-]95).

Simple Cooperation

“It should be noted further that this partial division of labour can occur even when the workers are engaged in the same task. Masons, for example, engaged in passing bricks from hand to hand to a higher stage of the building, are all performing the same task, and yet there does exist amongst them a sort of division of labour. This consists in the fact that each of them passes the brick through a given space, and, taken together, they make it arrive much more quickly at the required spot than they would do if each of them carried his brick separately to the upper storey” (Skarbek, l.c., pp. 97-98).

[V-190] γ) MACHINERY.

UTILISATION OF THE FORCES OF NATURE AND OF SCIENCE
(Steam, Electricity, Mechanical and Chemical Agencies)

John Stuart Mill remarks:

*“It is questionable, if all the mechanical inventions yet made have lightened the day’s toil of any human being.”*b

He should have said, of any toiling human being. But on the basis of capitalist production the purpose of machinery is by no means to lighten or shorten the day’s toil of the worker.

*“Articles are cheap, but they are made of human flesh”* (J. B. Byles, Sophisms of Free-Trade, 7th edit., London, 1850, p. 202).

The purpose of machinery, speaking quite generally, is to lessen the value, therefore the price, of the commodity, to cheapen it, i.e. to shorten the labour time necessary for the production of a commodity, but by no means to shorten the labour time during which the worker is employed in producing this cheaper

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a Here and below Marx quotes Skarbek in French.—Ed.
commodity. In fact it is not a matter of shortening the working day but rather, as in any development of productive power on a capitalist basis, of reducing the labour time the worker needs for the reproduction of his labour capacity, in other words for the production of his wages; it is therefore a matter of shortening the part of the working day during which he works for himself, the paid part of his labour time, and thereby lengthening the other part of the day, during which he works for capital for no return, the unpaid part of the working day, his surplus labour time. Why the mania for devouring alien labour time grows everywhere with the introduction of machinery, and why the working day, instead of being shortened is rather extended beyond its natural limits—until legislation is obliged to take a hand—why therefore not only relative surplus labour time but also total labour time increases, is a phenomenon we shall examine in Chapter 3.212

[V-190]

[V-196]215 *“Simultaneously, however, with the increase of numbers has been the increase of toil. The labour performed by those engaged in the processes of manufacture, is three times as great as in the beginning of such operations. Machinery has executed, no doubt, the work that would demand the sinews of millions of men; but it has also prodigiously multiplied the labour of those who are governed by its fearful movements”* (Ten Hours' Factory Bill. Lord Ashley's Speech, London, 1844, p. 6).

[V-190] Only in isolated cases does the capitalist intend to secure a direct reduction of wages by introducing machinery, although this is always the case when he replaces skilled labour with simple labour, and the labour of grown men with that of women and children. The value of the commodity is determined by the socially necessary labour time contained in it. With the introduction of new machinery, and as long as the major part of production continues to be based on the old means of production, the capitalist can sell his commodity at less than its social value, even though he sells it at more than its individual value, i.e. for more labour time than he requires to manufacture it under the new production process. Here, therefore, the surplus value appears to originate for him from selling—from his taking advantage of the other owners of commodities, from the fact that the commodity's price has risen above its value; not from the reduction in necessary labour time and the lengthening of surplus labour time. Yet, this too is merely the way things appear. Through the exceptional productive power attained here by labour in contrast to average labour in the same branch of industry, it becomes higher labour in relation to the average, so that e.g. an hour of this higher labour would be equal
The production process of capital to \(\frac{5}{4}\) hours of average labour; simple labour raised to a higher power. But the capitalist pays it as average labour. Thus a smaller number of hours of labour becomes equal to a greater number of hours of average labour. He pays for this labour as average labour and sells it as what it is, higher labour, a given quantity of which = a greater quantity of average labour. Here, therefore, the worker needs to work, on our assumption, for a shorter time than the average worker in order to produce [V-191] the same value. He therefore in fact works less labour time—than the average worker—in order to produce an equivalent for his wages, or in other words to produce the means of subsistence necessary for the reproduction of his labour capacity. He therefore gives the capitalist a greater number of hours of labour as surplus labour, and it is only this relative surplus labour which provides the latter, when selling the commodity, with the excess of its price over its value. The capitalist only realises this surplus labour time, or this surplus value, which is the same thing, by selling the commodity; the surplus value therefore originates not in the sale but in the reduction of necessary labour time and the concomitant relative increase of surplus labour time. Even if the capitalist who introduces the new machinery were to pay a higher than average wage, the surplus realised by him over and above the normal surplus value, the surplus value realised by the other capitalists in the same branch of industry, would originate solely from the fact that the wage was not increased \(\text{in the same proportion}\) as this labour rose above the level of average labour, that a relative increase in surplus labour time continued to occur. Therefore this case can also be subsumed under the general law that surplus value = surplus labour.

In its early stages machinery is mostly nothing but a more powerful craftsman's tool; but as soon as it is applied in the capitalist fashion, it presupposes simple cooperation, and indeed, as we shall see later,\(^{214}\) simple cooperation appears as a much more important element in the application of machinery than in the system of manufacture resting on the division of labour, where it only asserts itself in the principle of \textit{multiples}, i.e. the principle that the different operations are not only distributed between different workers but according to certain numerical proportions, in which a definite number of workers, organised in groups, is assigned to, subsumed under, each individual operation. In the \textit{mechanical workshop}, the most developed form of the capitalist application of machinery, it is essential that many should do \textit{the same thing.} Indeed, this is its main principle. The application of machinery
further presupposes as the original condition of its existence the system of manufacture based on the division of labour, since the construction of machines—hence the existence of the machine—is itself based on a workshop in which the principle of the division of labour has been completely implemented. Only at a further stage of development does the construction of machines itself take place on the basis of machinery, by means of the mechanical workshop.

"In the infancy of mechanical engineering, a machine-factory displayed the division of labour in manifold gradations—the file, the drill, the lathe, having each its different workmen in the order of skill; but the dexterous hands of the file and driller are now superseded by the planing, the key-groove cutting, and the drilling machines; and those of the iron and brass turners, by the self-acting slide-lathe" (Ure, I.e., Vol. I, pp. 30-31).

On the one hand, the division of labour developed under the system of manufacture is repeated within the mechanical workshop, although on a greatly reduced scale; on the other hand, as we shall see later on, the mechanical workshop overturns the most essential principles of the system of manufacture based on the division of labour. And finally, the application of machinery increases the division of labour within society, that is to say it multiplies the number of specialised branches of industry and independent spheres of production.

Its fundamental principle is the replacement of skilled labour by simple labour; hence also the reduction of the amount of wages to the average wage, or the reduction of the worker’s necessary labour to the average minimum and the reduction of the production cost of labour capacity to the production cost of simple labour capacity.

[V-192] The increase in productive power achieved through simple cooperation and the division of labour costs the capitalist nothing. They are natural forces provided free of charge by social labour in the particular forms it takes on under the rule of capital. The application of machinery does not just bring the productive forces of social labour into play, as opposed to the labour of the isolated individual. It transforms simple natural forces, such as water, wind, steam, electricity, etc., into powers of social labour. This apart from the exploitation of the mechanical laws which operate in the actual working part of the machinery (i.e. the part which directly transforms the raw material, mechanically or chemically). However, this form of increasing the productive forces, hence [of reducing] necessary labour time, is distinguished

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\[a\] Hence.— Ed.
as follows: A part of the pure force of nature which is applied is, in this, its applicable form, a product of labour, as for example the conversion of water into steam. Where the motive power is naturally available, e.g. when water is available as a waterfall and the like //it is highly characteristic, by the way, that in the course of the 18th century the French let their water work horizontally, whereas the Germans always made artificial earthworks for it 216//, the medium through which its motion is transferred to the actual machinery, e.g. the water-wheel, is the product of labour. But this point is even truer for the machinery itself which directly recasts the raw material. Therefore machinery, unlike simple cooperation or the division of labour in manufacture, is a productive force which has been produced; it costs money; when it enters into the sphere of production in which it functions as machinery, functions as a part of the constant capital, it does so as a commodity (directly as machinery, or indirectly as a commodity which must be consumed in order to give the motive power the required form). Like any portion of constant capital, the machinery adds to the product the value contained in it, i.e. it makes it dearer to the extent of the labour time required for its own production. In this chapter we are exclusively examining the ratio of variable capital to the magnitude of the value in which it is reproduced, in other words the ratio of the necessary labour employed in a sphere of production to the surplus labour; we therefore deliberately refrain from investigating the ratio of surplus value to constant capital, and to the total amount of capital advanced. Nevertheless, the analysis of the application of machinery demands that we also investigate the other parts of capital, besides that laid out in wages. For the principle that the employment of means whereby productive power is increased increases relative surplus time and therewith relative surplus value, rests upon the cheapening of the commodities, hence the curtailment of the labour time necessary for the reproduction of labour capacity, in consequence of these contrivances through which productive power is increased, i.e. more use values are produced by the same number of workers in the same period of time. In the case of the employment of machinery, however, this result is only attained by an increase in the outlay of capital, by the consumption of already existing values, therefore by the introduction of an element which increases the magnitude of the product's, the commodity's, value to the amount of its own value.

To begin with, as far as the raw material is concerned, its value naturally remains the same, in whatever manner it is treated—it
is, to be precise, the value it has when it enters the process of production. [V-193] Furthermore, the employment of machinery reduces the amount of labour absorbed by a given amount of raw material, or, in other words, increases the amount of raw material transformed into product over a given labour time. Considering both these elements, the commodity produced with the assistance of machinery contains less labour time than the one produced without machinery, it represents a smaller magnitude of value, it is cheaper. But this result is only attained by the industrial consumption of commodities—commodities existing in the machinery—whose value enters into the product.

Therefore, since the value of the raw material remains the same whether machinery is employed or not, and since the amount of labour time which converts a given amount of raw material into product and hence into commodity is reduced by the employment of machinery, it follows that the cheapening of the commodities produced by machines depends on one circumstance alone: the labour time contained in the machinery itself is less than the labour time contained in the labour capacity replaced by it; the value of machinery which enters into the commodity is less than—i.e. less labour time than—the value of the labour replaced by it. And this value = the value of the number of labour capacities whose employment is made unnecessary by machinery.

As machinery emerges from the stage of infancy, as it diverges in dimensions and character from the craft tool it originally replaced, it becomes more massive and expensive; more labour time is required to produce it, and its absolute value rises, although it becomes cheaper relatively, i.e. although more efficient machinery costs less in proportion to its efficiency than less efficient machinery, i.e. the amount of labour time it costs to produce it grows in a much smaller proportion than the amount of labour time it replaces. But in any case its absolute dearness rises progressively, it therefore adds to the commodity produced by it a value which is greater absolutely, particularly in comparison with the craft tool or even the simple instruments of labour or those based on the division of labour which it replaces in the production process. Why then is the commodity produced by this more expensive instrument of production cheaper than the commodity produced without it? Why is the labour time contained in the machinery itself less than the labour time replaced by it? This is due to the two following circumstances:

1) As the efficiency of the machinery grows, as the productive power of labour is thus raised, the quantity of use values and
therefore of commodities which are produced in the same labour
time with the help of machinery grows, in the proportion to which
the machinery enables one worker to do the work of many
workers. This means an increase in the number of commodities in
which the value of the machinery re-appears. The total value of the
machinery only re-appears in the totality of the commodities in
whose production it has assisted as a means of labour; this total
value is distributed in aliquot parts among the individual
commodities which when added together make up the total
amount of the commodities. Therefore, the greater this total
amount the smaller the portion of the machinery's value that
re-appears in the individual commodity. In spite of the difference in
value between the machinery and the tool or simple instrument of
labour, a smaller portion of value will enter the commodity from
the machinery than from the instrument of labour and from the
labour capacity replaced by the machine, in proportion as the
value of the machine is spread over a greater total amount of
products, of commodities. A spinning machine which absorbs a
given labour time in 1,000 pounds of cotton re-appears in the
individual pound of yarn as a fraction of value of only \(\frac{1}{1000}\),
whereas if it only helped to spin 100 pounds in the same time, \(\frac{1}{100}\)
of its value would re-appear in the single pound of yarn, it would
therefore contain in this case ten times more labour time, ten
times more value, be 10 times dearer, than in the first case.

[V-194] Machinery can therefore only be employed (on a capital-
ist basis) under circumstances in which mass production, pro-
duction on a large scale, is possible (see p. 201, quotation from
Rossi).

[V-201]217 "The division of labour and the use of powerful machines are only
possible in establishments which offer enough labour to all classes of worker and
provide results on a large scale. The more considerable the product the smaller the
proportional expenditure on tools and machines. If two equally powerful machines
produce respectively 100,000 metres and 200,000 metres of the same cloth in the same
space of time, you may say that the first machine costs twice as much as the second,
that one of these enterprises has employed a capital double that employed in the
other" (Rossi, Cours d'économie politique, p. 334).\(^a\) [V-201]

[V-194] 2) It is already the case in manufacture resting on the
division of labour as in industry on the craft basis, etc., that the
instruments of labour (in the same way as other parts of the
conditions of labour, like factory buildings) enter into the labour
process to their whole extent, either directly as means of labour or
indirectly as conditions (such as buildings) which are necessary for

\(^a\) Marx quotes in French.—Ed.
the labour process to take place. But they only enter into the *valorisation process* piece by piece, *partially*—i.e. they enter to the extent to which they are used up in the labour process, to the extent to which their exchange value is consumed in the labour process simultaneously with their use value. Their use value as means of labour enters into the labour process wholly, but it is preserved over a period which comprises a number of labour processes, during which these means of labour serve repeatedly for the production of the same kind of commodity, i.e. serve over and over again as means of labour used by new labour for working up new material. Their use value as means of labour of this kind is only used up at the end of a period, which may be shorter or longer, during which the same labour process has been constantly repeated. Their exchange value therefore only re-appears completely in the total amount of commodities they have helped to produce during such a period—the whole period, from their entry into the labour process to their removal from it. Only a certain aliquot part of the value of the instrument of labour therefore enters into each individual commodity. If the instrument served for 90 days, \(\frac{1}{90}\) of its value would re-appear in the commodities produced on each day. A notional average calculation necessarily enters the picture here, for the value of the instrument only re-appears as a whole in the whole period of labour processes during which it has been completely used up—therefore in the sum total of the commodities it has helped to produce during this period. The calculation is therefore made in this way: on each day on the average an equal aliquot part of the instrument's use value is used up (this is the fiction), and therefore an equal aliquot part of the value of the instrument re-appears in the product of this one day.

With the introduction of machinery, as a result of which the means of labour assumes a very extensive value and is represented in a massive quantity of use values, there is an increase in this difference between the labour process and the valorisation process, which becomes a significant element in the development of productive power and in the character of production. If a workshop is equipped with mechanical looms, and they perform their function, e.g., over 12 years, the wear and tear of the machinery, etc., during the labour process in the course of one day is insignificant, and therefore the portion of the value of the machinery which re-appears in the individual commodity or even in the product of a whole year is relatively insignificant. Past, objectified labour here enters massively into the labour process,
whereas only a relatively insignificant portion of this part of capital, the portion used up in the same labour process, enters into the valorisation process and therefore re-appears in the product as part of the value. Therefore, however considerable the magnitude of the value that is represented by the machinery that enters into the labour process, and the factory buildings, etc., associated with it, the part of this overall value that enters into the daily valorisation [V-195] process, hence into the value of the commodity, is always relatively small; it makes the commodity relatively more expensive, but only insignificantly, to a much smaller extent than the manual labour replaced by the machinery would have done. Therefore, however large the part of the capital laid out in machinery may appear to be in comparison with the part laid out for the living labour which this machinery serves as means of production, this proportion appears to be very small if the part of the value of the machinery which re-appears in the individual commodity is compared with the living labour absorbed in the same commodity, and the part of the value added to the individual product by both of them—machinery and labour—appears to be small in proportion to the value of the raw material itself.

It is with the coming of machinery that social production on a large scale first obtains the power of introducing into the labour process in their entirety, wholly as means of production, products which represent a large amount of past labour, hence large masses of value, whereas only a relatively small aliquot part of those products enters into the valorisation process taking place during the individual labour process. The capital which enters in this form into every individual labour process is large, but the proportion in which its use value is used up, consumed, during this labour process, making necessary the replacement of its value, is relatively small. The machinery functions in its entirety as means of labour, but it only adds value to the product in the proportion to which the labour process diminishes its value, a devaluation which is conditioned by the degree of the reduction of its use value through wear and tear during the labour process.

The conditions enumerated under 1) and 2), on which it depends whether the commodity produced by the dearer instrument is cheaper than the commodity produced by the cheaper one, or whether the value contained in the machinery itself is smaller than the value of the labour capacities it replaces, therefore amount to the following: The first condition is mass production; this depends on the degree to which the amount of
commodities 1 worker can produce in the same labour time is large in comparison with the amount he would produce without machinery. In other words, it depends on the degree to which labour is replaced by machinery; hence the number of labour capacities which is used in regard to the amount of the product is reduced as far as possible, as many labour capacities as possible are replaced by the machinery, and the part of the capital which is laid out in labour appears relatively small in comparison with the part of the capital which is laid out in machinery. And secondly: however large the part of the capital which consists in machinery, the part of the value of the machine which re-appears in the individual commodity, the part of the value, therefore, which is added by the machinery to the individual commodity, is small in comparison with the parts of the value of labour and raw material contained in the same commodity, and indeed small because during a given labour time the machinery enters in its entirety into the labour process but only a relatively insignificant portion of it enters into the valorisation process; the whole of the machinery enters into the labour process, but there always enters merely an aliquot part of the total magnitude of the machinery's value [into the valorisation process].

Accordingly, the following criticism of Ricardo needs itself to be corrected:

“Ricardo speaks of *‘a portion of the labour of the engineer in making machines’"* as contained, e.g., in a pair of stockings. *"Yet the total labour that produced each single pair of stockings, if it is of a single pair we are speaking, includes the whole labour of the engineer, not a portion; for one machine makes many pairs, and none of those pairs could have been done without any part of the machine"* (Observations on Certain Verbal Disputes in Political Economy, London, 1821, [p.] 54).

[V-196] The part of the capital laid out in raw material grows disproportionately more rapidly in comparison with the part laid out in wages than where there is a mere division of labour. The new and relatively large amount of capital laid out in means of labour, machinery, etc., comes additionally into consideration. The progress of industry is therefore accompanied by a growth in the auxiliary part of capital218 as against the part laid out in living labour.

[V-197] One of the first effects of the introduction of new machinery, before it has become dominant in its branch of production, is to prolong the labour time of those workers who
continue to work with the old, imperfect means of production. Although the commodity produced with the machinery is sold at *more than* its individual value, i.e. at more than the quantity of labour time contained in it, it is sold *at less than* the previous social, general value of the same species of product. The labour time socially necessary for the production of this particular commodity has therefore *fallen*, but not the labour time necessary for the worker using the old instruments of production. If, therefore, 10 hours of labour time suffice for the reproduction of his labour capacity, the product of his 10 hours is no longer *10 hours of necessary labour time*, that is to say labour time necessary under the new social conditions of production for the manufacture of this product; it is instead perhaps only 6 hours. Therefore, if he works for 14 hours, those 14 hours of his represent only *10 hours of necessary labour time* and only 10 hours of necessary labour time have been realised in them. Hence the value of the product also does not exceed the value of the product of 10 hours of general, necessary, social labour. If he works independently, he will have to prolong his labour time. If he works as a wage labourer, hence necessarily also works surplus time, then however much the absolute labour time is prolonged, average surplus labour for the capitalist will only emerge through a reduction of his wage below the previous *average*, i.e. he works more hours but less of them are appropriated by him personally, not because his labour has become more productive but because it has become less productive, not because he creates the same quantity of product in less labour time but because the quantity falling to his share is reduced.

The surplus value (= surplus labour, absolute as well as relative) which capital brings into existence through the employment of machinery does not arise from the *labour capacities replaced* by the machinery but from the labour capacities employed by it.

"According to Baines *a first rate cotton-spinning factory cannot be built, filled with machinery, and fitted with the steam engines and gasworks, under £100,000. A steam-engine of 100 horse power will turn 50,000 spindles, which will produce 62,500 miles of fine cotton thread per day. In such a factory 1,000 persons will spin as much thread as 250,000 persons could without machinery"* (S. Laing, *The National Distress*, London, 1844, p. 75).

In this case the surplus value of the capital comes not from the saving made on the labour of 250 persons, but from the 1 person
who replaces them; not from the 250,000 persons replaced, but from the 1,000 employed. It is their surplus labour which is realised in the surplus value. The use value of the machine, and its replacement of human labour is its use value, does not determine its value; this is determined by the labour required to produce the machine itself. And this value, which it possesses before being employed, before entering into the production process, is the sole value it adds to the product \textit{qua} machinery. The capitalist paid for this value when he bought the machine.

On the presupposition that the commodities are sold at their value, the \textit{relative surplus value} created by capital by means of the machinery, as in applying all other \textit{arrangements} which increase the productive power of labour and thereby reduce the price of the individual product, consists simply in this, that the commodities necessary for the reproduction of labour capacity are cheapened, hence that there is a reduction of the labour time necessary for the reproduction of labour capacity, which is only an equivalent of the labour time contained in wages; and therefore that the surplus labour time is prolonged, with the [V-198] overall length of the working day remaining the same. (There are a number of circumstances modifying this, which will be dealt with later.) This curtailment of necessary labour time is a result which redounds to the benefit of capitalist production as a whole and reduces the production costs of labour capacity altogether, because on our assumption the commodity produced by the machinery in fact contributes to the reproduction of labour capacity. However, this is not a motive for the individual capitalist to introduce machinery—it is a general result which is not particularly advantageous to him.

\textbf{Firstly:} Machinery may be introduced, either in replacement of a craft-based industry (as e.g. in the case of spinning), hence in subjecting a branch of industry for the first time to the capitalist mode of production; or in revolutionising a form of manufacture which previously rested merely on the division of labour (as in a factory for making machines); or, lastly, in driving out older by more efficient machinery or in extending the field of application of machinery in a workshop to parts of the operation it had not as yet previously seized hold of. In all these cases, as remarked above, it prolongs \textit{necessary labour time} for the workers still subsumed under the old mode of production, and also prolongs their overall working day. On the other hand, in workshops where it is newly introduced it \textit{curtails} necessary labour time, relatively speaking. If 2 hours of labour by a hand loom weaver are only
equivalent to 1 socially necessary hour of labour after the introduction of the power loom, 1 hour of labour by the power loom weaver is now, before the power loom has been introduced generally into this form of weaving, of greater magnitude than one hour of necessary labour. Its product has a higher value than the product of one hour of labour. It is the same as if simple labour were realised in it at a higher power, or a higher sort of weaving labour were realised in it. This concerning the extent to which the capitalist who employs the power loom, while admittedly selling the product of 1 hour below the level of the old hour of labour, below its previous socially necessary value, even so sells it at more than its individual value, i.e. at more than the labour time he himself has to employ to produce it with the help of the power loom. The worker therefore needs to work fewer hours for the reproduction of his wage, his necessary labour time is curtailed in the same measure as his labour has become higher labour in the same branch, that is to say the product of an hour of his labour is sold at perhaps more than the product of two hours of labour in the workshops where the old mode of production still prevails. If, therefore, the normal day remains the same—equally long—surplus labour time increases here because necessary labour time has been curtailed. This would occur even in the case of an increase in wages, always on the assumption that in the new circumstances the worker does not employ as large an aliquot part of the day as previously in replacing his wage or reproducing his labour capacity. This curtailment of necessary labour time is of course temporary, and it disappears once the general introduction of machinery into this branch has reduced the value of the commodity again to the labour time contained in it. Nevertheless, this is at the same time an incentive to the capitalist to raise the labour time he employs above the general level of the necessary labour time in the same sphere of production, by introducing ever new, small improvements. This is true whatever branch of production the machinery is employed in, and it is independent of whether the commodities produced by the machinery enter into the consumption of the worker himself.

Secondly. It is a general experience that as soon as machinery is employed in the capitalist way—i.e. emerges from the infant stage in which it originally appears in many branches, namely as merely a more productive form of the old handicraft tool, which is, however, still employed in the old industrial mode [V-199] by independent workers and their families—once it takes on an independent existence as a form of capital vis-à-vis the worker, the
Relative Surplus Value

absolute labour time, the overall working day, is not curtailed but prolonged. The investigation of this case belongs to Chapter III.212 But the main points should be presented here. In this context we must distinguish between two things. Firstly the new conditions in which the worker finds himself and which enable the capitalist forcibly to prolong labour time. Secondly the motives which impel capital to undertake this operation.

In looking at 1) we have firstly to consider the converted form of labour, its apparent ease, which transfers all muscular exertion to the machinery, and similarly all skill. For the first reason, prolongation does not initially come up against physical impracticability; the second change breaks the resistance of the worker, who can no longer dig his heels in because his dexterity, still predominant under the system of manufacture, has now been broken; instead of this capital is able to replace skilled workers by unskilled ones, who therefore are more under its control. Then the new class of workers, who enter the situation as a determining element, alter the character of the whole workshop, and by their nature are more obedient to the despotism of capital. The element, namely, of female and child labour. Once the working day has been prolonged forcibly by tradition, generations are required, as in England, before the workers are capable of bringing it back to its normal limits. Thus the prolongation of the day beyond its natural limits, nightwork, is an offshoot of the factory system.

*"It is evident that the long hours of work were brought about by the circumstance of so great a number of destitute children being supplied from the different parts of the country"* (from the workhouses) *"that the masters were independent of the hands, and that, having once established the custom by means of the miserable materials which they procured in this way, they could impose it upon their neighbours with the greater facility"* (J. Fielden, The Curse of the Factory System, London, 1836, [p. 11]).

*"'Mr. E., a manufacturer, informed me that he employs females exclusively at his power looms; it is so universally; gives a decided preference to married females, especially those who have families at home dependent on them for support; they are attentive, docile, more so than unmarried females, and are compelled to use their utmost exertions to procure the necessaries of life.' Thus are the virtues, the peculiar virtues, of the female character to be perverted to her injury,—thus all that is most dutiful and tender in her nature is to be made the means of her bondage and suffering!'"* (Ten Hours Factory Bill. The Speech of Lord Ashley, London, 1844, p. 20).

Fielden, already cited above, says:

*"As improvements in machinery have gone on, the avarice of masters has prompted many to exact more labour from their hands than they were fitted by nature to perform"* (Fielden, l.c., [p.] 34).

24-1098
A keen appetite for alien labour (surplus labour) is not a feature specific to the person who employs machinery, it is the driving motive of the whole of capitalist production. Since the factory master is now in a better position to indulge this urge, he quite naturally lets go of the reins. A further remark: As long as the motive force proceeds from human beings (and indeed animals too) [V-200] it can only physically function for a certain portion of the day. A steam engine, etc., needs no rest. It can continue operating for any length of time. [V-200]

[V-199] However, there are yet further circumstances which give this urge a very special impetus in the case of the employment of machinery.

[V-200] Machinery, etc., is valorised over a lengthy period, during which the same labour process is constantly repeated in order to produce new commodities. This period is determined by calculating the average time it takes for the whole value of the machinery to be transferred to the product. The extension of labour time beyond the limits of the normal working day shortens the period over which the capital laid out in the machinery is replaced by the total amount of production. Let us assume the period is 10 years if 12 hours are worked every day. If 15 hours are worked every day, hence if the day is lengthened by ¼, over one week this makes $1\frac{1}{2}$ days=18 hours. The whole week comes to 90 hours on our assumption. $\frac{18}{90}=\frac{1}{5}$ week. And so $\frac{1}{5}$ of the 10 years would be saved; 2 years, therefore. Hence the capital laid out in machinery would have been replaced in 8 years. Either it has in fact been used up in that time. Then the reproduction process has been hastened. If not—if the machinery is still capable of functioning—the ratio of variable capital to constant capital is raised, because the latter continues to function without however having to enter into the valorisation process any more. This brings about an increase, if not in the surplus value (which has already grown as a result of the prolongation of labour time), at least in the ratio of that surplus value to the total amount of capital laid out—and therefore an increase in profit. And additionally: When new machinery is introduced the improvements come thick and fast. Thus a large part of the old machinery constantly loses part of its value or becomes entirely unusable before it has passed through its circulation period, or its value has re-appeared in the value of the commodities. The more the reproduction period is curtailed, the slighter this danger is, and the more the capitalist is able, the value of the machinery having returned to him in a shorter period, to introduce the new improved machinery and sell
cheaply the old machinery, which can again be profitably employed by another capitalist, since it enters into his production as from the outset the representative of a smaller magnitude of value. (We shall deal with this point in more detail under fixed capital, bringing in Babbage's examples as well.)

What has been said here is valid not only for machinery but for the whole of the fixed capital which the employment of machinery brings in its train and is the condition for.

Yet, the capitalist is by no means concerned merely to get back the amount of value laid out in the fixed capital as soon as possible, so as to protect it from devaluation and to possess it again in disposable form; he is concerned above all with the profitable employment of this capital—of the great quantity of capital fixed in a form in which it both decays as exchange value and is useless as use value, except to the extent that it is brought into contact with the living kind of labour whose fixed capital it constitutes. Since the part of capital laid out in wages has become much smaller in relation to the total capital—particularly in relation to the fixed capital—and since the magnitude of surplus value depends not only on its rate but on the number of working days simultaneously employed, while profit depends on the ratio of this surplus value to the total capital, the consequence is a fall in the rate of profit. The simplest means to prevent this is of course to prolong the absolute surplus labour as far as possible by prolonging the working day, thereby making the fixed capital the means of appropriating the greatest possible quantity of unpaid labour. If the factory is not in operation, the manufacturer regards this as being robbed by the workers; for his capital has obtained a form in fixed capital in which it is directly a draft entitling him to alien labour. This is all expressed very naively by Mr. Senior, who in the year 1837 still was of the opinion [V-201] that the working day—hence absolute labour time—would necessarily have to become longer with the development of machinery.

Senior says, giving, moreover, the honourable Mr. Ashworth as his authority:

"The difference between the hours of work usual over the whole world in cotton factories and other employments derives from two sources. 1) The great proportion of fixed to circulating capital, which makes long hours of work desirable" (Senior, Letters on the Factory Act etc., London, 1837, p. 11) (XI, 4).\(^\text{219}\)

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a Ch. Babbage, Traité sur l'économie..., pp. 375-78.—Ed.
With the constant growth of fixed capital in relation to circulating capital

* "the motives to long hours of work will become greater, as the only means by which a large proportion of fixed capital can be made profitable. 'When a labourer,' said Mr. Ashworth to me, 'lays down his spade, he renders useless, for that period, a capital worth 18d. When one of our people leaves the mill, he renders useless a capital that has cost £100,000."* (l.c., [p.] 14).

He renders useless! After all the machinery is there—such a great capital has been invested in it—precisely to squeeze labour out of the worker. In fact he has already committed a great crime against a capital that has cost £100,000 by leaving the mill at all!

(this was the original reason for nightwork: "later our factories usually worked 80 hours a week") (XI, 5).

"If a steam engine, or other kind of machine, only works for some hours or some days a week, there is a loss of energy. If it works for the whole day it produces more, and it produces still more if it works night and day" (J. G. Courcelle-Seneuil, Traité théorique et pratique des entreprises industrielles etc., 2nd ed., Paris, 1857, p. 48).a

"The first machines for weaving patent net, when first installed, were very expensive, costing from £1,000 to £1,200 [or £1,300]. Though the machines increased the quantity produced, the possessors were nevertheless unable, with the workers' working time being limited to 8 hours, to compete with the old methods in price terms. This disadvantage arose from the large capital the instalment of the machinery cost; but the manufacturers quickly perceived that with the same expense of fixed capital, and a small addition to their circulating capital, they could work the same machines during the whole 24 hours" (Babbage, p. 279).b

[V-206] *"It is self-evident, that, amid the ebbings and flowings of the market, and the alternate contractions and expansions of demand, occasions will constantly recur, in which the manufacturer may employ additional floating capital without employing additional fixed capital ... if additional quantities of raw material can be worked up without incurring an additional expense for buildings and machinery"* (R. Torrens, On Wages and Combination, London, 1834, p. 64).221

This is, in general, an advantage associated with the prolongation of labour time—saving of an additional expense for buildings and machinery. [V-206]

[V-201] Thirdly. To the extent that the employment of machinery curtails the labour time during which the same commodity can be produced, it lessens the value of the commodity and makes the labour more productive, because it provides more product in the same time. To that extent the machinery only affects the productive power of normal labour. But a definite quantity of labour time continues to be represented in the same magnitude of value. Therefore as soon as competition has reduced

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a Marx quotes in French.—Ed.
b Ch. Babbage, Traité sur l'économie.—Ed.
the price of the commodity produced by machinery to its value, the employment of machinery can only increase the surplus value, the profit [V-202] of the capitalist, in so far as the cheapening of the commodity leads to a reduction in the value of wages or the value of labour capacity or in the time necessary for the reproduction of labour capacity.

There is, however, an additional circumstance here owing to which the employment of machinery increases absolute labour time, and therefore absolute surplus value, even without any prolongation of the working day. This happens through the, so to speak, condensation of labour time, in which every part of the time increases its labour content; the intensity of labour grows; there is growth not only in the productivity (hence the quality) of the labour owing to the employment of machinery, but in the quantity of labour performed within a given period. The pores of time are so to speak shrunk through the compression of labour. One hour of labour thereby represents the same quantity of labour as perhaps \( \frac{6}{4} \) hours of the average labour performed without the employment of machinery or with the employment of less efficient machinery.

Where machinery has already been introduced, the improvements which reduce the number of workers in relation to the amount of commodities produced and the machinery employed are accompanied by the circumstance that the labour of the individual worker who replaces 1 or 2 workers grows with the improvements in the machinery, hence that the machinery only enables him to do what 2 or 3 workers did previously by compelling him to increase his labour and fill each period of time more intensively with labour. Thus labour capacity is more rapidly worn out during the same hour of labour.

Let us look first at the way those who have investigated factory labour at different times have spoken about the growth in labour accompanying improvements in machinery. This follows on the one hand from the greater rapidity of the machine, which the worker has to follow; and on the other hand from the greater quantity of machine labour the individual worker has to overlook, as for example when the number of spindles on the Mule is increased, with double rows of spindles (Double decking) as well, or when 1 weaver has to supervise 2 or 3 power looms instead of 1.

* "The labour now undergone in the factories is much greater than it used to be, owing to the greater attention and activity required by the greatly increased speed which is given to the machinery that the children have to attend to, when we
compare it with what it was 30 or 40 years ago"* (J. Fielden, The Curse of the Factory System, [London, 1836] p. 32).

This was in the year 1836. John Fielden was himself a manufacturer.

**Lord Ashley (now Earl of Shaftesbury) stated in his speech on the Ten Hours Factory Bill on March 15, 1844:**

*"The labour performed by those engaged in the processes of manufacture, is 3 times as great as in the beginning of such operations. Machinery has executed, no doubt, the work that would demand the sinews of millions of men; but it has also prodigiously multiplied the labour of those who are governed by its fearful movements"* (l.c., [p.] 6). *"In 1815, the labour of following a pair of mules spinning cotton yarn of Nos. 40—reckoning 12 hours to the working day—involved a necessity for walking 8 miles. In 1832, the distance travelled in following a pair of mules spinning cotton-yarn on the same numbers, was 20 miles, and frequently more. But the amount of labour performed by those following the mules, is not confined merely to the distance walked. There is far more to be done. In 1835, the spinner put up daily on each of these mules 820 stretches; making a total of 1,640 stretches in the course of the day. In 1832, the spinner put upon each mule 2,200 stretches, making a total of 4,400. In 1844, according to a return furnished by a practised operative spinner, the person working puts up in the same period 2,400 stretches on each mule, making a total of 4,800 stretches in the [V-203] course of the day; and in some cases, the amount of labour required is even greater"* (pp. 6, 7).

*"I have a document here, signed by 22 operative spinners of Manchester, in which they state that 20 miles is the very least distance travelled, and they believe it to be still greater. I have another document sent to me in 1842, stating that the labour is progressively increasing—increasing not only because the distance to be travelled is greater, but because the quantity of goods produced is multiplied, while the hands are, in proportion, fewer than before; and, moreover, because an inferior species of cotton is now often spun, which it is more difficult to work"* (l.c., pp. 8, 9).

*"In the carding room there has been also a great increase of labour—one person there does the work formerly divided between two. In the weaving room where a vast number of persons are employed, and principally females ... the labour has increased, within the last few years, fully 10 per cent, owing to the increased speed of the machinery. In 1838, the number of hanks spun per week was 18,000; in 1843 it amounted to 21,000. In 1819, the number of picks in power loom weaving per minute was 60—in 1842 it was 140, showing a vast increase of labour, because more nicety and attention are required to the work in hand"* (p. 9).

//As long as machinery enables a manufacturer to sell the commodity for more than its individual value, the following passage applies, showing that even in this case the surplus value derives from a curtailment of necessary labour time, is itself a form of relative surplus value:

*"A man's profit does not depend upon his command of the produce of other men's labour, but upon his command of labour itself. If he can sell"* (by raising the

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* This should be 1815 or 1825. See the corresponding passage in Volume I of Capital.—Ed.
MONEY PRICES of the commodities)* "his goods at a higher price, while his workmen’s wages remain unaltered, he is clearly benefited by the rise, whether other goods rise, or not. A smaller proportion of what he produces is sufficient to put that labour into motion, and a larger proportion consequently remains for himself" *(Outlines of Political Economy (by a Malthusian), etc., London, 1832, pp. 49-50). 222 //

The FACTORY REPORTS show that in those branches of industry which were covered (until April 1860) by the FACTORY ACT, and in which therefore the working week had been reduced by law to 60 hours, wages did not fall (comparing 1859 with 1839) but rather rose, whereas they positively fell during this period in factories where

"THE LABOUR OF CHILDREN, YOUNG PERSONS AND WOMEN" was still "UNRESTRICTED".

The reference here is to

"PRINTING, BLEACHING and DYEING WORKS, in which until 1860 THE HOURS OF WORK REMAIN NOW THE SAME AS THEY WERE 20 YEARS SINCE, IN WHICH THE PROTECTED CLASSES UNDER THE FACTORY ACTS ARE AT TIMES EMPLOYED 14 AND 15 HOURS PER DAY." a

[V-204] The following list shows in general that, with the progress of industry in the last 20 years, wages have fallen considerably in a number of branches of industry.

<table>
<thead>
<tr>
<th></th>
<th>Calico printing, dyeing and bleaching, 60 hours per week.</th>
<th>Fustian dyeing, 61 hours per week.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1839</td>
<td>1859</td>
</tr>
<tr>
<td>Colour mixer</td>
<td>£35s.</td>
<td>32</td>
</tr>
<tr>
<td>Machine printer</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Foreman</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Block Cutter</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>Block printer</td>
<td>40</td>
<td>28</td>
</tr>
<tr>
<td>Dyer</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Washer and Labourer</td>
<td>16 and 15</td>
<td>ditto</td>
</tr>
</tbody>
</table>

* Calico printing, dyeing and bleaching, 60 hours per week. Fustian dyeing, 61 hours per week.

(V-203) In the first kind of factory, production increased more, relatively speaking, than previously, and at the same time the profits of the manufacturers increased, as is demonstrated by the rapid spread of the factories.

a Reports of the Inspectors of Factories for the Half Year Ending 30th April 1860, pp. 31-32.— Ed.
The great improvements that have been made in machinery, of all kinds, have vastly improved their productive powers, improvements to which a stimulus was doubtless given, especially as regards the greater speed of the machines in a given time, by the restrictions of the hours of work. These improvements, and the closer application which the operatives are enabled to give, have had the effect ... of as much work being turned off in the shortened time as used to be in the longer hours"* (Factory Reports for the Half Year Ending October 31, 1858, [p.] 10. Cf. Reports for the Half Year Ending 30th April 1860, p. 30 sqq.).

The phenomenon that the Ten Hours' Bill has not cut down the profits of the English manufacturers, in spite of the shortening of the working day, is explained by two reasons:

1) The English hour of labour stands above the Continental one, it is related to it as more complex labour to simple labour. (Hence the relation of the English to the foreign manufacturer is the same as the relation of a manufacturer who has introduced new machinery to his competitor.)

"All things being equal, the English manufacturer can turn out a considerably larger amount of work in a given time than a Foreign manufacturer, so much as to counterbalance the difference of the working days, between 60 hours a week here and 72 or 80 elsewhere; and the means of transport in England enable the manufacturer to deliver his goods upon a railway, almost at his factory, whence they may be almost directly shipped for exportation"* (Reports of Inspectors of Factories. 31 October 1855, London, 1856, [p.] 65).

2) What is lost through the reduction of absolute labour time is gained in condensation of labour time, so that in fact 1 hour of labour is now equal to $\frac{6}{5}$ or more hours of labour. Just as the absolute extension of the working day beyond certain limits (beyond the natural day) is defeated by natural obstacles, so does the condensed working day have its limits. It is questionable whether the amount of labour which is now provided in the factories under the Ten Hours' Law would be possible at all for 12 hours at e.g. an equal level of intensity.

"In fact one class of manufacturers, the spinners of woollen yarn."

(since they do not wish to employ two sets of half-timers, children under 13 years who work for 6 hours)

"now rarely employ children under 13 years of age, i.e. half-timers. They have introduced improved and new machinery of various kinds, which altogether supersedes the necessity of the employment of children, for instance, as an illustration, by the addition of an apparatus, called a piecing machine, to existing machines, the work of 6 or 4 half-timers, according to the peculiarity of each machine, can be performed by one young person ... the half-time system had some share in stimulating the invention of the piecing machine"* (Factory Reports for the Half Year Ending 31 October 1858, London, 1858, pp. 42-43).

In any case this effect of the shortening of absolute labour time shows us how the manufacturers look for means of curtailing
necessary labour time in order to prolong relative surplus labour time. It also shows us how machinery not only enables one individual to perform the labour of many, but increases the amount of labour required of that individual, thus giving the hour of labour a higher value, and thereby lessening the proportion of his time the worker himself needs for the reproduction of his wage.

[V-205] As we have said,² this occurs as a result of the increase both in the machine’s rapidity of action and in the amount of working machinery the individual worker has to supervise. This result is attained partly through changes in the construction of the machine which supplies the motive power, changes enabling a machine of the same weight to set in motion, and in more rapid motion, with a relative, and often an absolute reduction in cost, a greater quantity of machinery than before.

*“The facts thus brought out by the Return appear to be that the Factory system is increasing rapidly; that although the same number of hands are employed in proportion to the horsepower as at former periods there are fewer hands employed in proportion to the machinery; that the steam engine is enabled to drive an increased weight of machinery by economy of force, and other methods, and that an increased quantity of work can be turned off by improvements in machinery, and in methods of manufacture, by increased speed of the machinery, and by a variety of other causes”* (Factory Reports for the Half Year Ending 31st October 1856, p. 20).

“In the * Report for October 1852, Mr. Horner quotes ... a letter from Mr. Jas. Nasmyth, the eminent civil engineer, of Paticroft, near Manchester, explaining the nature of recent improvements in the steam engine, whereby the same engine is made to perform more work with a diminished consumption of fuel.... ‘It would not be very easy to get an exact return as to the increase of performance or work done by the identical engines to which some or all of these improvements have been applied; I am confident, however, that could we obtain an exact return, the result would show, that from the same weight of steam-engine machinery, we are now at least obtaining 50 per cent more duty or work performed on the average, and that ... in many cases, the identical steam engines which, in the days of the restricted speed of 220 feet per minute, yielded 50 horsepower, are now yielding upwards of 100.’”

*“The return of 1838,”* says Horner *(Reports, 31st October 1856), “gave the number of steam engines and of water wheels, with the amount of horsepower employed. At that time the figures represented a much more accurate estimate of the actual power employed than do the figures in the returns either of 1850 or 1856. The figures given in the Returns are all of the nominal power of the engines and wheels, not of the power actually employed or capable of being employed. The modern steam engine of 100 horsepowers is capable of being driven at a much greater force than formerly, arising from the improvements in its construction, the capacity and construction of the boilers, etc., and thus the nominal power of a modern manufacturing steam engine cannot be considered more than an index from which its real capabilities are to be calculated”* (I.c., pp. 13-14).

² See this volume, pp. 335-36.—Ed.
Fourthly: Replacement of simple cooperation by machinery.

Just as machinery removes or revolutionises cooperation in its developed form of division of labour, so also in many cases does it do away with or revolutionise simple cooperation. For example, if operations such as mowing corn, sowing seed, etc., require the simultaneous employment of many hands, they can be replaced by mowing or sowing machines. The same with the production of wine, when the wine-press replaces treading by foot. This is equally true of the application of steam engines to raise building materials to the top of a building or to the height at which they [V-206] are required.

"The turnout of the Lancashire workmen in the building trade (1833) has introduced a curious application of the steam-engine. This machine is now employed in some towns, instead of manual labour, in hoisting the various building materials to the top of the edifices where they are intended to be used" ([E. C. Tufnell,] Character, Object and Effects of Trades' Unions etc., London, 1834, [p.] 109).

Fifthly: Invention and employment of machinery against strikes, etc., and against wage demands.

Strikes usually originate from attempts either to prevent a cut in wages or enforce an increase in wages, or to settle the limits of the normal working day. What is at stake in a strike is always the limitation of the positive or relative amount of surplus labour time or the appropriation of part of it by the worker himself. The capitalist counters this with the introduction of machinery. Here the machine appears directly as a means of curtailing necessary labour time; it also appears as a form of capital—an instrument of capital—a power of capital—over labour—for the suppression of any claim by labour to autonomy. Here machinery comes into play as a form of capital inimical to labour in intention as well. Selfactors, wool-combing machines in the spinning industry, the so-called "condenser" which replaces the hand-turned "slubbing machine" (in the woollen industry as well), etc., are all machines invented in order to defeat strikes.

[V-207] Likewise

the self-acting apparatus for executing the dyeing and rinsing operations was invented "under the high pressure of the same despotic confederacies" (namely the workers' associations)

(what is being referred to here is the printing of calico, where from 4 to 6 colours can now be printed at once with the application of steam-driven engraved cylinders). Ure comments further, with reference to the invention of a new machine in the weaving industry:
"The combined malcontents, who fancied themselves impregnably intrenched behind the old lines of division of labour, found their flanks turned and their defences rendered useless by the new mechanical tactics, and were obliged to surrender at discretion" (l.c., p. 142). [V-207]

[V-206] The result of these new machines is either to make the previous kind of work completely superfluous (as the selfactor makes the spinner superfluous) or to lessen the number of workers required and make the new kind of work simpler in comparison with the previous kind (as the work of the comber with combing machines).

"The most frequent cause of strikes in the cotton trade has been the introduction of improved machinery, and especially the enlargement of mules, by means of which the number of spindles a spinner is capable of superintending has been continually increasing.... A master, on the introduction of such improved machinery into his establishment stipulates with his spinners to pay them less per piece, but still at such a rate that, owing to the greater power of the machine, their weekly earnings shall rise rather than fall.... But such a bargain is injurious to the masters and men in the manufactories where the improved machine is not introduced" ([E. C. Tufnell,] Character, Object and Effects of Trades' Unions etc., London, 1834, [pp.] 17-18).

"1829 a serious turnout. A little before this time, several masters had erected mules, carrying from 4-500 spindles, which enabled the spinners who worked at them to receive a less sum in the proportion of 3 to 4 for a given quantity of work, and at the same time to earn at least an equal amount of wages with those who were employed on the old machinery. 21 mills and 10,000 persons were thrown idle for 6 months by this strike" (l.c., p. 19).

"The strike of 1833 at Messrs. Hindes and Derham (West Riding of Yorkshire) was the cause of the invention of a wool-combing machine, which wholly superseded the labour of that class of men, who were the chief ringleaders in this affair; and which has struck a blow at their combination, that it can never recover" (pp. 61-62).

[V-207] Similarly "the introduction of steam as an antagonist to human power" (P. Gaskell (Surgeon), Artisans and Machinery etc., London, 1836, p. 23).

"The surplus hands would readily enable the manufacturers to lessen the rate of wages; but the certainty that any considerable reduction would be followed by immediate immense losses from turnouts, extended stoppages, and various other impediments which would be thrown in their way, makes them prefer the slower process of mechanical improvement, by which, though they may triple production, they require no new men" (l.c., p. 314).

*"The factory operatives should keep in wholesome remembrance the fact that theirs is really a low species of skilled labour; and that there is none which is more easily acquired or of its quality more amply remunerated, or which, by a short training of the least expert can be more quickly as well as abundantly supplied." "The master's machinery really plays a far more important part in the business of production than the labour and skill of the operative, which 6 months' education can teach, and a common labourer can learn"* (The Master Spinners and Manufacturers' Defence Fund. Report of the Committee Appointed for the Receipt and Apportionment of This Fund, to the Central Association of Master Spinners and Manufacturers, Manchester, 1854, pp. 17, 19).
Ure says with regard to the "Iron Man" (SELF-ACTING MULE): 

"When capital enlists science in her service, the refractory hand of labour will always be taught docility" (p. 140).

"The necessity of enlarging the spinning-frames, created by the decrees of the workers' associations, has recently given an extraordinary stimulus to mechanical science.... In doubling the size of his mule, the owner is enabled to get rid of indifferent or restive workers, and to become once more the master of his mill, which is no small advantage" (Ure, Vol. II, p. 134).

This expedient tends

"to raise, or uphold at least, the wages of each spinner, but to diminish the numbers of workers necessary for the same quantity of work, so that those employed would prosper, but the combined body of workers would thereby be impoverished" (l.c., [pp.] 133, 134).

"The Iron Man ... a creation destined to restore order among the industrious classes" (p. 138). a

"The first Manufacturers, who had to trust entirely to hand labour, were subjected periodically to severe immediate losses through the refractory spirit of their hands, who timed their opportunity, when the markets were particularly pressing, to urge their claims.... A crisis was rapidly approaching, which would have checked the progress of manufactures, when steam and its application to machinery at once turned the current against the men" (Gaskell, l.c., [pp.] 34, 35).

[V-208] Sixthly. Presumption of the workers in wishing to appropriate part of the productivity of their labour brought about by machinery.

"Trades Unions in their desire to maintain wages endeavour to share in the profits of improved machinery.... They demand higher wages because labour is abbreviated ... in other words: they endeavour to establish a duty on manufacturing improvements" (On Combinations of Trades, New Edit., London, 1834, p. 42).

"The principle of adjusting wages to the supposed profits of the employer, which is involved in claiming higher remuneration from improved machinery, is wholly inadmissible. The application of this principle is not, however, confined to one description of profit. The dyers, on August 7th 1824, turned out ... setting forth in a placard that their masters had obtained an increase of price for dyeing, more than adequate to the advance they claim.... Wages thus change their character completely, and either absorb or become an ad valorem tax upon profits" (l.c., pp. 43, 44).

Seventhly. More continuity of labour. Utilisation of waste etc. More work can be done at a finishing stage if more raw materials are provided with the help of machinery.

Continuity of labour generally increases with the employment of machinery (of fixed capital altogether).

The machine has the further effect that it provides a more plentiful supply of the material of labour for the branches of

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a Marx quotes Ure in French.— Ed.
industry for which its product serves as raw material. For example in the 18th century the handloom weavers always suffered from the impossibility of supplying themselves with materials (yarn) for their labour. Considerable vacations were frequently occurring in this respect, and at these periods they found themselves suffering "privations".

"What was now gained from the improvement in the spinning machine had arisen not so much from any increase in the rate of payment for labour, as from a market generally understocked, and a constantly increasing production of yarn, which enabled them to work full hours" (Gaskell, l.c., p. 27).

This is one of the main results of machinery,

"this possibility of continuously working full hours in the same department".

This would be the possibility of working full hours for the small man who works on his own account. For the capitalist it is the possibility of having other people work full hours.

What the spinning machine does for weaving, by providing the yarn, was done for the spinner by the invention of the cotton gin in 1793, by Eli Whitney, of Connecticut. This machine provides the cotton. The plantation owner had enough black slaves to sow a large amount of cotton, but not enough to separate the fibres from the seed. This therefore considerably reduced the amount of raw production, and increased what it cost to produce e.g. a pound of cotton.

* "It was an average day's work to separate a pound of cotton fibre perfectly from the seed.... Whitney's invention enabled the owner of his gin to separate the seed completely from [100] pounds of fibres per day per hand, [and] the efficiency of the gin [has] since increased." *224

[V-209] The same thing in India.

* "The next evil in India is one which one would scarcely expect to find in a country which exports more labour than any other in the world, with the exception perhaps of China and England—the impossibility of procuring a sufficient number of hands to clean the cotton. The consequence of this is that large quantities of the crop are left unpicked, while another portion is gathered from the ground, where it has fallen, and of course discoloured and partially rotten, so that for want of labour at the proper season, the cultivator is actually forced to submit to the loss of a large part of that crop, for which England is so anxiously looking"* (Bengal Hurkaru, Bi-Monthly Overland Summary of News, 22nd July 1861).

* "A common churka worked by a man and woman turned out 28 lbs daily. Dr. Forbes' churka worked by 2 men and a boy turns out 250 lbs daily"* (Bombay Chamber of Commerce Report for 1859-60, p. 171). * "16 of these (last named machines), driven by bullocks, would clean a ton of cotton per day, which was equal to the ordinary day's work of 750 people"* (Paper Read before the Society of Arts, on the 17th April 1861).
Machinery can work with materials which are too inferior to be worked by hand.

*“The demand for cheap goods”* (woollen in the West Riding of Yorkshire) *“has given an immense impulse to this kind of manufacture, the economy of which consists not so much in improved machinery and labour-saving processes, as in the employment of an inferior staple and woollen rags, brought again, by powerful machinery, to the original condition of wool, and then either spun into yarn for inferior cloths, or mixed with new wool, spun into yarn for better kinds of cloths. This manufacture prevails nowhere to so great an extent as in England, although it is considerable in Belgium”* *(Reports of Inspectors of Factories for 31st October 1855, London, 1856, [p.] 64).

*“There is frequently a great saving of materials, as in the change from making boards with the adze, to that of making them with the saw; and again the labour of natural agents is so much cheaper, that many articles which would otherwise have been worthless, are now deserving of attention, as they may now be profitably endowed with some form of value”* *(F. Wayland, The Elements of Political Economy, Boston, 1843, [pp.] 72-73).

In production on a large scale, moreover, the waste products are so considerable that they themselves can in turn more readily become simple articles of commerce, whether for agriculture or for other branches of industry.

[V-210] **Eighthly. Replacement of labour.**

“Perfection of the crafts means nothing other than the discovery of new ways of making a product *with fewer people*, or (which is the same thing) *in less time than previously*” *(Galiani, Della Moneta, Custodi, Parte Moderna, p. 158 [159]).*

This is true as much for simple cooperation or the division of labour as it is for machinery—*fewer people* and *less time* for the manufacture of a product are identical. If someone can do in 1 hour what he previously did in 2, one person can do in one working day what previously was done by two; and what therefore previously required two simultaneous working days. Therefore every means of reducing the necessary labour time of an individual worker implies at the same time a reduction in the number of workers required to bring about the same effect. If we look now at the employment of machinery, is there only a difference of degree in this reduction, or is there some specific additional feature?

Sir James Steuart says in his *Principles of Political Economy*, Book I, Ch. XIX:

“Machines therefore I consider as a method of augmenting *(virtually)* the number of the industrious, without the expense of feeding an additional number” [p. 123].

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*a Marx quotes in Italian.— Ed.*
Indeed, in the same passage he asks:

"Wherein does the effect of a machine differ from that of new inhabitants?"

(l. c.).

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//Price of the commodity and wages. We [shall] speak [in] another place of Proudhon’s nonsense. But what he is replied to by Mr. Eugène Forcade, one of the best economical critics in France, is as false and ridiculous as Proudhon’s assertions. Forcade says:

“If Proudhon’s objection ... that ‘the worker cannot buy back his own product’” (on account of the interest which is added to it) “were correct, not only would it apply to the profits of capital; it would eliminate the very possibility of industry. If the worker is compelled to pay 100 for something for which he has only received 80, if his wages can buy back only the value he has put into a product, this amounts to saying that the worker cannot buy back anything”

//hence even if he gets back the whole value he has put into the product, that is to say, if there exists no profit and no other form of surplus value expressing surplus labour; and holding such notions Forcade claims to understand anything whatever of political economy! Proudhon’s nonsense consists in his belief that the worker must buy back with the money he receives (as wages) a higher value in commodities than is contained in the money, or in other words that the commodity is sold above its value because profit, etc., is realised in the sale. But now here comes Forcade, declaring that industry becomes impossible as soon as the wage is only able to buy back in a product the value that the worker has put into it. The reverse is true. Capitalist industry becomes impossible if the wage is sufficient to buy back in a product the whole of the value the worker has put into it. In that case, there would neither be surplus value, nor profit, nor interest, nor rent, nor capital. In fact: Forcade’s comment has a bearing not only on the “worker” but on the producer in general//,

“that wages cannot pay for anything”.

(Thus we have in fact the general proposition: if the producer can only buy back in a product the value he has put into it, the producer cannot pay for anything. Because the commodity contains constant capital apart from the labour added.)

“In fact the cost price always contains something more than the wage”

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a Marx quotes in French.—Ed.

b P. J. Proudhon, Qu’est-ce que la propriété?, p. 201, and Gratuité du crédit. Discussion entre M. Fr. Bastiat et M. Proudhon, pp. 207-08.—Ed.
(This is already a very crude way of putting it. He means to say that there is always something more than the last piece of labour added to, and realised in, the commodity.)

"e.g. the price of the raw material, often paid out abroad..."

(And even if it were not paid out abroad the situation would not be changed in the least. Forcade's objection, which [V-211] is based on a crude misconception, remains the same. The point is this: the amount of the total product which forms the payment of wages contains no particle of value due to the value of the raw material, etc., although every single commodity, considered for itself, is composed of the value due to the last labour added and to the value of the raw materials, etc., independent of that labour. The same applies to the whole of that part of the produce which constitutes the surplus value. (Profit, etc.) As to the value of the constant capital, it is replaced either by itself, in natura, or by exchange with other forms of constant capital.)

"Proudhon has forgotten the continual growth of the national capital; he has forgotten that this growth takes effect for all workers, both the entrepreneurs and the labourers" (Revue des Deux Mondes, Vol. 24, Paris, 1848, Eugène Forcade, [pp.] 998, 999).

And with this meaningless phrase Forcade endeavours to evade solving the problem; and yet he is indisputably one of the "most critical" political economists! 

Here we want to bring together immediately the whole of Proudhon's rubbish.226 //

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\( ^{226} \) The passage on Forcade and Proudhon was written by Marx in a mixture of German, French and English.— Ed.
VI Contents of Notebook VI:
5) Theories of Surplus Value
   (a) Sir James Steuart
   (b) The Physiocrats
   (c) Adam Smith

VII
5) Theories of Surplus Value
   (c) Adam Smith (continuation)
   (Inquiry into how it is possible for the annual profit and wages to buy the annual commodities, which besides profit and wages also contain constant capital)
All economists share the error of examining surplus value not as such, in its pure form, but in the particular forms of profit and rent. What theoretical errors must necessarily arise from this will be shown more fully in Chapter III, in the analysis of the greatly changed form which surplus value assumes as profit.

**a) [SIR JAMES STEUART]**

Before the Physiocrats, surplus value—that is, profit, in the form of profit—was explained purely from *exchange*, the sale of the commodity above its value. Sir James Steuart on the whole did not get beyond this restricted view; he must rather be regarded as the man who reproduced it in scientific form. I say “in scientific form”. For Steuart does not share the illusion that the surplus value which accrues to the individual capitalist from selling the commodity above its value is a creation of new wealth. He distinguishes therefore between *positive* profit and *relative* profit.

*“Positive profit, implies no loss to anybody; it results from an augmentation of labour, industry, or ingenuity, and has the effect of swelling or augmenting the public good... Relative profit, is what implies a loss to somebody; it marks a vibration of the balance of wealth between parties, but implies no addition to the general stock.... The compound is easily understood; it is that species of profit ... which is partly relative, and partly positive ... both kinds may subsist inseparably in the same transaction”* *(Principles of Political Economy, Vol. I, The Works of Sir James Steuart etc., ed. by General Sir James Steuart, his son, etc., in 6 vols, London, 1805, pp. 275-76).*

*Positive* profit arises from “*augmentation* of labour, industry and ingenuity”. *How* it arises from this Steuart makes no attempt to explain. The further statement that the effect of this profit is to
Theories of Surplus Value. James Steuart

augment and swell "THE PUBLIC GOOD" seems to indicate that Steuart means by it nothing but the greater mass of use values produced in consequence of the development of the productive powers of labour, and that he thinks of this positive profit as quite distinct from the capitalist's profit—which always presupposes an increase of exchange value. This interpretation is fully confirmed by his further exposition.

He says to wit:

*"In the price of goods, I consider two things as really existing, and quite different from one another; the real value of the commodity, and the profit upon alienation"* (p. 244).

The price of goods therefore comprises two elements that are completely different from each other: firstly their real value, secondly, the profit upon alienation, the profit realised through their transfer to another person, their sale.

[VI-221] This profit upon alienation therefore arises from the price of the goods being greater than their real value, or from the goods being sold above their value. Gain on one side therefore always involves loss on the other. No addition to the general stock is created. Profit, i.e., surplus value, is relative and resolves itself into "A vibration of the balance of wealth between parties". Steuart himself rejects the idea that surplus value can be explained in this way. His theory of "vibration of the balance of wealth between parties", however little it touches the nature and origin of surplus value itself, remains important in considering the distribution of surplus value among different classes and among different categories such as profit, interest and rent.

That Steuart limits all profit of the individual capitalist to this "relative profit", profit upon alienation, is shown by the following:

The "real value", he says, is determined by the "quantity" of labour, which "upon an average a workman of the country in general may perform ... in a day, a week, a month etc.". Secondly: "the value of the workman's subsistence and necessary expense, both for supplying his personal wants, and ... the instruments belonging to his profession, which must be taken upon an average as above." Thirdly: "the value of the materials" (pp. 244-45). "These three articles being known, the price of manufacture is determined. It cannot be lower than the amount of all the three, that is, than the real value; whatever is higher, is the manufacturer's profit. This will be in proportion to demand, and therefore will fluctuate according to circumstances" (l. c., p. 245). "Hence appears the necessity of a great demand, in order to promote flourishing manufactures ... the industrious regulate their living and expense according to their certain profit" (l. c., [p.] 246).230

From this it is clear that: The profit of the "manufacturer", of the individual capitalist, is always relative profit, always profit upon
Alienation, always derived from the excess of the price of the commodity over its real value, from its sale above its value. If therefore all commodities were sold at their value, no profit would exist.

Stewart wrote a special chapter on this; he examines in detail:

"How profits consolidate into prime cost" (I.c., Vol. III, p. 11 sq.).

Stewart on the one hand rejects the conception of the Monetary and Mercantile systems, according to which the sale of commodities above their value, and the profit resulting therefrom, creates surplus value, a positive increase of wealth.* On the other hand he holds to their view that the profit of the individual capital is nothing but this excess of the price over the [VI-222] value, the profit upon alienation. This however according to him is only relative, the gain on the one side being compensated by the loss on the other, and consequently this movement is nothing more than "a vibration of the balance of wealth between parties".

In this respect Stewart is therefore the rational expression of the Monetary and Mercantile systems.

His service to the theory of capital is that he shows how the process of separation takes place between the conditions of production, as the property of a definite class, and labour capacity. He gives a great deal of attention to this genesis of capital—without as yet seeing it directly as the genesis of capital, although he sees it as a condition for large-scale industry. He examines the process particularly in agriculture; and he rightly considers that manufacturing industry proper only came into being through this process of separation in agriculture. In Adam Smith's writings this process of separation is assumed to be already completed.

(Stewart's book [appeared in] 1767 (London), Turgot's [was written in] 1766, Adam Smith's [in] 1775.)

b) **THE PHYSIOCRATS**

The analysis of capital, within the bourgeois horizon, is essentially the work of the Physiocrats. It is this service that makes them the true fathers of modern political economy. In the first place, the analysis of the various objective components in which

* Even the Monetary system, however, thinks of this profit as arising not within a country, but only in exchange with other countries. In this it remains stuck in the Mercantile system [which assumed] that this value takes the form of money (gold and silver) and the surplus value is therefore expressed in the balance of trade, which is settled with money.
capital exists and into which it resolves itself in the course of the labour process. It is not a reproach to the Physiocrats that, like all their successors, they thought of these objective forms of existence—such as tools, raw materials, etc.—as capital, in isolation from the social conditions in which they appear in capitalist production; in a word, in the form in which they are elements of the labour process in general, independently of its social form—and thereby made of the capitalist form of production an eternal, natural form of production. For them the bourgeois forms of production necessarily appeared as natural forms. It was their great merit that they conceived these forms as physiological forms of society: as forms arising from the natural necessity of production itself, forms that are independent of anyone’s will or of politics, etc. They are material laws, the error is only that the material law of a definite historical social stage is conceived as an abstract law governing equally all forms of society.

In addition to this analysis of the objective elements of which capital consists within the labour process, the Physiocrats established the forms which capital assumes in circulation (fixed capital, circulating capital, even though as yet they give them other names), and in general the connection between the process of circulation and the reproduction process of capital. We shall come back to this in the chapter on circulation.232

In these two principal points Adam Smith inherited the legacy of the Physiocrats. His service—in this connection—is limited to fixing the abstract categories, to the greater consistency of the baptismal names which he gave to the distinctions made by the Physiocrats in their analysis.

[Vl-223] As we have seen,a the basis for the development of capitalist production is, in general, that labour capacity, as the commodity belonging to the workers, confronts the conditions of labour as commodities maintained in the form of capital and existing independently of the workers. The determination of the value of labour capacity, as a commodity, is of vital importance. This value is equal to the labour time required to produce the means of subsistence necessary for the reproduction of labour capacity, or to the price of the means of subsistence necessary for the existence of the worker as a worker. It is only on this basis that the difference arises between the value of labour capacity and the valorisation of labour capacity—a difference which exists with no other commodity, since there is no other commodity

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a See this volume, pp. 111-17.—Ed.
The use value, and therefore also the use of it, can increase its exchange value or the exchange values resulting from it.

Therefore the foundation of modern political economy, whose business is the analysis of capitalist production, is the conception of the value of labour capacity as something fixed, as a given magnitude—as indeed it is in practice in each particular case. The minimum of wages therefore correctly forms the pivotal point of Physiocratic theory. They were able to establish this although they had not yet recognised the nature of value itself, because this value of labour capacity is manifested in the price of the necessary means of subsistence, hence in a sum of definite use values. Consequently, without being in any way clear as to the nature of value, they could conceive the value of labour capacity, so far as it was necessary to their inquiry, as a definite magnitude. If moreover they made the mistake of conceiving this minimum as an unchangeable magnitude—which in their view is determined entirely by nature and not by the stage of historical development, which is itself a magnitude subject to fluctuations—this in no way affects the abstract correctness of their conclusions, since the difference between the value of labour capacity and its valorisation does not at all depend on whether the value is assumed to be great or small.

The Physiocrats transferred the inquiry into the origin of surplus value from the sphere of circulation into the sphere of direct production, and thereby laid the foundation for the analysis of capitalist production.

Quite correctly they lay down the fundamental principle that only that labour is productive which creates a surplus value, in whose product therefore a higher value is contained than the sum of the values consumed during the production of this product. Since the value of raw and other materials is given, while the value of the labour capacity is equal to the minimum of wages, this surplus value can clearly only consist in the excess of labour which the labourer returns to the capitalist over and above the quantity of labour that he receives in his wage. But it does not appear in this form with the Physiocrats, because they have not yet reduced a value in general to its simple substance—the quantity of labour or labour time.

Their method of exposition is, of course, necessarily governed by their general view of the nature of value, which to

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a In the manuscript, the word "reducirt" (reduced) was substituted, presumably by Engels, for "realisirt" (realised).—Ed.
them is not a definite social mode of existence of human activity (labour), but consists of material things—land, nature, and the various modifications of these material things.

The difference between the value of labour capacity and its valorisation—that is, the surplus value which the purchase of labour capacity secures for the user of labour capacity—appears most palpably, most incontrovertibly, of all branches of production, in agriculture, the primary production. The sum total of the means of subsistence which the labourer consumes from one year to another, or the mass of material substance which he consumes, is smaller than the sum total of the means of subsistence which he produces. In manufacture the workman is not generally seen directly producing either his means of subsistence or the surplus additional to his means of subsistence. The process is mediated through purchase and sale, through the various acts of circulation, and the analysis of value in general is necessary for it to be understood. In agriculture it shows itself directly in the surplus of use values produced over use values consumed by the labourer, and can therefore be grasped without an analysis of value in general, without a clear understanding of the nature of value. Therefore also when value is reduced to use value, and the latter to material substance in general. Hence for the Physiocrats agricultural labour is the only productive labour, because it is the only labour that creates a surplus value, and rent is the only form of surplus value which they know. The workman in manufacture does not increase the material substance; he only alters its form. The material—the mass of material substance—is given to him by agriculture. It is true that he adds value to the substance, not through his labour, but through the production costs of his labour: through the total means of subsistence which he consumes during his labour, equivalent to the minimum of wages, which he receives from agriculture. Because agricultural labour is conceived as the only productive labour, the form of surplus value which distinguishes agricultural labour from industrial labour, rent, is conceived as the only form of surplus value.

Profit on capital in the true sense, of which rent itself is only an offshoot, therefore does not exist for the Physiocrats. Profit is seen by them as only a kind of higher wages paid by the landowners, which the capitalists consume as revenue (and which therefore enters into their production costs in the same way as the minimum wages of the ordinary workmen); this increases the value of the raw material, because it enters into the consumption costs which the capitalist, [the] industrialist, consumes while he is produc-
ing the product, transforming the raw material into a new product.

Surplus value in the form of interest on money—an another branch of profit—is consequently declared by one section of the Physiocrats, such as Mirabeau the elder, to be usury and contrary to nature. Turgot on the other hand derives his justification of it from the fact that the money capitalist could buy land, that is, rent, and that therefore his money capital must create for him as much surplus value as he would receive if he converted it into landed property. This means therefore that interest on money too is not newly created value, not surplus value; it only explains why a part of the surplus value gained by the landowners finds its way to the money capitalists in the form of interest, just as it is explained on other grounds [VI-225] why a part of this surplus value finds its way to the industrial capitalist in the form of profit. Because agricultural labour is the only productive labour, the only labour that creates surplus value, the form of surplus value which distinguishes agricultural labour from all other branches of labour, rent, is the general form of surplus value. Industrial profit and interest on money are merely different categories into which rent is divided and, in certain portions, passes from the hands of the landowners into the hands of other classes. This is the direct opposite to the view held by later economists beginning with Adam Smith, because they rightly consider industrial profit to be the form in which surplus value is originally appropriated by capital, hence as the original general form of surplus value—they present interest and rent as mere offshoots of industrial profit, which is distributed by the industrial capitalists to various classes, who are co-owners of surplus value.

In addition to the reason already stated—that agricultural labour is the labour in which the creation of surplus value appears in material and tangible form, and apart from the process of circulation—there were a number of other considerations which explain the standpoint of the Physiocrats.

First, because in agriculture rent appears as a third element, as a form of surplus value which is not found in industry or merely has a transient existence. It was surplus value over and above surplus value (profit), and so the most palpable and most conspicuous form of surplus value, surplus value raised to the second power.

"By means of agriculture," as Karl Arnd, the home-bred economist, says in Die naturgemäße Volkswirthschaft etc. (Hanau, 1845, pp. 461-62), "a value is created—in the rent of land—which is not to be met with in industry and trade; a value which
remains over when the wages and the rent of the capital employed have been completely replaced.”

**Secondly**: leaving foreign trade out of account—as the Physiocrats rightly did and had to do in an abstract study of bourgeois society—it is clear that the number of workmen engaged in manufacture, etc., and completely detached from agriculture (the “free hands”, as Steuart calls them a 156)—is determined by the mass of agricultural products which the farm labourers produce in excess of their own consumption.

*“It is obvious that the relative numbers of persons who can be maintained without agricultural labour, must be measured wholly by the productive powers of the cultivators”* (R. Jones, *On the Distribution of Wealth*, London, 1831, pp. 159-60).

As agricultural labour thus forms the natural basis (on this, see an earlier notebook b) not only for surplus labour in its own sphere, but also for the independent existence of all other branches of labour, and therefore also for the surplus value created in them, it is clear that it was bound to be considered the creator of surplus value, so long as the substance of value was regarded as definite, concrete labour, and not abstract labour with its measure, labour time.

[V1-226] **Thirdly.** All surplus value, not only relative but absolute, depends on a given productivity of labour. If the productivity of labour had reached only such a stage of development that a man’s labour time no more than sufficed to keep him alive, to produce and reproduce his own means of subsistence, then there would be no surplus labour and no surplus value, and there would be no difference at all between the value of labour capacity and [the result of] its valorisation. The possibility of surplus labour and of surplus value therefore arises from a given productive power of labour, a productive power which enables labour capacity to create more than its own value, to produce more than the needs dictated by its life process. And indeed this productivity, this level of productivity which is presupposed as the starting-point, must first—as we saw in the second point above—make its appearance in agricultural labour. It appears therefore as a gift of nature, a productive power of nature. Here, in agriculture, from the very beginning there is generally

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b See this volume, pp. 192-93.—Ed.
co-operation of the forces of nature—the increase of human labour power through the use and exploitation of the forces of nature—working automatically. This utilisation of the forces of nature on a large scale appears in manufacture only with the development of large-scale industry. A definite stage in the development of agriculture, whether in the country concerned or in other countries, forms the basis for the development of capital. Up to this point absolute surplus value coincides with relative. (Buchanan—a great adversary of the Physiocrats—makes this point even against Adam Smith, when he tries to show that agricultural development preceded the emergence of modern town industry.4)

Fourthly. Since it is the great and specific contribution of the Physiocrats that they derive value and surplus value not from circulation but from production, they necessarily begin, in contrast to the Monetary and Mercantile systems, with that branch of production which can be thought of in complete separation from and independently of circulation, of exchange; and which presupposes exchange not between man and man but only between man and nature.

Hence the contradictions in the Physiocratic system.

It is in fact the first system which analyses capitalist production, and presents the conditions within which capital is produced, and within which capital produces, as eternal natural laws of production. On the other hand, it has rather the character of a bourgeois reproduction of the feudal system, of the dominion of landed property; and the industrial spheres within which capital first develops independently are presented as "unproductive" branches of labour, mere appendages of agriculture. The first condition for the development of capital is the separation of landed property from labour, the emergence of land, the primary condition of labour, as an independent force, a force in the hands of a separate class, confronting the free labourer. The Physiocrats therefore present the landowner as the true capitalist, that is, the appropriator of surplus labour. Feudalism is thus portrayed and explained sub specie of bourgeois production; agriculture is treated as the branch of production in which capitalist production—that is, the production of surplus value—exclusively appears. While feudalism is thus made bourgeois, bourgeois society is given a feudal semblance.

This resemblance deceived Dr. Quesnay’s adherents among the nobility, such as the crotchety and patriarchal Mirabeau the elder. Among the later representatives [VI-227] of the Physiocrats, especially Turgot, this illusion disappears completely, and the Physiocratic system is presented as the new capitalist society prevailing within the framework of feudal society. This therefore corresponds to bourgeois society in the epoch when the latter breaks its way out of the feudal order. Consequently, the starting-point is in France, in a predominantly agricultural country, and not in England, a predominantly industrial, commercial and seafaring country. In the latter country attention was naturally concentrated on circulation, on the fact that the product acquires value, becomes a commodity only when it becomes the expression of general social labour, money. In so far, therefore, as the question concerned not the form of value, but the magnitude of value and valorisation, profit upon expropriation—that is, relative profit as Steuart describes it—is what catches the eye. But if the creation of surplus value in the sphere of production itself is what has to be established, it is necessary first of all to go back to that branch of labour in which surplus value is found independently of circulation—that is, agriculture. The initiative was therefore taken in a predominantly agricultural country. Ideas related to those of the Physiocrats are to be found in fragmentary form in older writers who preceded them, partly in France herself, for example, Boisguillebert. But it is only with the Physiocrats that these ideas develop into an epoch-making system.

The agricultural labourer, depending on the minimum of wages, the strict nécessaire, reproduces more than this strict nécessaire, and this more is rent, surplus value, which is appropriated by the owners of the fundamental condition of labour—nature. So what they say is not: the labourer works more than the labour time required for the reproduction of his labour capacity; the value which he creates is therefore greater than the value of his labour capacity; or the labour which he gives in return is greater than the quantity of labour which he receives in the form of wages. But what they say is: the amount of use values which he consumes during the period of production is smaller than the amount of use values which he creates, and so a surplus of use values is left over.—Were he to work only for the time required to reproduce his own labour capacity, there would be nothing over.

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a The most indispensable, the absolutely necessary.—Ed.
But the Physiocrats only stuck to the point that the productivity of the earth enables the labourer, in his day’s labour, which is assumed to be a fixed quantity, to produce more than he needs to consume in order to continue to exist. The surplus value appears therefore as a gift of nature, through whose co-operation a definite quantity of organic matter—plant seeds, a number of animals—enables labour to transform more inorganic matter into organic.

On the other hand, it is taken for granted that the landowner confronts the labourer as a capitalist. He pays for the labour capacity, which the labourer offers to him as a commodity, and he receives in return not only an equivalent, but appropriates for himself the valorisation of this labour capacity. The alienation of the objective condition of labour from labour capacity itself is presupposed in this exchange. The starting-point is the feudal landowner, but he comes on to the stage as a capitalist, as a mere owner of commodities, who valorises the goods exchanged by him for labour, getting back not only their equivalent, but a surplus over this equivalent, because he pays for the labour capacity only as a commodity. He confronts the free labourer as an owner of commodities. In other words, this landowner is in essence a capitalist.

In this respect too the Physiocratic system hits the mark, inasmuch as the separation of the labourer from the soil and from the ownership of land is a fundamental condition [VI-228] for capitalist production and the production of capital.

Hence the contradictions in this system: it was the first to explain surplus value by the appropriation of the labour of others, and in fact to explain this appropriation on the basis of the exchange of commodities; but it did not see that value in general is a form of social labour and that surplus value is surplus labour. On the contrary, it conceived value merely as use value, merely as material substance, and surplus value as a mere gift of nature, which returns to labour, in place of a given quantity of organic material, a greater quantity. On the one hand, it stripped rent—that is, the true economic form of landed property—of its feudal wrapping, and reduced it to mere surplus value in excess of the labourer’s wage. On the other hand, this surplus value is explained again in a feudal way, as derived from nature and not from society; from man’s relation to the soil, not from his social relations. Value itself is resolved into mere use value, and therefore into material substance. But again what interests [the Physiocrats] in this material substance is its quantity—the excess of the use values produced over those consumed; that is, the purely
quantitative relation of the use values to each other, their mere exchange value, which in the last resort comes down to labour time.

All these are contradictions of capitalist production as it works its way out of feudal society, and interprets feudal society itself only in a bourgeois way, but has not yet discovered its own peculiar form—somewhat as philosophy first builds itself up within the religious form of consciousness, and in so doing on the one hand destroys religion as such, while on the other hand, in its positive content, it still moves only within this religious sphere, idealised and reduced to terms of thought.

Hence also, in the conclusions which the Physiocrats themselves draw, the ostensible veneration of landed property becomes transformed into the economic negation of it and the affirmation of capitalist production. On the one hand, all taxes are put on rent, or in other words, landed property is in part confiscated, which is what the legislation of the French Revolution sought to carry through and which is the final conclusion of the fully developed Ricardian modern political economy.\footnote{234} By placing the burden of tax entirely on rent, because it alone is surplus value—and consequently any taxation of other forms of income ultimately falls on landed property, but in a roundabout way, and therefore in an economically harmful way, that hinders production—taxation and along with it all forms of State intervention, are removed from industry itself, and the latter is thus freed from all intervention by the State. This is ostensibly done for the benefit of landed property, not in the interests of industry but in the interests of landed property.

Connected with this is \textit{laissez faire, laissez aller}\footnote{235}; unhampered free competition, the removal from industry of all interference by the State, monopolies, etc. Since industry [as the Physiocrats see it] creates nothing, but only transforms values given it by agriculture into another form; since it adds no new value to them, but returns the values supplied to it, though in altered form, as an equivalent; it is naturally desirable that this process of transformation should proceed without interruptions and in the cheapest way; and this is only realised through free competition, by leaving capitalist production to its own devices. The emancipation of bourgeois society from the absolute monarchy set up on the ruins of feudal society thus takes place only in the interests of the feudal landowner transformed into a capitalist \[VI-229\] and bent solely on enrichment. The capitalists are only capitalists in the interests of the landowner, just as political economy in its later develop-
ment would have them be capitalists only in the interests of the working class.

It can be seen therefore how little the modern economists, [such as] M. Eugène Daire (who published the works of the Physiocrats together with his prize essay on them), have understood the Physiocrats when they treat their specific theories—of the exclusive productivity of agricultural labour, of rent as the only surplus value, and of the landowners' pre-eminent status in the system of production—as if they had no connection and were only fortuitously associated with their proclamation of free competition, the principle of large-scale industry, of capitalist production. At the same time it is understandable how the feudal semblance of this system, in the same way as the aristocratic tone of the Enlightenment, was bound to win a number of feudal lords as enthusiastic supporters and propagandists of a system which, in its essence, proclaimed the rise of the bourgeois system of production on the ruins of the feudal.

We will now examine a number of passages, partly to elucidate and partly in support of theses advanced above.

With Quesnay himself, in the Analyse du tableau économique, the nation consists of 3 classes of citizens:

"the productive class" (AGRICULTURAL LABOURERS), "the class of landowners and the sterile class" ("all the citizens occupied with other services and with other labours than those of agriculture") (Physiocrates etc., éd. Eugène Daire, Paris, 1846, Part 1, p. 58).a

Only the agricultural labourers, not the landowners, appear as a productive class, as a class which creates surplus value. The importance of this class of landowners, which is not "sterile", because it is the representative of "surplus value", does not rest on its being the creator of surplus value, but exclusively on the fact that it appropriates surplus value.

[With] Turgot [the Physiocratic system is] most fully developed. In some passages in his writings the pure gift of nature is presented as surplus labour, and on the other hand the necessity for the labourer to yield up what there is in excess of his necessary wage [is explained] by the separation of the labourer from the conditions of labour, and their confronting him as the property of a class which uses them to trade with.

The first reason why agricultural labour alone is productive is that it is the natural basis and pre-condition for the independent pursuit of all other forms of labour.

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a Here and below Marx quotes Quesnay in French.—Ed.
Theories of Surplus Value. The Physiocrats

“His” (the husbandman’s) “labour, in the sequence of the labours divided among the different members of the society, retains the same primacy ... as the labour which provided his own food had among the different kinds of labour which, when he worked alone, he was obliged to devote to his different kinds of wants. We have here neither a primacy of honour nor of dignity; it is one of physical necessity... What his labour causes the land to produce beyond his personal wants is the only fund for the wages which all the other members of the society receive in exchange for their labour. The latter, in making use of the price of this exchange to buy in their turn the products of the husbandman, only return to him” (as matter) “exactly what they have received from him. We have here a very essential difference [VI-230] between these two kinds of labour” (Réflexions sur la formation et la distribution des richesses (1766). 34 Turgot, Oeuvres, édit. Daire, Vol. I, Paris, 1844, [pp.] 9-10).

How then does surplus value arise? It does not arise from circulation, but it is realised in circulation. The product is sold at its value, not above its value. There is no excess of price over value. But because it is sold at its value, the seller realises a surplus value. This is only possible because he has not himself paid in full for the value which he sells, that is, because the product contains a portion of value which has not been paid for by the seller, which he has not offset by an equivalent. And this is the case with agricultural labour. The seller sells what he has not bought. Turgot at first presents this unbought element as a pure gift of nature. We shall see, however, that in his writings this pure gift of nature becomes imperceptibly transformed into the surplus labour of the labourers which the landowner has not bought, but which he sells in the products of agriculture.

“As soon as the labour of the husbandman produces more than his wants, he can, with this superfluity that nature accords him as a pure gift over and above the wages of his toil, buy the labour of the other members of the society. The latter, in selling it to him, gain only their livelihood; but the husbandman gathers, beyond his subsistence, a wealth which is independent and disposable, which he has not bought and which he sells. He is, therefore, the sole source of the riches, which, by their circulation, animate all the labours of the society, because he is the only one whose labour produces over and above the wages of labour” (l.c., [p.] 11).

In this first conception we have, to begin with, the essence of surplus value—that it is value realised in sale, without the seller having given an equivalent for it, without his having bought it. Unpaid value. But in the second place this is conceived as a pure gift of nature, this excess over the wage of labour; because after all it is a gift of nature, it depends on the productivity of nature that the labourer is able to produce in his day’s labour more than is necessary for the reproduction of his labour capacity, more than the amount of his wages. In this first conception the total product is still appropriated by the labourer himself. And this total
product is divided into 2 parts. The first forms his wages; he is presented as his own wage labourer, who pays himself the part of the product that is necessary for the reproduction of his labour capacity, for his subsistence. The second part, which is the excess over the first, is a gift of nature and forms surplus value. The nature of this surplus value, of this pure gift of nature, will however take clearer shape, when the premiss of the proprietor who cultivates his land is abandoned and the two parts of the product, wages and surplus value, accrue to different classes, the one to the wage labourer, the other to the landowner.

The formation of a class of wage labourers, whether in manufacture or in agriculture itself—at first all manufacturers appear only as stipendiés,\(^a\) wage labourers of the cultivating proprietor—requires the separation of the conditions of labour from labour capacity, and the basis for this separation is that the land itself becomes the private property of one part of society, so that the other part is cut off from this objective condition for valorisation of its labour.

“In the early stages there was no need to distinguish the proprietor from the cultivator.... In this early time, as every industrious man would find as much land as he [V1-231] wished, he could not be tempted to work for others.... But in the end all land found its master, and those who could not have properties had at first no other resource than that of exchanging the labour of their arms, in the employment of the stipendiary class” (i.e., the class of ARTISANS, of all non-agricultural labourers) “for the superfluous portion of the produce of the cultivating proprietor” (p. 12). The cultivating proprietor with the considerable surplus which the land gave to his labour, could “pay men to cultivate his land; and for men who live on wages, it was as good to earn them in this business as in any other. Thus ownership [of land] had to be separated from the labour of cultivation, and soon it was.... The landowners began to shift the labour of cultivating the soil on to the wage labourers” (p. 13).

In this way, therefore, the relation between capital and wage labour arises in agriculture itself. It first arises when a number of people find themselves cut off from ownership of the conditions of labour—above all from the land—and have nothing to sell but their labour itself.

For the wage labourer, however, who can no longer produce commodities, but must sell his labour itself, the minimum of wages, the equivalent of the necessary means of subsistence, necessarily becomes the law which governs his exchange with the owner of the condition of labour.

“The mere workman who has only his arms and his industry, has nothing unless he succeeds in selling his labour to others.... In every kind of work it cannot

\(^a\) Those who are paid (wages or a salary).—Ed.
fail to happen, and as a matter of fact it does happen, that the wages of the 
workman are limited to what is necessary to procure him his subsistence” (l.c., 
[p.] 10).

Then as soon as wage labour has arisen,

“the produce of land is divided into two parts: the one includes the subsistence 
and the profits of the husbandman, which are the reward of his labour and the 
condition upon which he undertakes to cultivate the field of the proprietor. What 
remains is that independent and disposable part which the land gives as pure gifts to 
him who cultivates it, over and above his advances and the wages of his labour; and 
this is the portion of the proprietor, or the revenue with which the latter can live 
without labour and which he uses as he will” ([p.] 14).

This pure gift of the land, however, is now already defined as a 
gift which it gives “to him who cultivates it”, and thus as a gift 
which it makes to labour; as the productive power of labour 
applied to the land, a productive power which labour possesses 
through using the productive power of nature and which it thus 
derives from the land—but it derives it from the land only as 
labour. In the hands of the landowner, therefore, the surplus 
appears no longer as a “gift of nature”, but as the appropria-
tion—without an equivalent—of another’s labour, which through 
the productivity of nature is enabled to produce means of 
subsistence in excess of its own needs, but which, because it is 
 wage labour, is restricted to appropriating for itself, out of the 
product of the labour, only “what is necessary to procure him” 
[the workman] “his subsistence”.

“The cultivator produces his own wages, and, in addition, the revenue which 
serves to pay the whole class of artisans and other stipendiaries.... The proprietor has 
nothing except through the labour of the cultivator” (therefore not through a pure gift 
of nature); “he receives from him his [VI-232] subsistence and that wherewith he 
pays the labours of other stipendiaries ... the cultivator has need of the proprietor 
only by virtue of conventions and laws” (l.c., [p.] 15).

Thus in this passage surplus value is explicitly stated to be the 
part of the cultivator’s labour which the proprietor appropriates 
to himself without giving any equivalent, and he sells the product 
of his labour, therefore, without having bought it. Only what 
Turgot has in mind is not exchange value as such, the labour time 
 itself, but the surplus of products which the cultivator’s labour 
supplies to the proprietor over and above his own wages; which 
surplus of products, however, is only the embodiment of the 
amount of time which he works gratis for the proprietor in 
addition to the time which he works for the reproduction of his 
wages.

We see thus how, within the limits of agricultural labour, the 
Physiocrats have a correct grasp of surplus value; they see it as a
product of the wage labourer's labour, although they in turn conceive this labour in the concrete form in which it appears in use values.

The capitalist exploitation of agriculture—

"leasing or letting of land"—is, it may be noted in passing, described by Turgot as "the most advantageous method of all, but it presupposes a country that is already rich" (I.c., p. 21).

// In considering surplus value it is necessary to turn from the sphere of circulation to the sphere of production. That is to say, to deduce surplus value not from the exchange of commodity for commodity, but from exchange as it occurs within production, between the owners of the conditions of labour and the labourers themselves. These too confront each other as owners of commodities, and consequently there is no assumption here of production independent of exchange.//

// In the Physiocratic system the proprietors are the salarains,\(^a\) labourers and manufacturers in all other branches of industry being wage labourers or stipendiaries. Consequently also the governing and the governed. //

Turgot analyses the conditions of labour as follows:

"In every craft, it is necessary that the workman should have tools in advance, that he should have a sufficient quantity of the materials upon which he has to labour; it is necessary that he should subsist while waiting for the sale of his finished goods" ([p.] 34).

All these advances, these conditions in which alone labour can be performed, which are therefore pre-conditions of the labour process, are originally provided gratis by the land:

It is the land which "has provided the first fund of advances prior to all cultivation", in fruits, fish, game, etc., in tools such as tree branches, stones, in domestic animals, which multiply through the process of procreation, and moreover each year yield products in milk, fleeces, "hides and other materials, which, with the wood obtained in the forests, have formed the first fund for the works of industry" (p. 34).

Now these conditions of labour, these advances to labour become capital as soon as they have to be advanced to the labourer by a third person, and this is the case from the moment when the labourer owns nothing but his labour capacity itself.

"When a large part of the society had only their arms to maintain them, it was necessary that those who thus lived on wages should begin by having something in advance, either to procure the materials upon which to labour or to maintain them while waiting for the payment of their wages" (pp. 37-38).

\(^a\) The payers of wages.—Ed.
[VI-233] Turgot defines "capitals" as

"accumulated movable values" (l.c., p. 38). Originally the proprietor or cultivator pays wages directly each day and supplies the material, for example, to the spinner of flax. As industry develops, larger advances and continuity of the process of production are necessary. This is then undertaken by the possessor of capital. In the price of his products he must recover all his advances and a profit equal to "what his money would have been worth to him if he had employed it in the purchase of an estate", besides his wages, "for doubtless, if the profit were the same, he would have preferred to live without any exertion on the revenue of the land he could have acquired with the same capital" ([pp.] 38-39).

The "stipendiary industrial class" is itself subdivided "into capitalist entrepreneurs and simple workers", etc. ([p.] 39).

Agricultural entrepreneurs are in the same position as these entrepreneurs. They must similarly get all their advances replaced, along with the profit as shown above.

"All this must first be deducted from the price of the products of the earth; the surplus serves the cultivator for paying the proprietor for the permission he has given him to make use of his field for setting his enterprise on foot. This is the price of the lease, the revenue of the proprietor, the net produce; for all the land produces, up to the amount that replaces the advances of every kind and the profits of the person who has made the advances, cannot be regarded as a revenue, but only as the return of the expenses of cultivation; when one considers that, if the cultivator did not get them back, he would take care not to employ his resources and his toil in cultivating the field of another" (l.c., p. 40).

Finally:

"Although capitals are partly formed by saving from the profits of the working classes, yet, as these profits always come from the earth—inasmuch as they are all paid either from the revenue, or as part of the expenditure which serves to produce the revenue—it is evident the capitals come from the land just as much as the revenue does; or, rather, that they are nothing but the accumulation of the part of the values produced by the land that the proprietors of the revenue, or those who share it with them, can lay by every year without using it for the satisfaction of their wants" ([p.] 66).

It is quite right that, if rent is the only surplus value, accumulation takes place only from rent. What the capitalists accumulate apart from rent, they pinch from their wages (their revenue, destined for their consumption—since this is how profit is defined).

As profit, like wages, is reckoned in with the costs of cultivation, and only the surplus forms the revenue of the proprietor, the latter—in spite of the honourable status given him—is in fact excluded from the costs of cultivation (and thereby from being an agent of production), just as with the Ricardians.

The emergence of the Physiocrats was connected both with the opposition to Colbertism and, in particular, with the hullabaloo over the John Law system.236
The confusion of value with material substance, or rather the equating of value with it, and the connection between this view and the whole outlook of the Physiocrats, comes clearly to light in the following extracts from Ferdinando Paoletti: I veri mezzi di render felici le società (in part directed against Verri, who in his Meditazioni sulla economia politica (1771), had attacked the Physiocrats), (Paoletti of Toscana, op. cit., Custodi, Parte Moderna, Vol. XX.)

"Such a multiplication of matter" as are the products of the earth "has certainly never taken place through industry, nor is it possible. This gives matter only form, it only modifies it; consequently nothing is created by industry. But, the objection may be raised, industry gives matter form, and consequently it is productive; even if this is not a production of matter, it is nevertheless one of form. Very well, then, I won't contest this. But that is not creation of wealth; on the contrary, it is nothing but an expense.... Political economy presupposes, and takes as the object of its investigation, material and real production, which is found only in agriculture, since this alone multiplies the substances and products which form wealth.... Industry buys raw materials from agriculture, in order to work them up; its labour—as we have already said—gives these raw materials only a form, but it adds nothing to them and does not multiply them" ([pp.] 196-97). "Give the cook a measure of peas, with which he is to prepare your dinner; he will put them on the table for you well cooked and well dished up, but in the same quantity as he was given, but on the other hand give the same quantity to the gardener for him to put into the ground; he will return to you, when the right time has come, at least fourfold the quantity that he had been given. This is the true and only production" [p.] 197). "Things receive value through the needs of men. Therefore the value or the increase of value of commodities is not the result of industrial labour, but of the labourers' outlays" ([p.] 198). "Hardly has a new manufacture of any kind made its appearance, but it immediately spreads within and outside the country; and see! very soon competition from other industrialists and merchants brings the price down to its correct level, which ... is determined by the value of the raw material and the costs of the labourers' maintenance" ([pp.] 204-05).

Agriculture is the first of all branches of industry to use the forces of nature for production on a considerable scale. Their use in manufacturing industry becomes apparent only at a higher stage of industrial development. The following quotation shows how, in this connection, Adam Smith still reflects the prehistory of large-scale industry and for this reason upholds the Physiocratic point of view, and how Ricardo answers him from the standpoint of modern industry.

In Book II, Ch. 5 Adam Smith says with reference to the rent of land:

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a In the manuscript Marx presumably by mistake gives the title of another work of Verri, Pensier sopra l'agricoltura.—Ed.
b See this volume, pp. 375-76.—Ed.
c Marx quotes in Italian.—Ed.
"It is the work of nature which remains after deducting or compensating everything which can be regarded as the work of man. It is seldom less than a fourth, and frequently more than a third of the whole produce. No equal quantity of productive labour employed in manufactures, can ever occasion so great a reproduction. *In them nature does nothing, man does all;* and the reproduction must always be in proportion to the strength of the agents that occasion it."*a

On which Ricardo comments [in his *On the Principles of Political Economy, and Taxation*, 2nd ed., 1819, note to pp. 61, 62:]

*"Does nature nothing for man in manufactures? Are the powers of wind and water, which move our machinery, and assist navigation, nothing? The pressure of the atmosphere and the elasticity of steam, which enable us to work the most stupendous engines—are they not the gifts of nature? to say nothing of the effects of the matter of heat in softening and melting metals, of the decomposition of the atmosphere in the process of dyeing and fermentation. There is not a manufacture which can be mentioned, in which nature does not give her assistance to man, and give it too, generously and gratuitously."*  

That the Physiocrats regarded profit as only a deduction from rent:

*"The Physiocrats say, for instance, of the price of a piece of lace, one part merely replaces what the labourer consumed, and the other part is only transferred from one man's pocket" //i.e., that of the landlord// "to another's"* (An Inquiry into those Principles, Respecting the Nature of Demand and the Necessity of Consumption, Lately Advocated by Mr. Malthus etc., London, 1821,b p. 96).  

The view of Adam Smith and his followers that the accumulation of capital is due to personal stinting and saving and self-denial of the capitalists also originates from the view of the Physiocrats that profit (including interest) is merely revenue for the consumption of the capitalist. They could say this because they only regarded land rent as the true economic, so to speak legitimate, source of accumulation.

"He," says Turgot, i.e., the husbandman, "is the only one whose labour produces over and above the wages of labour" (Turgot, l.c., p. 11).

Here the entire profit is thus reckoned in with the wages of labour.

[V1-236] "The cultivator creates over and above that restitution" (of his own wages) "the revenue of the proprietor; and the artisan creates no revenue, either for himself or for others" (l.c., p. 16). "All the land produces up to the amount that replaces the advances of every kind and the profits of the person who has made the advances, cannot be regarded as a revenue, but only as the return of the expenses of cultivation" (l.c., [p.] 40).

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*b The manuscript has "1829", the change has been made in somebody else's hand.—*Ed.
Adolphe Blanqui. *Histoire de l'économie politique*, Brussels, 1839, says on p. 139:

[The Physiocrats were of the opinion that] “Labour applied to the cultivation of the soil produced not only the wherewithal to maintain the labourer throughout the entire duration of the task, but also an excess of value” (surplus value) “which could be added to the mass of already existing wealth. They called this excess the net product.”

(Thus they conceive surplus value in the form of the use values in which it appears.)

“The net product had necessarily to belong to the owner of the land and constituted in his hands a revenue fully at his disposal. What then was the net product of the other industries?... Manufacturers, merchants, workmen, all were the employees, the stipendiaries of agriculture, sovereign creator and dispenser of all wealth. The products of the labour of these latter represented in the system of the Economists only the equivalent of what they had consumed during the task, so that after their work was completed, the sum total of wealth was absolutely the same as before, unless the workmen or the masters had placed in reserve, i.e., saved, what they had the right to consume. Thus, then, labour applied to the soil was the only labour productive of wealth, and labour in other industries was regarded as sterile, because no increase in the general capital resulted from it.”

(Thus the Physiocrats saw the production of surplus value as the essence of capitalist production. It was this phenomenon that they had to explain. And it remained the problem, after they had eliminated the profit of expropriation of the Mercantile system.)

“In order to acquire money,” says Mercier de la Rivière, “one must buy it, and, after this purchase, one is no richer than one was before; one has simply received in money the same value that one has given in commodities” (Mercier de la Rivière, *L'ordre naturel et essentiel des sociétés politiques*, Vol. II, p. 338).

This holds good both for [V1-237] purchase and for sale, as also for the result of the whole metamorphosis of the commodity, or the result of purchase and sale, the exchange of different commodities at their value, hence the exchange of equivalents. Whence, therefore, comes surplus value? That is, whence comes capital? That was the problem for the Physiocrats. Their error was that they confused the increase of material substance, which because of the natural processes of vegetation and generation distinguishes agriculture and stockraising from manufacture, with the increase of exchange value. Use value was their starting-point. And the use value of all commodities, reduced, as the scholastics say, to a universal, was the material substance of nature as such, whose increase in the same form occurs only in agriculture.)

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*a* Here and below Marx quotes Blanqui in French.— Ed.

*b* Here and below Marx quotes Mercier de la Rivière in French.— Ed.
Germain Garnier, the translator of Adam Smith and himself a Physiocrat, correctly expounds their *theory of savings*, etc. First he says that manufacture, as the Mercantilists maintained of all production, can only produce surplus value through the *profit of expropriation*, by selling commodities above their value, so that only a new distribution of values created takes place, but no new addition to the created values.

"The labour of artisans and manufacturers, opening no new source of wealth, can only be profitable through advantageous exchanges, and has only a purely relative value, a value which will not be repeated if there is no longer the opportunity to gain on the exchanges" (his translation *Recherches sur la nature et les causes de la richesse des nations*, Vol. V, Paris, 1802, p. 266).

Or the savings which they make, the values which they secure over and above those which they expend, must be stinted from their own consumption.

"The labour of artisans and manufacturers, though only able to add to the general amount of the wealth of society the savings made by the wage labourers and the capitalists, may well tend by these means to enrich society" (i.e., p. 266).

And in greater detail:

"The labourers in agriculture enrich the State by the very product of their labour; labourers in manufactures and commerce, on the contrary, cannot enrich it otherwise than through savings on their own consumption. This assertion of the Economists is a consequence of the distinction which they have established, and appears to be quite incontestable. Indeed, the labour of artisans and manufacturers cannot add anything else to the value of the material than the value of their own labour, i.e., the value of the wages and profits which this labour should have earned, at the rates actually current in the country [VI-238] for the one and the other. For these wages, whether they be small or large, are the reward of labour; they are what the labourer has the right to consume and is presumed to consume; because it is only in consuming them that he can enjoy the fruits of his labour, and this enjoyment is all that in reality constitutes his reward. Similarly profits, whether they be high or low, are also regarded as the daily and continuous consumption of the capitalist, who is naturally presumed to proportion his enjoyments to the revenue that his capital gives him. Thus unless the workman curtails a part of the comforts to which he has the right in accordance with the current rate of wages assigned to his labour; unless the capitalist resigns himself to saving a part of the revenue which his capital brings him, both the one and the other will consume, in proportion as the piece of work is completed, the whole value resulting from this work. The total quantity of the wealth of society will then be, after their labour is over, the same as it was before, unless they have saved a part of what they had the right to consume and what they could consume without being charged with wasting; in which case the total quantity of the wealth of society will have been increased by the whole value of these savings. Consequently it is correct to say that the agents of manufacture and commerce can only add to the total quantity of wealth existing in society by their privations alone" (i.e., pp. 263-64).

Garnier is also quite correct in noting that Adam Smith's theory of accumulation through savings rests on this Physiocratic founda-
The Production Process of Capital

Adam Smith was strongly infected by the Physiocrats, as he nowhere shows more strikingly than in his critique of the Physiocrats.

Garnier says:

"Finally, if the Economists have maintained that manufacturing and commercial industry can only add to the national wealth by privations, Smith has likewise said that industry would be practised in vain, and the capital of a country would never grow larger, unless the economy augmented it by its savings" (Book II, ch. 3 [p. 326]). "Smith is therefore in full agreement with the Economists and so on" (i.e., p. 270).

Among the immediate historical circumstances which facilitated the spread of Physiocratic theory and even its emergence, Adolphe Blanqui, in the work already mentioned, adduces:

"Of all the values which shot up in the feverish atmosphere of the system" (Law's), "nothing remained except ruin, desolation and bankruptcy. Landed property alone did not go under in the storm."

"For this reason M. Proudhon, in Philosophie de la misère, puts landed property only after credit."

"It even improved its position by changing hands and by being subdivided on a large scale, perhaps for the first time since feudalism" (i.e., p. 138).

In particular,

"The innumerable changes of ownership which were effected under the influence of the system, began the process of parceling out property.... Landed property arose for the first time from the condition of torpor in which the feudal system had kept it for so long. This was a real awakening for agriculture.... It" (the land) "passed now from out of a condition of mortmain and came into circulation" (pp. 137-38).

Turgot as well as Quesnay and his other adherents also want capitalist production in agriculture. Thus Turgot:

"The leasing or letting of land ... this latter method" (large-scale agriculture, based on the modern system of leases) "is the most advantageous of all, but it presupposes a country that is already rich" (see Turgot, i.e., p. 21).

And Quesnay in his Maximes générales du gouvernement économique d'un royaume agricole:

"The pieces of land which are employed in growing grain should as far as possible be joined together in large-scale farms which can be managed by rich farmers" (i.e., capitalists) "since the expenses for the maintenance and repair of the buildings are smaller and therefore the costs are correspondingly much lower and the net product much greater in the case of large agricultural undertakings than in the case of small" [pp. 96-97].

In the same passage Quesnay admits that the increased productivity of agricultural labour accrues to the "net revenue",
and therefore in the first place to the landowner, i.e., the owner of surplus value, and that the relative increase of the latter arises not from the land but from the social and other arrangements for raising the productivity of labour. [VI-240] For he says in the same place:

"Every advantageous" //i.e., advantageous to the net product// "economy in labour which can be accomplished with the aid of animals, machines, water-power and so on, will be of benefit to the population," etc. [pp. 96-97].

At the same time Mercier de la Rivière (i.e., Vol. II, p. 407) has an inkling that surplus value at least in manufacture has something to do with the manufacturing workers themselves. (Turgot extended this to all production, as already mentioned.) In the passage cited he exclaims:

"Moderate your enthusiasm, ye blind admirers of the false products of industry! Before ye exalt its miracles, open your eyes and see how many live in poverty or at least, in need, among those producers who understand the art of converting 20 sous into the value of a thousand écus. Who then benefits by this enormous increase in value? What do you say! Comforts are unknown to those through whose hands it is accomplished. Take warning then by this contrast!"

Contradictions in the system of the Economists,238 taken as a whole. Among others, Quesnay was for the absolute monarchy.

"There must be only one supreme power.... The system of opposing forces in a government is ruinous. It merely indicates discord among the great and the suppression of the small people" (in the above-mentioned Maximes générales etc.) [p. 81].

Mercier de la Rivière:

"By the very fact that man is intended to live in a community, he is intended to live under a despotism" ([L'Ordre naturel et essentiel des sociétés politiques], Vol. I, p. 281).

And to crown all the "Friend of the People",240 the Marquis de Mirabeau—Mirabeau le père! It was precisely this school, with its laissez faire, laissez aller, that overthrew Colbertism236 and all forms of government interference in the activities of civil society. It allowed the State to live on only in the pores of this society, as Epicurus placed his gods in the pores of the world241! The glorification of landed property in practice turns into the demand that taxes should be put exclusively on ground rent, [and this implies] the virtual confiscation of landed property by the State, just as with the radical section of the Ricardians.234 The French Revolution, in spite of the protests of Roederer and others, accepted this taxation theory.

Turgot himself [was] the radical bourgeois minister who prepared the way for the French Revolution. For all their sham
feudal pretences the Physiocrats were working hand in hand with the Encyclopædists.\[242\]

[VI-241] We shall come back again later to the great service rendered by the Physiocrats RESPECTING THE ANALYSIS OF CAPITAL.\[292\]

Meanwhile just this point: surplus value (according to them) is due to the productivity of a special kind of labour, agricultural labour. And on the whole this special productivity is due to nature itself.

In the Mercantile system, surplus value is only relative—what one wins, the other loses: PROFIT UPON ALIENATION OR OSCILLATION OF WEALTH BETWEEN DIFFERENT PARTIES.\[a\] So that within a country, if we consider the total capital, no creation of surplus value in fact takes place. It can only arise in the relations between one nation and other nations. And the surplus realised by one nation as against the other takes the form of money (the balance of trade), because it is precisely money that is the direct and independent form of exchange value. In opposition to this—for the Mercantile system in fact denies the creation of absolute surplus value—the Physiocrats seek to explain absolute surplus value: the net product. And since the net product is fixed in their minds as use value, agriculture [is for them] the sole creator of it.

Turgot sought to anticipate the measures of the French Revolution. By the edict of February 1776 he abolished the guilds. (This edict was revoked three months after it was promulgated.) Similarly he annulled the road-making corvée des paysans.\[b\] He tried to introduce the impôt unique\[c\] on rent of land.

One of the most naïve representatives of Physiocratic theory—how far removed he is from Turgot!—is the old smell-out of demagogues\[243\] and royal Prussian Privy Councillor Schmalz. For instance:

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\[a\] See this volume, p. 348 et seq.—Ed.

\[b\] Compulsory labour exacted of the peasants.—Ed.

\[c\] Single tax.—Ed.
“If nature pays him” (the lessor of the land, the landowner) “even double the legal interests, on what plausible ground could anyone dare to deprive him of it?” (Économie politique, traduit par Henri Jouffroy, etc., Vol. I. Paris, 1826, p. 90.244).b

The minimum of wages is so formulated by the Physiocrats that the consumption (or expenditure) of the labourers is equal to the wage that they receive. Or as Mr. Schmalz puts it in a general way:

“The average wage in a trade is equal to the average of what a man in this trade consumes during the time of his labour” (l.c., p. 120).

“Rent of land is the one and only element of the national revenue; [VI-242] and interest on capitals employed and the wages of all kinds of labours only make the product of this rent pass and circulate through everyone’s hands” (Schmalz, l.c., Vol. I, [pp.] 309-10).

“The utilisation of the land, its faculty, its capacity for the annual reproduction of rent, is all that constitutes the national wealth” (l.c., p. 310).

“If we go back to the foundations, to the first elements of the value of all objects, whatsoever they may be, we are forced to recognise that this value is nothing other than that of the simple products of nature; that is to say, although labour may have given a new value to these objects and raised their price, this new value, or this price, is only made up nevertheless of the total values put together of all the natural products which, because of the new form that labour has given them, have been destroyed, consumed, or used by the labourer in one way or another” (l.c., p. 319).

“This kind of labour” (agriculture proper) “being the only labour that contributes to the production of new bodies, it is therefore the only labour that can, up to a certain point, be considered productive. As for labours in working up material or in industry ... they simply give a new form to bodies which nature has produced” (Schmalz, l.c., pp. 15-16).

Against the superstition of the Physiocrats.

Verri (Pietro): Meditazioni sulla economia politica. (First printed 1771), Custodi, Parte Moderna, Vol. XV, p. [21,]22:

“All the phenomena of the universe, whether produced by the hand of man or through the universal laws of physics, are not actual new creations, but merely a modification of matter. Joining together and separating are the only elements which the human mind always finds on analysing the concept of reproduction; and it is just the same with the reproduction of value and of wealth, when earth, air and water in the fields are transformed into corn, or when the hand of man transforms the

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a The words “the lessor of the land” were written in French in the manuscript.— Ed.

b Here and below Marx quotes Schmalz in French.— Ed.

c In the manuscript part of this sentence was written by Marx in French.— Ed.
secretions of an insect into silk, or some pieces of metal are arranged to make the mechanism of a watch.”

Further:

The Physiocrats call “the class of manufacturing labourers sterile, because in their view the value of manufactured products is equal to the raw material plus the means of subsistence which the labourers consume during the time of manufacture” (l.c., p. 25).

[VI-243] On the other hand, Verri calls attention to the constant poverty of the contadini in contrast to the progressive enrichment of the artigiani, and then goes on to say:

“This proves that the artisan, in the price which he receives, gets not only the replacement of his outlay on consumption, but a certain sum over and above that; and this sum is a new quantity of value created in the annual production” (l.c., p. 26).

“The value reproduced is that part of the price of an agricultural or industrial product which exceeds the original value of the material and the outlay on consumption incurred while it is being produced. In agriculture the seed and the consumption of the peasant must be deducted: equally in manufacture one must deduct the raw material and the worker’s consumption; and so every year a reproduced value is created, to the amount of the part that remains” (l.c., pp. 26-27).

c) ADAM SMITH

Adam Smith, like all economists worth speaking of, takes over from the Physiocrats the conception of the average wage, which he calls the prix naturel du salaire.

“A man must always live by his work, and his wages must at least be sufficient to maintain him. They must even upon most occasions be somewhat more, otherwise it would be impossible for him to bring up a family, and the race of such workmen could not last beyond the first generation” ([Garnier,] t. I, l. I, ch. VIII, p. 136) [Vol. I, pp. 113-14].


* “The produce of labour constitutes the natural recompense or wages of labour. In that original state of things, which precedes both the appropriation of land and the accumulation of stock, the whole produce of labour belongs to the labourer. He has neither landlord nor master to share with him. Had this state continued, the wages of labour would have augmented with all those improvements in its productive powers, to which the division of labour gives occasion. All things would gradually have become cheaper.” *

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a Agricultural population.— Ed.
b Artisans.— Ed.
At any rate *all those things requiring a smaller quantity of labour for their reproduction, but they “would” not only have become cheaper; they have, in point of fact, become cheaper.* //

*“They would have been produced by a smaller quantity of labour; and as the commodities produced by equal quantities of labour would naturally in this state of things be exchanged for one another, they would have been purchased likewise with [VI-244] the produce of a smaller quantity. But this original state of things, in which the labourer enjoyed the whole produce of his own labour, could not last beyond the first introduction of the appropriation of land and the accumulation of stock. It was at an end, therefore, long before the most considerable improvements were made in the productive powers of labour, and it would be to no purpose to trace further what might have been its effects upon the recompense or wages of labour”* (Vol. I, pp. 107-09).

Here Adam Smith very acutely notes that the really great development of the productive power of labour starts only from the moment when it is transformed into wage labour, and the conditions of labour confront it on the one hand as landed property and on the other as capital. The development of the productive power of labour thus begins only under conditions in which the labourer himself can no longer appropriate its results. It is therefore quite useless to investigate how this growth of productive powers might have influenced or would influence “wages”, taken here as equal to the product of labour, on the premiss that the product of labour (or the value of this product) belonged to the labourer himself.

Adam Smith is very copiously infected with the conceptions of the Physiocrats, and often whole strata run through his work which belong to the Physiocrats and are in complete contradiction with the views specifically advanced by him. This is so, for example, in the theory of rent, etc. For our present purpose we can completely disregard these passages in his writings, which are not characteristic of himself, but in which he is a mere Physiocrat.246

In the first part of this work, when dealing with the analysis of the commodity, I have already pointed out a Adam Smith’s inconsistency in his treatment of how exchange value is determined. In particular, [I have shown] how he sometimes confuses, and at other times replaces, the determination of the value of commodities by the quantity of labour required for their production, with its determination by the quantity of living labour with which commodities can be bought, or, what is the same thing, the

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quantity of commodities with which a definite quantity of living labour can be bought. Here he makes the *exchange value* of labour the measure for the value of commodities. In fact, he makes *wages* the measure; for wages are equal to the quantity of commodities bought with a definite quantity of living labour, or to the quantity of labour that can be bought by a definite quantity of commodities. The value of labour, or rather of labour capacity, changes, like that of any other commodity, and is in no way specifically different from the value of other commodities. Here value is made the measuring rod and the basis for the explanation of value—so we have a *cercle vicieux*.

From the exposition that follows, however, it will be seen that this vacillation and this jumbling up of completely heterogeneous determinations do not affect Smith’s investigations into the nature and origin of surplus value, because in fact, without even being aware of it, everywhere in his analysis, he keeps firmly to the correct determination of the exchange value of commodities—that is, its determination by the quantity of labour or the labour time expended on them.

[V1-245] Secondly, however, this contradiction in Adam Smith and his passing from one kind of explanation to another is based upon something deeper, which Ricardo, in exposing this contradiction, overlooked or did not rightly appreciate, and therefore also did not solve. Let us assume that all labourers are producers of commodities, and not only produce their commodities but also sell them. The value of these commodities is determined by the necessary labour time contained in them. If therefore the commodities are sold at their value, the labourer buys with one commodity, which is the product of 12 hours’ labour time, another 12 hours’ labour time in the form of another commodity, i.e., 12 hours’ labour time which is embodied in another use value. The value of his labour is therefore equal to the value of his commodity, i.e., it is equal to the product of 12 hours’ labour time. The selling and buying again, in a word, the whole process of exchange, the metamorphosis of the commodity, alters nothing in this. It alters only the form of the use value in which this 12 hours’ labour time appears. The value of labour is therefore equal to the value of the product of labour. In the first place, equal quantities of objectified labour are exchanged in the commodities—in so far as they are exchanged at their value. Secondly, however, a certain quantity of living labour is exchanged

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*a Vicious circle.—* Ed.
for an equal quantity of objectified labour, because, firstly, the living labour is objectified in a product, a commodity, which belongs to the labourer, and secondly, this commodity is in turn exchanged for another commodity which contains an equally large quantity of labour. In fact, therefore, a certain quantity of living labour is exchanged for an equal amount of objectified labour. Thus it is not only commodity exchanging for commodity in the proportion in which they represent an equal quantity of objectified labour time, but a quantity of living labour exchanging for a commodity which represents the same quantity of labour objectified.

On this assumption the value of labour (the quantity of commodities which can be bought with a given quantity of labour, or the quantity of labour which can be bought with a given quantity of commodities) could serve as the measure of the value of a commodity just as well as the quantity of labour contained in it, since the value of labour always represents the same quantity of objectified labour as the living labour requires for the production of this commodity; in other words, a definite quantity of living labour time would always command a quantity of commodities which represents an equal amount of objectified labour time. But in all modes of production—and particularly in the capitalist mode of production—in which the objectified conditions of labour belong to one or several classes, while on the other hand nothing but labour capacity belongs to another class, the working class, what takes place is the opposite of this. The product or the value of the product of labour does not belong to the labourer. A definite quantity of living labour does not command the same quantity of objectified labour, or a definite quantity of labour objectified in a commodity commands a greater quantity of living labour than is contained in the commodity itself.

But as Adam Smith quite correctly takes as his starting-point the commodity and the exchange of commodities, and thus the producers initially confront each other only as possessors of commodities, sellers of commodities and buyers of commodities, he therefore discovers (so it seems to him) that in the exchange between capital and wage labour, [VI-246] objectified labour and living labour, the general law at once ceases to apply, and commodities (for labour too is a commodity in so far as it is bought and sold) do not exchange in proportion to the quantities of labour which they represent. Hence he concludes that labour time is no longer the immanent measure which regulates the exchange value of commodities, from the moment when the
conditions of labour confront the wage labourer in the form of landed property and capital. He should on the contrary, as Ricardo rightly points out, have drawn the opposite conclusion, that the expressions “quantity of labour” and “value of labour” are now no longer identical, and that therefore the relative value of commodities, although determined by the labour time contained in them, is not determined by the value of labour, since that was only correct so long as the latter expression remained identical with the former. Later on, when we deal with Malthus, we can show how wrong and absurd it would be, even when the labourer appropriated his own product, i.e., the value of his own product, to make this value or the value of labour the measure of value, in the same sense in which labour time or labour itself is the measure of value and the value-creating element. For even in that case the labour which can be bought with a commodity cannot serve as a measure in the same sense as the labour contained in it. One would be merely an index to the other.

In any case Adam Smith feels the difficulty of deducing the exchange between capital and labour from the law that determines the exchange of commodities, since the former apparently rests on quite opposite and contradictory principles. And indeed the contradiction could not be solved so long as capital was set directly against labour instead of against labour capacity. Adam Smith was well aware that the labour time expended on the reproduction and maintenance of labour capacity is very different from the labour which it [labour capacity] itself can perform. Thus he himself quotes from Cantillon’s *Essai sur la nature du commerce*...:

"The labour of an able-bodied slave, the same author adds, is computed to be worth double his maintenance; and that of the meanest labourer, he thinks, cannot be worth less than that of an able-bodied slave" (Garnier, t. I, l. I, ch. VIII, p. 137) [Vol. I, p. 114].

On the other hand it is strange that Adam Smith did not grasp how little the objection he raises has to do with the law that determines the exchange of commodities for each other. That commodities A and B exchange in proportion to the labour time contained in them is in no way upset by the proportions in which the producers A or B divide the products A and B, or rather their value, between themselves. If a part of A goes to the landowner, another to the capitalist, and a third part to the labourer, no matter what the share of each may be, this does not alter the fact that A itself exchanges with B according to its value. The relation between the labour time contained in commodities A and B is in
no way affected by how the labour time contained in A and B is appropriated by various persons.

"When the exchange of broadcloth for linen has been accomplished, the producers of broadcloth will share in the linen in a proportion equal to that in which they previously shared in the broadcloth" (Misère de la philosophie, p. 29).a

It is this, too, that later the Ricardians rightly maintained against Adam Smith. Thus the Malthusian John Cazenove says:

* "Interchange of commodities and distribution must be kept distinct from each other ... the circumstances which affect the one do not always affect the other. For instance, a reduction in the cost of producing any particular commodity will alter its relation to all others: but it will not necessarily alter its own distribution, nor will it in any way affect theirs. Again, a general reduction in the value of commodities affecting them all alike will not alter their relation to each other. It might or might not affect their distribution etc." * (John Cazenove: Preface to his edition of Malthus's Definitions in Political Economy, London, 1853 [p. VI]).

But since the "distribution" of the value of the product between capitalist and worker is itself based on an exchange between commodities—commodities and labour capacity—Adam Smith is justifiably startled. The fact that he had also made the value of labour, or the extent to which a commodity (or money) can purchase labour, the measure of value, has a disturbing effect on Smith's argument when he comes to the theory of prices, shows the influence of competition on the rate of profit, etc.; it deprives his work of all unity, and even excludes a number of essential questions from his inquiry. As we shall soon see, however, it did not affect his exposition of surplus value in general, because here he keeps consistently to the correct determination of value by the labour time expended in different commodities.

So now to his treatment of the question.

But first we must mention one other circumstance. Adam Smith mixes up different things. First he states in Book I, Ch. V:

"Every man is rich or poor according to the degree in which he can afford to enjoy the necessaries, conveniences and amusements of human life. But after the division of labour has once thoroughly taken place, it is but a very small part of these with which a man's own labour can supply him. The far greater part of them he must derive from the labour of other people, and he must be rich or poor according to the quantity of that labour which he can command, or which he can afford to purchase. The value of any commodity, therefore, to the person who possesses it, and who means not to use or consume it himself, but to exchange it for other commodities, is equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of the exchangeable value of all commodities" ([Garnier,] t. I, pp. 59, 60) [Vol. I, pp. 53-54].


27*
Further:

"They" (the goods) "contain the value of a certain quantity of labour, which we exchange [V1-248] for what is supposed at the time to contain the value of an equal quantity of labour.... It was not by gold or by silver, but by labour, that all the wealth of the world was originally purchased; and its value, to those who possess it, and who want to exchange it for some new productions, is precisely equal to the quantity of labour which it can enable them to purchase or command" ([Garnier,] [I.] 1, [ch.] V, pp. 60-61) [Vol. I, p. 54].

Finally:

"Wealth, as Mr. Hobbes says, is power. But the person who either acquires, or succeeds to a great fortune, does not necessarily acquire or succeed to any political power, either civil or military... The power which that possession immediately and directly conveys to him, is the power of purchasing, the right to command all the labour of other people or all the produce of this labour which is then in the market" ([Garnier,] l.c., p. 61) [Vol. I, pp. 54-55].

It can be seen that in all these passages Adam Smith confuses the labour of other people with the produce of this labour. The exchange value of the commodity which anyone possesses consists—after the division of labour—in the commodities belonging to someone else which he can buy, i.e., in the quantity of someone else's labour which is contained in them, the quantity of someone else's materialised labour. And this quantity of the labour of others is equal to the quantity of labour that is contained in his own commodity. As he expressly says:

"The goods contain the value of a certain quantity of labour, which we exchange for what is supposed at the time to contain the value of an equal quantity of labour."

The emphasis here is on the change brought about by the division of labour: that is to say, that wealth no longer consists in the product of one's own labour, but in the quantity of the labour of others which this product commands, the social labour which it can buy, the quantity of which is determined by the quantity of labour it itself contains. In fact, only the concept of exchange value is here involved—that my labour now counts only as social labour, and consequently its product determines my wealth by its command over an equal quantity of social labour. My commodity, which contains a definite quantity of necessary labour time, gives me command over all other commodities of equal value, and therefore over an equal quantity of the labour of others realised in other use values. The emphasis here lies on the equalisation, brought about through the division of labour and exchange value, of my labour with the labour of others, in other words, with social labour (the fact that my labour too, or the labour contained in my commodities, is already socially determined, and has fundamental-
ly changed its character, escapes Adam), and not at all on the
difference between objectified labour and living labour, and the
specific laws of their exchange. In fact, Adam Smith is here saying
nothing more than that the value of commodities is determined by
the labour time contained in them, and that the wealth of the
owner of commodities consists in the quantity of social labour at
his disposal.

However, the equating here of labour and product of labour
[V1-249] in fact provides the first occasion for the confusion
between the determination of the value of commodities by the
quantity of labour contained in them, and the determination of
their value by the quantity of living labour that they can buy, in
other words, their determination by the value of labour. When
Adam Smith says:

"His fortune is greater or less precisely in proportion to the extent of this
power, or to the quantity of either of other men's labour, or, what is the same thing"
(here is the false identification) "of the produce of other men's labour, which it enables him
to purchase or command" ([Garnier, l.c., p. 61] [Vol. I, p. 55],

he might just as well have said: it is in proportion to the
quantity of social labour contained in his own commodity or
fortune; as indeed he also says:

"They" (the goods) "contain the value of a certain quantity of labour, which we
exchange for what is supposed at the time to contain the value of an equal quantity
of labour."

(The word value is here superfluous and meaningless.) The
false conclusion emerges already in this Chapter V, when for
example he says:

"Labour, therefore, never varying in its own value, is alone the ultimate and real
standard by which the value of all commodities can at all times and places be estimated
and compared" ([Garnier,] p. 66) [Vol. I, p. 58].

What is true of labour itself and consequently of its measure,
labour time—that the value of commodities is always proportion-
ate to the labour time realised in them, no matter how the value of
labour may change—is here claimed for this changing value of
labour itself.

Here Adam Smith is examining only commodity exchange in
general: the nature of exchange value, of the division of labour
and of money. The parties to the exchange still confront each
other only as owners of commodities. They buy the labour of
others in the form of a commodity, just as their own labour
appears in the form of a commodity. The quantity of social labour
which they command is therefore equal to the quantity of labour
contained in the commodity with which they themselves make the purchase. But when in the following chapters he comes to the exchange between objectified labour and living labour, between capitalist and worker, and then stresses that the value of the commodity is now no longer determined by the quantity of labour it itself contains, but by the quantity—which is different from this—of living labour of others which it can command, i.e., buy, he is not in fact saying by this that commodities themselves no longer exchange in proportion to the labour time they contain; but that the increase of wealth, the increase of the value contained in the commodity, and the extent of this increase, depends upon the greater or less quantity of living labour which the objectified labour sets in motion. And put in this way it is correct. Smith, however, remains unclear on this point.

[VI-250] In Chapter VI of Book I Adam Smith passes on from those relations in which it is assumed that the producers confront one another only as sellers and possessors of commodities to the relations of exchange between those who possess the conditions of labour and those who possess labour capacity alone.

"In that early and rude state of society which precedes both the accumulation of stock and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different objects of exchange, seems to be the only circumstance which can afford any rule for exchanging them for one another.... It is natural that what is usually the produce of two days' or two hours' labour, should be worth double of what is usually the produce of one day's or one hour's labour" (Garnier, t. I, l. 1, ch. VI, pp. 94-95) [Vol. I, p. 81].

That is to say, the labour time necessary to produce different commodities determines the proportion in which they exchange for one another, or their exchange value.

"In this state of things, the whole produce of labour belongs to the labourer; and the quantity of labour commonly employed in acquiring or producing any commodity, is the only circumstance which can regulate the quantity of labour which it ought commonly to purchase, command, or exchange for" ([Garnier,] l.c., [p.] 96) [Vol. I, p. 82].

Consequently, on this assumption the labourer is a mere seller of commodities, and one commands the labour of another only in so far as he buys the other's commodity with his commodity. He thus commands with his commodity only so much of the other's labour as is contained in his own commodity, since both exchange only commodities against each other, and the exchange value of the commodities is determined by the labour time or quantity of labour they contain.

But, Adam continues:
“As soon as stock has accumulated in the hands of particular persons, some of them will naturally employ it in setting to work industrious people, whom they will supply with materials and subsistence, in order to make a profit by the sale of their work, or by what their labour adds to the value of the materials” ([Garnier,] i.e., p. 96) [Vol. I, pp. 82-83].

Stop, before we follow the passage further. D’abord, whence come the industrious people who possess neither means of subsistence nor materials of labour—people who are hanging in mid air? If we strip Smith’s statement of its naive phrasing, it means nothing more than: capitalist production begins from the moment when the conditions of labour belong to one class, and another class has at its disposal only labour capacity. This separation of labour from the conditions of labour is the pre-condition of capitalist production.

Secondly, however, what does Adam Smith mean when he says that the employers of labour set labourers to work “in order to make a profit by the sale of their work, or by what their labour [VI-251] adds to the value of the materials”? Does he mean by this that the profit comes from the sale, that the commodity is sold above its value—that is, what Steuart calls profit upon alienation, which is nothing but a vibration of wealth between parties? Let him answer for himself.

“In exchanging the complete manufacture either for money, for labour” (here again is a source of new error) “or for other goods, over and above what may be sufficient to pay the price of the materials, and the wages of the workmen, something must be given for the profits of the undertaker of the work, who hazards his stock in this adventure” ([Garnier,] i.e.) [Vol. I, p. 83].

(We shall return to this “hazarding” later, see Notebook VII, p. 173, in the chapter on the apologetic accounts of profit.) This something given for the profits of the undertaker, when the complete manufacture is exchanged, does it come from the sale of the commodity above its value, is it Steuart’s profit upon alienation?

“The value,” Adam continues immediately, “which the workmen add to the materials, therefore, resolves itself in this case” (when capitalist production has begun) “into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced” ([Garnier,] i.e., pp. 96-97) [Vol. I, p. 83].

Here therefore Adam Smith explicitly states: the profit which is made on the sale of the complete manufacture originates not from the sale itself, not from the sale of the commodity above its value, is not profit upon alienation. The value, that is, the quantity of labour

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a In the first place.—Ed.
which the workmen add to the material, falls rather into 2 parts. One pays their wages or is paid for through their wages. By this transaction the workmen give in return only as much labour as they have received in the form of wages. The other part forms the profit of the capitalist, i.e., it is a quantity of labour which he sells without having paid for it. If therefore he sells the commodity at its value, i.e., for the labour time contained in it, in other words if he exchanges it for other commodities in accordance with the law of value, then his profit originates from the fact that he has not paid for a part of the labour contained in the commodity, but has nevertheless sold it. Adam Smith has thereby himself refuted the idea that the circumstance that the whole product of his labour no longer belongs to the labourer, that he is obliged to share it or its value with the owner of capital, invalidates the law that the proportion in which commodities exchange for each other, or their exchange value, is determined by the quantity of labour time materialised in them. Indeed, on the contrary, he traces the profit of the capitalist precisely to the fact that he has not paid for a part of the labour added to the commodity, and it is from this that his profit on the sale of the commodity arises. We shall see how further on Adam Smith even more explicitly derives profit from the labour performed by the workman over and above the quantity of labour with which he pays for his wages, that is to say, replaces it by an equivalent. Thereby he has recognised the true origin of surplus value. At the same time he has expressly stated that it does not arise from the [VI-252] advanced funds, whose value—however useful they may be in the real labour process—merely reappears in the product; but that it arises exclusively from the new labour which the workmen add to the materials in the new process of production, in which those funds figure as means of labour or instruments of labour.

On the other hand, the phrase “in exchanging the complete manufacture either for money, for labour, or for other goods” is wrong (and arises from the confusion mentioned earlier).

If he exchanges the commodity for money or for a commodity, his profit arises from his selling more labour than he has paid for, from the fact that he does not exchange an equal quantity of objectified labour for an equal quantity of living labour. Adam Smith therefore must not put the exchange either for money or for other goods on the same footing as the exchange of the complete manufacture for labour. For in the first exchange the

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a See this volume, pp. 394-98.—Ed.
surplus value originates from the fact that the commodities are exchanged at their value, for the labour time contained in them, which however is in part *unpaid for*. Here it is assumed that the capitalist does not exchange an equal quantity of past labour for an equal quantity of living labour; that the quantity of living labour appropriated by him is greater than the quantity of living labour he has paid for. Otherwise the workman’s wage would be equal to the value of his product. The profit on the exchange of the complete manufacture for money or commodities, if they are exchanged at their value, arises therefore from the fact that the exchange between the complete manufacture and the living labour is subject to other laws; that no equivalents are exchanged here. These cases, therefore, must not be lumped together.

Profit is consequently nothing but a deduction from the value which the workmen have added to the material of labour. They add to the material, however, nothing but a new quantity of labour. The workman’s labour time therefore resolves itself into two parts: one for which he has received an equivalent, his wages, from the capitalist; the other which he gives to him gratis and which constitutes the *profit*. Adam Smith rightly points out that only the part of the labour (value) which the workman newly adds to the material resolves itself into wages and profit, that is to say, the newly-created surplus value in itself has nothing to do with the part of the capital which has been advanced (as materials and instruments).

Adam Smith, who has thus reduced profit to the appropriation of the unpaid labour of others, at once goes on to say:

"The profits of stock, it may perhaps be thought, are only a different name for the wages of a particular sort of labour, the labour of inspection and direction" ([Garnier,] p. 97) [Vol. I, p. 83].

And he refutes this false view of the *labour of superintendence*. We shall return to this later, in another chapter. Here it is only important to stress that Adam Smith very clearly recognises, brings out and expressly emphasises the contradistinction between his view of the origin of profit and this apologetic view. After pointing out this contradistinction he proceeds:

[VI-253] “In this state of things the whole produce of labour does not always belong to the labourer. He must in most cases share it with the *owner of the stock* which employs him. Neither is the quantity of labour commonly employed in acquiring or producing any commodity, the only circumstance which can regulate the quantity which it ought commonly to purchase, command or exchange for. An *additional quantity*, it is evident, must be due for the profits of the stock which advanced the wages and furnished the materials of that labour” ([Garnier,] l. c., p. 99) [Vol. I, p. 85].
This is quite correct. Given capitalist production, objectified labour—in the form of money or commodity—always purchases, besides the quantity of labour which it itself contains, an "additional quantity" of living labour "for the profits of the stock": which however in other words means nothing but that it appropriates for nothing, appropriates without paying for it, a part of the living labour. Adam Smith is superior to Ricardo in that he so strongly emphasises how this change begins with capitalist production. On the other hand, he is inferior to Ricardo in that he is never able to free himself from the viewpoint—though it is one he himself refuted by his own analysis—that through this changed relation between materialised labour and living labour a change takes place in the determination of the relative value of commodities, which in relation to each other represent nothing but materialised labour, given quantities of realised labour.

After thus presenting surplus value in the one form, the form of profit, as part of the labour which the worker performs over and above the part of the labour which pays his wages, he does the same with the other form of surplus value, rent of land. One of the objective conditions of labour alienated from labour and therefore confronting it as other men's property, is capital; the other is the land itself, the land as landed property. Therefore after dealing with the owner of capital, Adam Smith continues:

"As soon as the land of any country has all become private property, the landlords, like all other men, love to reap where they never sowed, and demand a rent even for its natural produce... He" (the labourer) "must give up to the landlord a portion of what his labour either collects or produces. This portion, or, what comes to the same thing, the price, of this portion, constitutes the rent of land" ([Garnier,] I. c., pp. 99-100) [Vol. I, pp. 85-86].

Like industrial profit proper, rent of land is only a part of the labour which is added by the labourer to the materials and which he gives up, hands over to the owner of the land without being paid for it; hence, only a part of the surplus labour performed by him over and above the part of the labour time which he works to pay his wages or to return an equivalent for the labour time contained in his wages.

Thus Adam Smith conceives surplus value—that is, surplus labour, the excess of labour performed and realised in the commodity over and above the paid labour, the labour which has received its equivalent in the wages—as the general category, [VI-254] of which profit proper and rent of land are merely branches. Nevertheless, he does not distinguish surplus value as such as a category on its own, distinct from the specific forms it
assumes in profit and rent. This is the source of much error and inadequacy in his inquiry, and of even more in the work of Ricardo.

Another form in which surplus value appears is intérêt du capital, interest on money. But this

“interest on money is always” (Adam Smith says in the same chapter) “a derivative revenue, which, if it is not paid from the profit which is made by the use of the money, must be paid from some other source of revenue”

(theory either rent or wages. In the latter case, assuming the average wage, it does not originate from surplus value but is a deduction from the wage itself or—and in this form, as we shall later have occasion to see, it appears in undeveloped capitalist production—it is only another form of profit)

“unless perhaps the borrower is a spendthrift, who contracts a second debt in order to pay the interest of the first” ([Garnier,] l. c., pp. 105-06) [Vol. I, p. 90].

Interest is therefore either a part of the profit made with the capital lent; in this case it is only a secondary form of profit itself, a branch of profit, and thus only a further division between different persons of the surplus value appropriated in the form of profit. Or it is paid out of rent. In which case the same holds good. Or the borrower pays the interest out of his own or someone else’s capital. In which case it in no way constitutes surplus value, but is merely a different distribution of existing wealth, Vibration of the Balance of Wealth between Parties, as in Profit upon Alienation. Excluding the latter case, when interest is not in any way a form of surplus value and excluding the case where it is a deduction from the wage or itself a form of profit; Adam does not mention this latter case, interest is therefore only a secondary form of surplus value, a mere part of profit or of rent (affecting merely their distribution), and therefore also is nothing but a part of unpaid surplus labour.

* “The stock which is lent at interest is always considered as a capital by the lender. He expects that in due time it is to be restored to him, and that in the meantime the borrower is to pay him a certain annual rent for the use of it. The borrower may use it either as a capital, or as a stock reserved for immediate consumption. If he uses it as a capital, he employs it in the maintenance of productive labourers, who reproduce the value with a profit. He can, in this case, both restore the capital and pay the interest, without alienating or encroaching upon any other source of revenue. If he uses it as a stock reserved for immediate consumption, he acts the part of a prodigal, and dissipates in the maintenance of the idle, what was destined for the support of the industrious. He can, in this case,

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a Interest on capital.—Ed.
b See this volume, p. 348 et seq.—Ed.
neither restore the capital nor pay the interest, without either alienating or
encroaching upon some other source of revenue, such as the property or rent of

[VI-255] Thus whoever borrows money, which here means
capital, either uses it himself as capital, and makes a profit with it.
In this case the interest which he pays to the lender is nothing but
a part of the profit under a special name. Or he consumes the
borrowed money. Then he increases the wealth of the lender by
reducing his own. What takes place is only a different distribution
of the wealth that passes from the hand of the spendthrift into
that of the lender, but there is no generation of surplus value. In
so far therefore as interest in any way represents surplus value, it
is nothing but a part of profit, which itself is nothing but a
definite form of surplus value, that is, unpaid labour.

Finally, Adam Smith observes that in the same way all incomes
of persons who live on the proceeds of taxes are paid either from
wages, and are therefore a deduction from wages themselves; or
have their source in profit and rent, thus representing only claims
whereby various social strata share in the consumption of profit
and rent, which themselves are nothing but different forms of
surplus value.

“All taxes, and all the revenue which is founded upon them, all salaries,
pensions, and annuities of every kind, are ultimately derived from some one or
other of those three original sources of revenue, and are paid either immediately
or mediatly from the wages of labour, the profits of stock, or the rent of land”
([Garnier,] l. c., l. I, ch. VI, p. 106) [Vol. I, p. 90].

Thus interest on money, along with taxes or revenues derived
from taxes—in so far as they are not deductions from wages
themselves—are merely shares in profit and rent, which are
themselves in turn reducible to surplus value, that is, unpaid
labour time.

This is Adam Smith’s general theory of surplus value.

In yet another passage Adam Smith sums up his views on the
whole question, making it all the more clear how far he is from
even attempting in any way to prove that the value added by the
labourer to the product (after deducting the frais de production,a
the value of raw material and of the instruments of labour) is no
longer determined by the labour time contained in the product,
because the labourer does not himself appropriate this value in
full, but has to share it—the value or the product—with the
capitalist and the landowner. The way in which the value of a

a Costs of production.—Ed.
commodity is distributed among the producers of this commodity naturally alters nothing in the nature of this value or in the relative value of commodities to one another.

*"As soon as land becomes private property, the landlord demands a share of almost all the produce which the labourer can either raise, or collect from it. His rent makes the first deduction from the produce of the labour which is employed upon land. It seldom happens that the person who tills the ground has wherewithal to maintain himself till he reaps the harvest. His maintenance is generally advanced to him from the stock of a master, the farmer who employs him, and who would have no interest to employ him, unless he was to share in the produce of his labour, or unless his stock was to be replaced to him with a profit. This profit makes a second deduction [VI-256] from [the produce of] the labour which is employed upon land. The produce of almost all other labour is liable to the like deduction of profit. In all arts and manufactures the greater part of the workmen stand in need of a master to advance them the materials of their work, and their wages and maintenance till it be completed. He shares in the produce of their labour, or in the value which it adds to the materials upon which it is bestowed; and in this share consists his profit"* ([McCulloch edit.,] I.c., Vol. I, b. I, ch. VIII, pp. 109-10).

Here therefore Adam Smith in plain terms describes rent and profit on capital as mere deductions from the workman's product or the value of his product, which is equal to the quantity of labour added by him to the material. This deduction however, as Adam Smith has himself previously explained, can only consist of that part of the labour which the workman adds to the materials, over and above the quantity of labour which only pays his wages, or which only provides an equivalent for his wages; that is, the surplus labour, the unpaid part of his labour. (Therefore, incidentally, profit and rent or capital and landed property can never be a source of value.)

We see the great advance made by Adam Smith beyond the Physiocrats in the analysis of surplus value and hence of capital. In their view, it is only one definite kind of concrete labour—agricultural labour—that creates surplus value. Therefore what they examine is the use value of labour, not labour time, general social labour, which is the sole source of value. In this special kind of labour, however, it is nature, the land, which in fact creates the surplus value, consisting in an increase of (organic) matter—the excess of the matter produced over the matter consumed. They see it, however, still in quite a restricted form and therefore distorted by fantastic ideas. But to Adam Smith, it is general social labour—no matter in what use values it manifests itself—the mere quantity of necessary labour, which creates value. Surplus value, whether it takes the form of profit, rent, or the secondary form of interest, is nothing but a part of this labour, appropriated by the owners of the objective conditions of labour in the exchange with
living labour. For the Physiocrats, therefore, surplus value appears only in the form of rent of land. For Adam Smith, rent, profit and interest are only different forms of surplus value.

When I speak of surplus value, in relation to the total sum of capital advanced, as profit on capital, this is because the capitalist directly engaged in production directly appropriates the surplus labour, no matter under what categories he has subsequently to share this surplus value with the landowner or with the lender of capital. Thus the farmer pays the landowner directly. And the manufacturer, out of the surplus value he has appropriated, pays rent to the owner of the land on which the factory stands, and interest to the capitalist who has advanced capital to him.

[VII-257] // There are now still to be examined: 1) Adam Smith's confusion of surplus value with profit; 2) his views on productive labour; 3) how he makes rent and profit sources of value, and his false analysis of the natural price of commodities, in which the value of raw materials and instruments is not supposed to have a separate existence, and therefore not to be considered, apart from the price of the 3 sources of revenue. //

Wages or the equivalent with which the capitalist buys the temporary disposal of labour capacity are not a commodity in its immediate form, but the commodity metamorphosed, money, the commodity in its independent form as exchange value, as the direct materialisation of social labour, of general labour time. With this money the labourer naturally buys commodities at the same price as any other possessor of money //disregarding here such details as, for example, that he buys on less favourable conditions and in worse circumstances, etc.//. He faces the seller of commodities as does every other possessor of money—as a buyer. He enters commodity circulation itself not as a labourer, but as pole Money facing pole Commodity, as possessor of a commodity in its general, always exchangeable form. His money is once more transformed into commodities, which are to serve him as use values, and in this process he buys commodities at the current market price—generally speaking, at their value. In this transaction he carries through only the act $M\rightarrow C$, which indicates a change of form, but, as a general rule, by no means a change in magnitude of value. Since however, by his labour materialised in the product, he has added not only as much labour time as was contained in the money he received, he has paid not only an equivalent but has given surplus labour gratis—which is precisely the source of the profit—he has thus in fact (the mediating process, the sale of his labour capacity, is not relevant when we are
dealing with the result) given a higher value than the value of the sum of money which forms his wages. In return, he has bought with more labour time the quantity of labour realised in the money which comes to him as wages. It can therefore be said that in the same way he has indirectly bought all the commodities into which the money (which is only the independent expression of a definite quantity of social labour time) he received is converted with more labour time than they contain, although he buys them at the same price as any other buyer or possessor of a commodity in its first transformation. Conversely, the money with which the capitalist buys labour contains a smaller quantity of labour, less labour time, than the quantity of labour or labour time of the workman contained in the commodity produced by him. Besides the quantity of labour contained in this sum of money which forms the wage, the capitalist buys an additional quantity of labour for which he does not pay, an excess over the quantity of labour contained in the money he pays out. And it is precisely this additional quantity of labour which constitutes the surplus value created by capital.

But as the money [V1-258] with which the capitalist buys labour (in the actual result, even though mediated through exchange not with labour directly, but with labour capacity) is nothing other than the converted form of all other commodities, their independent existence as exchange value, it can equally well be said that all commodities in exchange with living labour buy more labour than they contain. It is precisely this more that constitutes surplus value. It is Adam Smith's great merit that it is just in the chapters of Book I (chapters VI, VII, VIII) where he passes from simple commodity exchange and its law of value to exchange between objectified and living labour, to exchange between capital and wage labour, to the consideration of profit and rent in general—in short, to the origin of surplus value—that he feels some flaw has emerged. He senses that somehow—whatever the cause may be, and he does not grasp what it is—in the actual result the law is suspended: more labour is exchanged for less labour (from the labourer's standpoint), less labour is exchanged for more labour (from the capitalist's standpoint). His merit is that he emphasises—and it obviously perplexes him—that with the accumulation of capital and the appearance of property in land—that is, when the conditions of labour assume an independent existence over against labour itself—something new occurs, apparently (and actually, in the result) the law of value changes into its opposite. It is his theoretical strength that he feels and stresses this contradiction,
just as it is his theoretical weakness that the contradiction shakes his confidence in the general law, even for simple commodity exchange; that he does not perceive how this contradiction arises, through labour capacity itself becoming a commodity, and that in the case of this specific commodity its use value—which therefore has nothing to do with its exchange value—is precisely the energy which creates exchange value. Ricardo is ahead of Adam Smith in that these apparent contradictions—in their result real contradictions—do not confuse him. But he is behind Adam Smith in that he does not even suspect that this presents a problem, and therefore the specific development which the law of value undergoes with the formation of capital does not for a moment puzzle him or even attract his attention. We shall see later how what was a stroke of genius with Adam Smith becomes reactionary with Malthus as against Ricardo's standpoint.249

Naturally, however, it is at the same time this deep insight of Adam Smith's that makes him irresolute and uncertain, cuts the firm ground from under his feet, and prevents him—in contrast to Ricardo—from reaching a consistent and comprehensive theoretical view of the abstract general foundations of the bourgeois system.

[VI-259] The above-quoted statement by Adam Smith that the commodity buys more labour than it contains, or that labour pays a higher value for the commodity than the latter contains, is thus formulated by Hodgskin in his *Popular Political Economy*:

*"The natural price (or necessary price) means the whole quantity of labour nature requires from man, that he may produce any commodity.... Labour was the original, is now and ever will be the only purchase money in dealing with nature. Whatever quantity of labour may be requisite to produce any commodity, the labourer must always, in the present state of society, give a great deal more labour to acquire and possess it than is requisite to buy it from nature. Natural Price so increased to the labourer is Social Price,* we must always attend to the difference between natural and social price” (Thomas Hodgskin, *Popular Political Economy etc.*, London, 1827, [pp.] 219-20).

In this presentation Hodgskin reproduces both what is correct and what is confused and confusing in Adam Smith's view.

We have seen how Adam Smith explains *surplus value* in general, of which the rent of land and profit are only different forms and component parts. As he presents it, the part of capital which consists of raw material and means of production has nothing directly to do with the creation of surplus value. The latter arises exclusively from the *additional quantity of labour* which the labourer gives *over and above* the part of his labour which forms only the equivalent for his wages. Therefore it is only that
part of the capital advanced which consists in wages from which surplus value directly arises, since it is the only part of capital which not only reproduces itself but produces an overplus. In profit, on the other hand, the surplus value is calculated on the total amount of capital advanced, and besides this modification yet further ones are added through the equalisation of profits in the various spheres of production of capital.

Because Adam makes what is in substance an analysis of surplus value, but does not present it explicitly in the form of a definite category, distinct from its special forms, he subsequently mixes it up directly with the further developed form of profit. This error persists with Ricardo and all his disciples. Hence arise (particularly with Ricardo, all the more strikingly because he works out the fundamental law of value in more systematic unity and consistency, so that the inconsistencies and contradictions stand out more strikingly) a series of inconsistencies, unresolved contradictions and fatuities, which the Ricardians (as we shall see later in the section on profit) attempt to solve with phrases in a scholastic way. Crass empiricism turns into false metaphysics, scholasticism, which toils painfully to deduce undeniable empirical phenomena by simple formal abstraction directly from the general law, or to show by cunning argument that they are in accordance with that law.

At this point where we discuss Adam Smith we will give an example, because the confusion creeps in immediately not when he is dealing ex professo with profit or rent—those particular forms of surplus value—but where he is thinking of them only as forms of surplus value in general, as deductions from the labour bestowed by the labourers upon the materials. [VI-260] After Adam Smith has said, in Book I, Chapter VI:

"The value which the workmen add to the materials, therefore, resolves itself in this case into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced",

he continues:

"He" (the entrepreneur) "could have no interest to employ them, unless he expected from the sale of their work something more than what was sufficient to replace his stock to him; and he could have no interest to employ a great stock rather than a small one, unless his profits were to bear some proportion to the extent of his stock" [Garnier, pp. 96-97] [Vol. 1, p. 83].

Remarquons d'abord: surplus value, the overplus which the

a Specifically.— Ed.

b See this volume, p. 391.— Ed.

c We note first.— Ed.
entrepreneur makes over and above the amount of value required to replace his stock, is reduced by Adam Smith to that part of the labour which the workmen add to the materials over and above the quantity that pays their wages—thus making this overplus arise purely from the part of the capital which is laid out in wages. Then, however, he immediately conceives this overplus in the form of profit—i.e., he thinks of it not in relation to the part of the capital from which it arises, but as an overplus over the total value of the capital advanced, “upon the whole stock of materials and wages which he advanced”. (It is oversight that the means of production are here left out of account.) He therefore conceives surplus value directly in the form of profit. Hence the difficulties that soon appear.

The capitalist, Adam Smith says,

“could have no interest to employ them, unless he expected from the sale of their work something more than what was sufficient to replace his stock to him”.

Once capitalist relations are assumed, this is quite correct. The capitalist does not produce in order to satisfy his needs with the product; he produces with absolutely no direct regard for consumption. He produces in order to produce surplus value. But this premiss—which amounts to no more than that, capitalist production being assumed, the capitalist produces for the sake of surplus value—is not made use of by Adam Smith to explain surplus value, as some of his silly disciples subsequently did; i.e., he does not explain the existence of surplus value by the interests of the capitalist, by his desire for surplus value. On the contrary, he has already derived surplus value from the value which the workmen add to the materials over and above the value which they add in exchange for the wages they have received. But then he goes on at once: the capitalist would have no interest to employ a great stock rather than a small one, unless his profits were to bear some proportion to the extent of the stock advanced. Here profit is no longer explained by the nature of surplus value, but by the “interest” of the capitalist. Which is downright silly.

Adam Smith does not sense that, by thus directly confusing surplus value with profit and profit with surplus value, he is upsetting the law of the origin of surplus value which he has just established. [VI-261] If surplus value is only the part of the value (or of the quantity of labour) added by the workman in excess of the part that he adds to the materials to replace the wages, why should that 2nd part grow as the direct result of the value of the capital advanced being in one case greater than in the other? The
contradiction becomes even clearer in the example which Adam Smith himself gives immediately following on this, in order to refute the view that profit is wages for the "so-called labour of superintendence".

For he says:

"They" (the profits of stock) "are, however, altogether different from wages, are regulated by quite different principles, and bear no proportion to the quantity, or the ingenuity of this supposed labour of inspection and direction. They are regulated altogether by the value of the stock employed, and are greater or smaller in proportion to the extent of this stock. Let us suppose, for example, that in some particular place, where the common annual profits of manufacturing stock are ten per cent there are two different manufactures, in each of which twenty workmen are employed, at the rate of 15 pounds a year each, or at the expense of 300 a year in each manufactory. Let us suppose, too, that the coarse materials annually wrought up in the one cost only 700 pounds, while the finer materials in the other cost 7,000. The capital annually employed in the one will, in this case, amount only to 1,000 pounds; whereas that employed in the other will amount to 7,300 pounds. At the rate of ten per cent, therefore, the undertaker of the one will expect a yearly profit of about 100 pounds only; while that of the other will expect about 730 pounds. But though their profits are so very different, their labour of inspection and direction may be either altogether or very nearly the same" [Garnier, pp. 97-98] [Vol. I, pp. 83-84].

From surplus value in its general form we come straight to a general rate of profit, which has nothing directly to do with it. Mais passon outre! In both manufactories 20 workmen are employed; in both their wages are the same, £300. Proof therefore that it is not perhaps a case of a higher kind of labour being employed in one as compared with the other, so that one hour's labour and therefore also one hour's surplus labour would in one be equal to several hours' surplus labour in the other. On the contrary, the same average labour is assumed in both, as the equality of their wages shows. How then can the surplus labour which the workers add, beyond the price of their wages, be worth seven times as much in one factory as in the other? Or why should the workers in one factory, because the materials they work up in it are 7 times as costly as in the other, provide 7 times as much surplus labour as in the other, although in both factories they receive the same wages, and therefore work the same time to reproduce [VI-262] their wages?

The seven times greater profit in the one manufactory as compared with the other—or in general the law of profit, that it is in proportion to the magnitude of the capital advanced—thus prima facie contradicts the law of surplus value or of profit (since

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a But let us pass on! — Ed.

28*
Adam Smith treats the two as identical) that it consists purely of the unpaid surplus labour of the workmen. Adam Smith puts this down with quite naïve thoughtlessness, without the faintest suspicion of the contradiction it presents. All his disciples—since none of them considers surplus value in general, as distinct from its determinate forms—followed him faithfully in this. With Ricardo, as already noted, it merely comes out even more strikingly.

As Adam Smith resolves surplus value not only into profit but also into the rent of land—two particular kinds of surplus value, whose movement is determined by quite different laws—he should certainly have seen from this that he ought not to treat general abstract form as directly identical with any of its particular forms. With all later bourgeois economists, as with Adam Smith, lack of theoretical understanding needed to distinguish the different forms of the economic relations remains the rule in their coarse grabbing at and interest in the empirically available material. Hence also their inability to form a correct conception of money, in which what is in question is only various changes in the form of exchange value, while the magnitude of value remains unchanged.

Lauderdale, in Recherches sur la nature et l’origine de la richesse publique (traduit par Lagentie de Lavaïsse, Paris, 1808), raises the objection to Adam Smith’s exposition of surplus value—which he says corresponds with the views already advanced by Locke—that according to it capital is not an original source of wealth, as Smith makes out, but only a derivative source. The relevant passages run:

"Above a century ago, Mr. Locke stated pretty nearly the same opinion" (as Adam Smith). . . . ‘Money,’ he said, ‘is a barren thing and produces nothing; the only service it renders is that it by compact transfers that profit that was the reward of one man’s labour into another man’s pocket’” (Lauderdale, p. 116).a

“If this, however, was a just and accurate idea of the profit of capital, it would follow that the profit of stock must be a derivative, and not an original source of wealth; and capital could not therefore be considered as a source of wealth, its profit being only a transfer from the pocket of the labourer into that of the proprietor of stock” (l.c., pp. 116-17) [James Maitland Lauderdale, An Inquiry into the Nature and Origin of Public Wealth..., Edinburgh and London, 1804, pp. 157-58].a

In so far as the value of the capital reappears in the product, it cannot be called a “source of wealth”. Here it is only as accumulated labour, as a definite quantity of materialised labour, that it adds its own value to the product.

a Marx quotes Lauderdale partly in French and partly in German.—Ed.
Capital is productive of value only as a relation, in so far as it is a coercive force on wage labour, compelling it to perform surplus labour, or spurring on the productive power of labour to produce relative surplus value. In both cases it only produces value as [VI-263] the power of labour's own objectified conditions over labour when these are alienated from labour; only as one of the forms of wage labour itself, as a condition of wage labour. But in the sense commonly used by economists, as stored up labour existing in money or commodities, capital—like all conditions of labour, even the unpaid natural forces—functions productively in the labour process, in the production of use values, but it is never a source of value. It creates no new value, and only adds exchange value to the product at all in so far as it has exchange value, i.e., only in so far as it itself consists in objectified labour time, so that labour is the source of its value.

Lauderdale is right in this respect—that Adam Smith, after explaining the nature of surplus value and of value, wrongly presents capital and land as independent sources of exchange value. They are sources of revenue for their owners in so far as they are titles to a certain quantity of surplus labour, which the labourer must perform over and above the labour time required to replace his wages. Thus Adam Smith says for example:

"Wages, profit, and rent, are the three original sources of all revenue, as well as of all exchangeable value" ([Garnier,] I. I, ch. VI [p. 105]) [Vol. I, p. 89].

Just as it is true that they are the three original sources of all revenue, so it is false that they also are the three original sources of all exchangeable value, since the value of a commodity is exclusively determined by the labour time contained in it. After just presenting rent and profit as mere deductions from the value or from the labour added by the workman to the raw material, how can Adam Smith call them original sources of exchangeable value? (They can only be that in the sense that they set in motion the original source, that is to say, that they compel the workman to perform surplus labour.) In so far as they are titles (conditions) for the appropriation of a part of the value, that is, of the labour objectified in the commodity, they are sources of income for their owners. But the distribution or appropriation of value is certainly not the source of the value that is appropriated. If this appropriation did not take place, and the workman received the whole product of his labour as his wage, the value of the commodities produced would be just the same as before, although it would not be shared with the landowner and the capitalist.
The fact that landed property and capital are sources of income for their owners, i.e., give them the power to appropriate a part of the values created by labour, does not make them sources of the value which they appropriate. But it is equally wrong to say that wages are an original source of exchangeable value, although wages, or rather the continuous sale of labour capacity, is a source of income for the labourer. It is the labour and not the wages of the labourer that creates value. Wages are only already existing value, or if we consider the whole of production, the part of the value created by the labourer which he himself appropriates; but this appropriation does not create value. His wages can therefore rise or fall without this affecting the value of the commodity produced by him.

Here we will leave entirely out of account how far Adam Smith regards rent as a constituent element of the price of commodities. For our present inquiry this question is all the more unimportant because he treats rent just as he treats profit, as a mere part of surplus value, a deduction from the labour added by the labourer to the raw material, and consequently [V1-264] in fact also as a deduction from profit, inasmuch as the total unpaid surplus labour is directly appropriated by the capitalist in his relations with labour; it does not matter under what categories he may later have to share this surplus value with owners of the conditions of production—the landowner or the lender of capital. For the sake of simplicity we shall therefore speak only of wages and profit as the two categories into which newly-created value is divided.

Let us assume that 12 hours of labour time are materialised in a commodity (leaving out of account the value of the raw material and instruments of labour consumed in it). We can express its value as such only in money. Let us therefore assume that 12 hours of labour time are likewise materialised in 5s. Thus the value of the commodity=5s. By the natural price of commodities Adam Smith understands nothing but their value expressed in money. (The market price of the commodity, of course, stands either above or below its value. Indeed, as I shall show later, even the average price of commodities is always different from their value. Adam Smith, however, does not deal with this in his discussion of natural price. Moreover, neither the market price nor still less the fluctuations in the average price of commodities can be comprehended except on the basis of an understanding of the nature of value.)

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a See this volume, p. 391.—Ed
If the surplus value contained in the commodity is 20 per cent of its total value, or what amounts to the same thing, 25 per cent of the necessary labour contained in it, then this value of 5s., the natural price of the commodity, can be resolved into 4s. wages and 1s. surplus value (which here we will call profit, following Adam Smith). It would be correct to say that the magnitude of value of the commodity determined independently of wages and profit, or its natural price, can be resolved into 4s. wages (the price of the labour) and 1s. profit (the price of the profit). But it would be wrong to say that the value of the commodity arises from adding together or combining the price of the wages, which is regulated independently of the value of the commodity, and the price of the profit. If this were the case there would be absolutely no reason why the total value of the commodity should not be 8s., 10s., etc., according to whether one assumes the wages = 5s. and the profit 3s., and so on.

When Adam Smith is examining the "natural rate" of wages or the "natural price" of wages, what guides his investigation? The natural price of the means of subsistence required for the reproduction of labour capacity. But by what does he determine the natural price of these means of subsistence? In so far as he determines it at all, he comes back to the correct determination of value, namely, the labour time required for the production of these means of subsistence. But when he abandons this correct course, he falls into cercle vicieux. By what is the natural price of the means of subsistence determined, which determine the natural price of wages? By the natural price of "wages", of "profit", of "rent", which constitute the natural price of those means of subsistence as of all commodities. And so in infinitum. The twaddle about the law of demand and supply of course does not help us out of this cercle vicieux. For the "natural price" or the price corresponding to the value of the commodity is supposed to exist just when demand meets supply, i.e., when the price of the commodity does not stand above or below its value as a result of fluctuations in demand and supply; when, in other words, the cost price of the commodity (or the value of the commodity supplied by the seller) is also the price which the demand pays.

[V1-265] But as we have said: In investigating the natural price of wages Adam Smith in fact falls back—at least in certain passages—on the correct determination of the value of the commodity. On the other hand, in the chapter dealing with the natural rate or the natural price of profit he gets bogged down, so far as the real problem is concerned, in meaningless common-
places and tautologies. In fact, at first it was the value of the commodity which he saw as regulating wages and profit and rent. Then however he sets to work the other way round (which was closer to what empirical observation showed and to everyday ideas), and now the natural price of commodities is supposed to be calculated and discovered by adding together the natural prices of wages, profit and rent. It is one of Ricardo's chief merits that he put an end to this confusion. We shall return to this point briefly when we are dealing with him.\textsuperscript{256}

Here there is only this further point to be noted: the \textit{given magnitude} of value of the commodity, serving as a fund for the payment of wages and profit, appears empirically to the industrialist in the form that a definite market price of the commodity holds good for a shorter or longer time, in spite of all fluctuations in wages.

It is necessary therefore to call attention to this peculiar train of thought in Adam Smith's book: first the value of the commodity is examined, and in some passages correctly determined—so correctly determined that he traces out in general form the origin of surplus value and of its specific forms, hence deriving wages and profit from this value. But then he takes the opposite course, and seeks on the contrary to deduce the value of commodities (from which he has deduced wages and profit) by adding together the natural prices of wages, profit and rent. It is this latter circumstance that is responsible for the fact that he nowhere correctly explains the influence of oscillations of wages, profit, etc., on the prices of commodities—since he lacks the basis [for such an explanation].

We come to another point, which is linked with the analysis of the price or value of the commodity (since the two are here still assumed to be identical). Let us assume that Adam Smith has calculated correctly—i.e., the value of the commodity being given, he has correctly resolved it into the constituent parts in which this value is distributed among the various agents of production—but has not on the contrary tried to deduce value from the price of these constituent parts. Thus we shall leave this aside and also the one-sided way in which wages and profit are presented only as forms of distribution, and hence both as revenues in the same sense that their owners can consume. Apart from all this, Adam Smith himself raises a question, and this again shows his

\textsuperscript{a} Marx wrote the word "ausgerechnet" (calculated) above the word "aufgefunden" (discovered) without indicating its place in the line.—\textit{Ed.}
superiority over Ricardo—not that he finds the right solution to the question he raises, but that he raises it at all.

The following quotation should be added to what has been said above in regard to Adam Smith making the categories in which the value of the commodity is appropriated into sources of this value: After he has refuted the view that profit is only another name for the wages of the capitalist, or wages of labour of superintendence, he concludes:

"In the price of commodities, therefore, the profits of stock constitute a source of value altogether different from the wages [of labour], and regulated by quite different principles" ([Garnier,] 1. I, ch. VI, [p. 99]) [Vol. I, p. 85].

Adam Smith has just shown that the value added by the workmen to the materials is divided between them and the capitalists in the form of wages and profit; labour is therefore the only source of value, and the price of wages and the price of profits arise out of this source of value. But these prices themselves, whether wages or profit, are not a source of value. //

[VI-266] What Adam Smith says is:

"These three parts" (wages, profit and rent of the landowner) "seem either immediately or ultimately to make up the whole price of corn."

(Of all commodities. Adam Smith here takes corn, because in some commodities rent does not enter into the price as a constituent part.)

"A fourth part, it may be thought, is necessary for replacing the stock of the farmer, or for compensating the wear and tear of his labouring cattle, and other instruments of husbandry. But it must be considered, that the price of an instrument of husbandry, such as a labouring horse, is itself made up of the same three parts: the rent of the land upon which he is reared, the labour of tending and rearing him, and the profits of the farmer, who advances both the rent of this land, and the wages of this labour."

// Here profit appears as the primary form, which also includes rent. //

"Though the price of the corn, therefore, may pay the price as well as the maintenance of the horse, the whole price still resolves itself, either immediately or ultimately, into the same three parts of rent, labour and profit" ([Garnier,] 1. I, ch. VI, [p. 101]) [Vol. I, pp. 86-87].

(Here it is perfectly preposterous that all of a sudden he says labour instead of wages, while he does not put landed property or capital for rent and profit.)

But was it not equally obviously necessary to consider that just as the farmer included the price of the horse and the plough in the price of the corn, the horse breeder or the plough maker from
whom the farmer bought the horse and the plough, would include in the price of the horse and the plough the price of the instruments of production (in the case of the former, perhaps another horse) and of raw materials such as feeding stuffs and iron, whereas the fund from which the horse breeder and plough maker paid wages and profit (and rent) consisted only in the new labour which they added in their sphere of production to the amount of value present in their constant capital? Since therefore Adam Smith admits, in relation to the farmer, that the price of his ble\textsuperscript{a} includes, besides the wages, profit and rent paid by him to himself and others, also a 4th constituent part which is different from these—the value of the constant capital he has used up, such as horses, agricultural implements, etc.—this must also hold good for the horse breeder and the manufacturer of agricultural implements; and it is of no avail for Adam Smith to send us from pillar to post. Incidentally, the example of the farmer is peculiarly unhappily chosen for sending us from pillar to post, for in this case the items of constant capital include one that does not at all need to be bought from somebody else, namely the seed; and does this constituent part of the value resolve itself into wages, profit or rent for anybody?

But for the present let us proceed, and see whether Smith sticks to his view that the value of every commodity is resolvable into one or all of the sources of revenue: wages, profit, rent; and can therefore, being destined for consumption, be devoured or at any rate used up in one way or another for personal use (not industrial consumption). D'abord [VI-267] another preliminary point. In the case for example of gathering berries and such like it can be assumed that their value consists entirely of wages, although here also as a rule some appliances, such as baskets and so on, are required as means of labour. But examples of this kind are quite irrelevant here, where we are dealing with capitalist production.

To start with, once more the repetition of the view expressed in Book I, Chapter VI:

B. II, Ch. II, (Garnier, Vol. II, p. 212) states:

“It has been shown ... that the price of the greater part of commodities resolves itself into three parts, of which one pays the wages of the labour, another the profits of the stock, and a third the rent of the land” [Vol. II, pp. 17-18].

According to this, the whole value of any commodity resolves itself into revenue, and therefore falls to the share of one or

\textsuperscript{a} Corn.—Ed.
another of the classes which live on this revenue, as a fund for consumption. Now since the total production of a country, each year for example, consists solely of the total of the values of the commodities produced, and since the value of each single one of these commodities is resolved into revenues, so also must their sum, the annual product of labour, the gross revenue, be consumable annually in this form. And so immediately after this passage Smith himself raises the point:

"Since this is the case, it has been observed, with regard to every particular commodity, taken separately, it must be so with regard to all the commodities which compose the whole annual produce of the land and labour of every country, taken complexly. The whole price or exchangeable value of the annual produce, must resolve itself into the same three parts, and be parcelled out among the different inhabitants of the country, either as the wages of their labour, the profits of their stock, or the rent of their land" ([Garnier,] I.e., p. 213) [Vol. II, p. 18].

This is in fact the necessary consequence. What is true of the individual commodity is necessarily true of the total sum of commodities. But quod non, says Adam. He goes on:

"But though the whole value of the annual produce of the land and labour of every country is thus divided among, and constitutes a revenue to, its different inhabitants; yet, as in the rent of a private estate, we distinguish between the gross rent and the neat rent, so may we likewise in the revenue of all the inhabitants of a great country" [Garnier, I.c., p. 213] [Vol. II, p. 18].

(Halt la! Above he told us the direct opposite: in the case of the individual farmer we can distinguish a 4th part into which the value of his wheat for example resolves itself, namely the part which merely replaces the constant capital used up. This is directly true for the individual farmer. But when we go further into it, what is constant capital for him resolves itself at an earlier point, in another person's hand before it became capital in his, into wages, profit, etc., in a word into revenue. Therefore if it is true that commodities, considered in the hands of an individual producer, contain one part of the value which does not form revenue, then it is untrue for "all the inhabitants of a great country", because what in one person's hand is constant capital derives its value from the fact that it came from another person's hand as the aggregate price of wages, profit and rent. Now he says the direct opposite.)

Adam Smith continues:

[V1-268] "The gross rent of a private estate comprehends whatever is paid by the farmer; the neat rent, what remains free to the landlord, after deducting the

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a Not so.— Ed.
b But stop.— Ed.
expense of management, of repairs, and all other necessary charges; or what, without hurting his estate, he can afford to place in his stock reserved for immediate consumption, or to spend upon his table”, etc. “His real wealth is in proportion, not to his gross, but to his neat rent” [Garnier, pp. 213-14] [Vol. II, pp. 18-19].

(In the first place, Smith brings in here something improper. What the farmer pays as rent to the landowner, just as what he pays as wages to the labourers, is like his own profit, part of the value or price of the commodity, which resolves itself into revenue. The question is however whether the commodity contains yet another constituent part of its value. He admits this here, as he should admit it in the case of the farmer, but that should not prevent the latter's corn (i.e., the price or exchange value of his corn) from being resolvable merely into revenue. Secondly, a note in passing. The real wealth of which an individual farmer, considered as a farmer, can dispose, depends on his profit. But on the other hand, as owner of commodities he can sell the whole farm, or if the land does not belong to him, he can sell all constant capital there is on it such as draught cattle, agricultural implements, etc. The value which he can realise in this way, therefore the wealth at his disposal, is conditioned by the value, that is the size of the constant capital belonging to him. However, he can only sell this again to another farmer, in whose hands it is not disposable wealth but constant capital.) //So we are still just where we were.//

“The gross revenue of all the inhabitants of a great country comprehends the whole annual produce of their land and labour”

(previously we were told that this total (its value) resolves itself into wages, profits and rents, nothing but different forms of net revenue);

“the neat revenue, what remains free to them, after deducting the expense of maintaining, first, their fixed, and, secondly, their circulating capital”;

(so he now deducts instruments of labour and raw materials);

“or what, without encroaching upon their capital, they can place in their stock reserved for consumption”.

(So now we learn that the price or exchangeable value of the total stock of commodities, just as in the case of the individual capitalist, so also for the whole country, is resolvable into a fourth part which does not form a revenue for anyone and cannot be resolved into wages, profit or rent.)

“The whole expense of maintaining the fixed capital must evidently be excluded from the neat revenue of the society. Neither the materials necessary for supporting
their useful machines and instruments of trade, their profitable buildings, etc., nor the *produce of the labour necessary* for fashioning those materials into the proper form, can ever make any part of it. The *price of that labour* may indeed make a part of it; as the workmen so employed may place the *whole value* [VI-269] of their wages in their *stock reserved for consumption*. But in other sorts of labour, both the price and the produce go to this or that stock; the price to that of the workmen, the produce to that of other people, whose subsistence, conveniences, and amusements, are augmented by the labour of those workmen” ([Garnier,] l.c., pp. 214-15) [Vol. II, pp. 19-20]. All the same, nearer the right view than the others.\(^a\)

Here Adam Smith once more shies away from the question which he has to answer—the question concerning the fourth part of the total price of the commodity, which is not resolved into either wages, profit or rent. First something that is quite wrong: with makers of machinery, as with all other industrial capitalists, the labour which fashions the raw materials of the machine, etc., into the proper form in fact consists of necessary and surplus labour, and therefore resolves itself not only into the wages of the workmen, but also into the profit of the capitalist. But the value of the materials and the value of the instruments with which they are fashioned by the workmen into the proper form, is resolvable into neither the one nor the other. That products which are destined by their nature not for individual consumption but for industrial consumption do not enter into the stock reserved for immediate consumption, has nothing at all to do with it. Seed, for example (that portion of the corn which serves for sowing), by its nature could also enter into the stock for consumption; but by its economic function it must enter into the stock for production. But furthermore it is quite wrong to say with regard to the products destined for individual consumption that both the full price and the product enter into the *stock for consumption*. Linen, for example, when not used for sail-cloth or other productive purposes, all goes as a product into consumption. But not its price, for one part of this price replaces the linen yarn, another part looms and so on, and only a part of the price of the linen is converted into revenue of any kind.

Just now Adam told us that the materials necessary for machines, profitable buildings, etc. “can never make any part of this *neat revenue*”, any more than the machines and so on fashioned from them can; presumably, therefore, they form a part of the gross revenue. Shortly afterwards, l.c., Book II, Chapter II, p. 220, he says on the contrary:

\(^a\) This sentence was added by Marx in pencil.—*Ed.*
"The machines and instruments of trade, etc., which compose the fixed capital either of an individual or of a society, make no part either of the gross or of the neat revenue of either; so money etc...." [Garnier] [Vol. II, p. 23].

Adam’s twistings and turnings, his contradictions and wanderings from the point, prove that, once he had made wages, profit and rent the constituent component parts of exchangeable value or of the total price of the product, he had got himself stuck in the mud and had to get stuck.\(^a\)

Say, who tries to hide his dull superficiality by repeating in absolute general phrases Smith’s inconsistencies and blunders, says:

"If we consider a nation as a whole, it has no net product; for since the products have only a value equal to the costs of their production, when these costs are deducted, the whole value of the products is deducted.... The annual revenue is the gross revenue" (Traité d’économie politique..., 3rd ed., Vol. II, Paris, 1817, p. 469).

The value of the total annual products is equal to the quantity of labour time materialised in them. [VI-270] If this aggregate value is deducted from the annual product, then in fact, so far as value is concerned, there remains no value, and by this deduction both the net revenue and the gross revenue have come to a final end. But Say thinks that the annually produced\(^b\) values are annually consumed. Hence for the whole nation there is no net product, but only a gross product. In the first place, it is not true that the annually produced\(^b\) values are annually consumed. This is not the case for a large part of the fixed capital. A large part of the annually produced values enters into the labour process without entering into the valorisation process, i.e., without their total value being annually consumed. But in the second place: a part of the annual consumption of values consists of values that are used not as the stock for consumption, but as means of production, and which are returned to production (either in the same form or in the form of an equivalent), just as they originated in production. The second part consists of the values which can enter into individual consumption over and above the first part. These form the net product.\(^{258}\)

Storch says of this trash of Say’s:

"It is evident that the value of the annual product is divided partly into capital and partly into profits, and that each of these parts of the value of the annual product goes regularly to purchase the product needed by the nation, as much for the purpose of preserving its capital as for renewing its consumable stock" (Storch, Cours

\(^{a}\) See this volume, p. 405.—Ed.

\(^{b}\) In the manuscript the word "producirten" (produced) was substituted in pencil, presumably by Engels, for the original "consumirten" (consumed).—Ed.
d'économie politique, Vol. V: Considérations sur la nature du revenu national, Paris, 1824, pp. 134-35).a “Let us then imagine a family which through its own labour is self-sufficing in all its needs, such as there are so many examples of in Russia ... is the revenue of such a family equal to the gross product coming from its land, its capital and its industry? Can it live in its barns or its stables, eat its seed and forage, clothe itself with its labouring cattle, amuse itself with its agricultural implements? According to Mr. Say's thesis, all these questions would have to be answered in the affirmative” (l.c., pp. 135-36).b “Say regards the gross product as the revenue of society; and from this he concludes that society can consume a value equal to this product” (l.c., p. 145).b “The (net) revenue of a nation is not the excess of values produced over the totality of values consumed, as Say imagines it to be, but only over the values consumed in order to produce. Therefore, if a nation consumes all this excess in the year it is produced, it consumes all its (net) revenue” (l.c., p. 146).b “If it is admitted that the revenue of a nation is equal to its gross product, so that no capital is to be deducted, then it must also be admitted that this nation may consume unproductively the entire value of its annual product, without in the least reducing its future revenue” (l.c., [p.] 147).a “The products which represent the capital of a nation are not consumable” (l.c., p. 150) (constant capital).c

Ramsay (George)—An Essay on the Distribution of Wealth (Edinburgh, 1836)—remarks on the same subject, namely, Adam Smith's fourth part of the total price, or what I call constant capital as distinct from the capital laid out in wages:

[VI-271] “Ricardo,” he says, “overlooks the fact that the whole product is not only divided up between wages and profit, but that a part of it is also NECESSARY FOR REPLACING FIXED CAPITAL” (p. 174, note).260

By “fixed capital” Ramsay in fact means not only instruments of production, etc., but also the raw material—in short, what I call constant capital within each sphere of production. When Ricardo speaks of the division of the product into profit and wages, he always assumes that the capital advanced to production itself and consumed in it has been deducted. Nevertheless, on the main issue Ramsay is right. Because Ricardo does not make any further examination at all of the constant part of capital, and pays no attention to it, he makes gross errors and in particular confuses profit with surplus value, besides errors in investigating oscillations in the rate of profit etc.

Let us hear now what Ramsay himself says:

“...In what manner is a comparison to be instituted between the product and the stock expended upon it?... In regard to a whole nation ... it is evident that all the various elements of the stock expended must be reproduced in some employment or another, otherwise the industry of the country could not go on as formerly. The

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a Marx quotes in French.— Ed.
b Marx quotes partly in German and partly in French.— Ed.
c Marx added the words “constant capital”, in pencil, thus correcting Storch's inaccuracy. Marx quoted Storch in French.— Ed.
raw material of manufactures, the implements used in them, as also in agriculture, the extensive machinery engaged in the former, the buildings necessary for fabricating or storing the produce, must all be parts of the total return of a country, as well as of the advances of all its master-capitalists. Therefore, the quantity of the former may be compared with that of the latter, each article being supposed placed as it were beside that of a similar kind".* (Ramsay, l.c., pp. 137-39). "Now as regards the individual capitalist, since he does not replace his outgoings in kind, by far the greater number must be obtained by exchange, a certain portion of the product being necessary for this purpose. Hence each individual master-capitalist comes to look much more to the exchangeable value of the product than to its quantity" (l.c., [pp.] 145-46).a "The more the value of the product exceeds the value of the capital advanced, the greater will be the profit. Thus, then, will he estimate it, by comparing value with value, not quantity with quantity... Profit must rise or fall exactly as the proportion of the gross produce, or of its value, required to replace necessary advances, falls or rises.*

The rate of profit therefore depends upon two circumstances: 1) the proportion of the whole produce which goes to the labourers; secondly, the proportion which must be set apart for replacing, either in kind or by exchange, the fixed capital"* (l.c. [pp.] 146-48, passim).a

(What Ramsay here says on the rate of profit has to be considered in Chapter III, on profit.261 It is important that he rightly lays stress on this element. On the one hand what Ricardo says is correct—that the cheapening of commodities which form constant capital (which Ramsay calls fixed capital) always depreciates a part of the existing capital. This is especially true of fixed capital proper—machinery, etc. It is of no advantage to the individual capitalist that the surplus value rises in relation to the total capital, if the rise in this rate has been due to a fall in the total value of his constant capital (which he already had before the depreciation). But this is true only to a very small extent for that part of the capital which consists of raw materials or finished commodities (which do not form part of the fixed capital). The existing amount of these that can be depreciated in this way is always only an insignificant magnitude compared with the total production. It holds good for each capitalist only to a slight extent for the part of his capital expended as circulating capital. On the other hand—since the profit=the proportion of the surplus value to the total advanced capital, and since the quantity of labour that can be absorbed depends not on the value but on the quantity of raw materials and on the efficiency of the means of production—not on their exchange value but on their use value—it is clear that the greater the productivity of industry in the branches whose [V1-272] product enters into the formation of constant capital, the smaller the outlay of constant capital required

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a Marx quotes Ramsay with slight changes and additions.—Ed.
to produce a given quantity of surplus value; consequently the greater the proportion of this surplus value to the whole advanced capital, and therefore the higher the rate of profit for a given amount of surplus value.)

(What Ramsay considers doubly—replacement of product by product in the process of reproduction for the whole country, and replacement of value by value for the individual capitalist—are two aspects, both of which, in relation to the individual capital, must be taken into account in the circulation process of capital, which is at the same time its reproduction process.)

Ramsay did not solve the real difficulty which occupied Adam Smith's attention and entangled him in all kinds of contradictions. Put plainly, it is this: The whole capital (as value) resolves itself into labour, is nothing but a certain quantity of objectified labour. The paid labour, however, is equal to the wages of the labourers, the unpaid labour is equal to the capitalists' profit. So the whole capital must be resolvable, directly or indirectly, into wages and profit. Or is labour somewhere performed which consists neither of wages nor profit, and merely has the purpose of replacing the values used up in production which are, however, the conditions of reproduction? But who performs this labour, since all labour performed by the labourer is resolved into two quantities, one which maintains his own capacity to produce, and the other which forms the profit of capital?

[INQUIRY INTO HOW IT IS POSSIBLE FOR THE ANNUAL PROFIT AND WAGES TO BUY THE ANNUAL COMMODITIES, WHICH BESIDES PROFIT AND WAGES ALSO CONTAIN CONSTANT CAPITAL]

To rid the problem of any spurious admixture, there is one more point to mention at the outset. When the capitalist transforms a part of his profit, of his revenue, into capital—into means of labour and materials of labour—both are paid for by that part of the labour which the labourer has performed gratis for the capitalist. Here we have a new quantity of labour forming the equivalent for a new quantity of commodities, commodities which as use values consist of means of labour and materials of labour. This therefore enters into the accumulation of capital and presents no difficulty; we have here the growth of the constant capital beyond its previous limits, or the formation of new constant capital in excess of the amount of constant capital that already exists and must be replaced. The difficulty is the reproduction of the existing constant capital, not the formation of new constant
capital in excess of what has to be reproduced. The new constant capital obviously originates in profit, and has existed for a moment in the form of revenue which is later transformed into capital. This part of the profit consists of the surplus labour time, which, even without the existence of capital, must constantly be performed by society, in order to have at its disposal, so to speak, a fund for development, which the very increase of population makes necessary.

(There is a good explanation of constant capital, but only in so far as concerns its use value, in Ramsay, I.c., p. 166, which runs:

*"Be the amount of the gross return"* (of the farmer, for example) *"small or great, the quantity of it required for replacing what has been consumed in these different forms, can undergo no alteration whatever. This quantity must be considered as constant, so long as production is carried on the same scale."*)

So we must first start from the fact: new formation of constant capital—as distinct from the reproduction of the existing constant capital—flows from profit as its source; that is, assuming on the one hand that the wages only suffice for the reproduction of labour capacity, and on the other that the whole surplus value is embraced under the category "profit", since it is the industrial capitalist who directly appropriates the whole surplus value, [irrespective of] to whom and where he has to surrender some of it later.

("THE MASTER-CAPITALIST IS THE GENERAL DISTRIBUTOR OF WEALTH who undertakes to pay to the labourers, the wages—to the (MONEYED) CAPITALIST, the interest—to the proprietor, the rent of his land" (Ramsay, [I.c.], p. 218-[19]).263

[In calling the whole] surplus value profit, we regard the capitalist: 1) *as the person who immediately appropriates the whole surplus value created; 2) as the distributor of that surplus value between himself, the moneyed capitalist, and the proprietor of the soil.*)

[VII-273] That this new constant capital arises from profit however means nothing but that it is due to a part of the surplus labour of the labourers. Just as the savage, in addition to the time he needs for hunting, must necessarily use some time for making his bow; or just as in patriarchal agriculture, the peasant, in addition to the time spent in tilling the soil, must use a certain quantity of labour time in producing most of his implements.

But the question here is: Who is it that labours in order to replace the equivalent of the constant capital already expended in production? The part of the labour which the labourer performs for himself replaces his wages, or, considered in relation to the
whole of production, creates his wages. On the other hand, his surplus labour which forms the profit is in part a consumption fund for the capitalist, and in part is transformed into additional capital. But the capitalist does not replace the capital already used up in his own production out of this surplus labour or profit. But the necessary labour which forms the wages and the surplus labour which forms the profit make up the whole working day, and no other labour is performed in addition to these. (The contingency of the capitalist’s Labour of Superintendence is included in wages. In this aspect he is the wage worker, even though not of another capitalist, yet of his own capital.) What then is the source, the labour, that replaces the constant capital?

The part of the capital expended in wages is replaced (leaving surplus labour out of account) by new production. The labourer consumes the wages, but he adds as much new labour as he has destroyed of old labour; and if we consider the whole working class, without allowing the division of labour to confuse us, he reproduces not only the same value but the same use values, so that, according to the productivity of his labour, the same value, the same quantity of labour, is reproduced in a greater or smaller quantity of these same use values.

If we take society at any one moment, there exists simultaneously in all spheres of production, even though in very different proportions, a definite constant capital—presupposed as a condition of production—that once for all belongs to production and must be given back to it, as seed must be given back to the land. It is true that the value of this constant part can fall or rise, depending on whether the commodities of which it is composed have to be reproduced at less or greater cost. This change in value, however, never alters the fact that in the process of production, into which it enters as a condition of production, it is a postulated value which must reappear in the value of the product. Therefore this change of value of the constant capital can here be ignored. In all circumstances it is a definite quantity of past, objectified labour, which passes into the value of the product as a determining factor. In order to bring out more clearly the nature of the problem, let us therefore assume that the production costs264 or the value of the constant part of the capital similarly remain unchanged, remain constant. It also makes no difference that for example the whole value of the constant capital may not pass into the products in a single year, but, as is the case with fixed capital, only passes into the aggregate products of a series of years. For the question here centres on that part of the constant
capital which is actually consumed within the year, and therefore also must be replaced within the year.

The question of the reproduction of the constant capital clearly belongs to the section on the reproduction process or circulation process of capital—that which however is no reason why the kernel of the matter should not be examined here.

[VII-274] Let us first take the labourer's wages. He receives, then, a certain sum of money in which say 10 hours' labour are materialised, if he works 12 hours for the capitalist. These wages are converted into means of subsistence. These means of subsistence are all commodities. Assume that the price of these commodities is equal to their value. But in the value of these commodities there is one component part which covers the value of the raw materials they contain and the means of production used up in them. All the component parts of the value of these commodities taken together, contain, however, like the wages spent by the labourer, only 10 hours' labour. Let us assume that \( \frac{2}{3} \) of the value of these commodities consists of the value of the constant capital they contain, and \( \frac{1}{3} \), on the other hand, of the labour which has finally made the product into a finished article for consumption. Thus the labourer, with his 10 hours of living labour, replaces \( \frac{2}{3} \) of constant capital and \( \frac{1}{3} \) of living labour (added to the article in the course of the year). If there were no constant capital in the means of subsistence, the commodities, which he buys, the raw material in them would have cost nothing, and no instrument of labour would have been required to make them. In that case there are two possibilities. Either the commodities, as before, would contain 10 hours' labour; then the labourer replaces 10 hours' living labour by 10 hours' living labour. Or the same quantity of use values into which his wages are converted and which he needed for the reproduction of his labour capacity would have cost only \( 3 \frac{1}{3} \) hours' labour (with no instrument of labour and no raw material which is itself a product of labour). In this case the labourer has only to perform \( 3 \frac{1}{3} \) hours' necessary labour, and his wages would in fact fall to \( 3 \frac{1}{3} \) [hours'] objectified labour time.

Let us assume that the commodity is linen: 12 yards (the actual price does not matter here)=36s. or £1 16s. Of this, let \( \frac{1}{3} \) be labour added, \( \frac{2}{3} \) for raw material (yarn) and wear and tear of machinery. Let the necessary labour time=10 hours; the surplus labour therefore=2. Let one hour's labour, expressed in money=1s. In this case the 12 hours' labour=12s., wages=10s., profit=2s. Let us assume that labourer and capitalist spent the
whole of their wages and profit, that is 12 s. (the total value that has been added to the raw material and machinery, the whole quantity of new labour time materialised in the transformation of yarn into linen), on linen itself as a consumption article. (And it is possible that subsequently more than one labour day will be spent on their own product.) A yard of linen costs 3s. With the 12s. labourer and capitalist together—adding wages and profit together—can only buy 4 yards of linen. These 4 yards of linen contain 12 hours' labour, of which however only 4 are newly-added labour, 8 representing the labour realised in the constant capital. With the 12 hours' labour wages and profit together buy only \( \frac{1}{3} \) of their total product, because \( \frac{2}{3} \) of this total product consist of constant capital. The 12 hours' labour are divisible into 4+8, of which 4 replace themselves, while 8—indisputably of the labour added in the weaving process—replace such labour as entered into the weaving process in already materialised form, as yarn and machinery.

In regard to that part of the product, of the commodity, which exchanges against or is bought by wages and profit as an article of consumption (or for any other purpose, even reproduction, for the purpose for which the commodity is bought makes no difference to the transaction), it is therefore clear that the part of the value of the product which is formed by the constant capital is paid for from the fund of newly-added labour, which is resolved into wages and profit. How much or how little of constant capital and how much or how little of the labour added in the last production process is bought by wages and profit combined, in what proportions the labour most recently added and in what proportions the labour realised in constant capital is paid for, depends on the original proportion in which they entered as component parts of value into the finished commodity. To simplify matters we assume the proportion of \( \frac{2}{3} \) labour realised in constant capital to \( \frac{1}{3} \) newly-added labour.

[VII-275] Now two things are clear:

First. The proportion we have assumed in the case of the linen—i.e., in the case where labourer and capitalist realise wages and profit in the commodities they have themselves produced, when they buy back a part of their product—this proportion remains the same when they expend the same quantity of value on other products. On the assumption that every commodity contains \( \frac{2}{3} \) of constant capital and \( \frac{1}{3} \) most recently added labour, wages and profit together could always only purchase \( \frac{1}{3} \) of the product. The 12 hours' labour time = 4 yards of linen. If these 4 yards of linen are
transformed into money, then they exist as 12s. If these 12s. are retransformed into some commodity other than linen, they buy a commodity of the value of 12 hours' labour, of which 4 are most recently added labour, 8 labour realised in constant capital. Consequently, this proportion holds good generally provided the other commodities contain the same original proportion of labour most recently added and of labour realised in constant capital as linen.

Secondly. If the daily most recently added labour = 12 hours, of these 12 hours only 4 replace themselves—i.e., the living, most recently added labour; while 8 pay for the labour realised in the constant capital. But who pays for the 8 hours of living labour which are not replaced by living labour? It is precisely the 8 hours of realised labour contained in the constant capital that are exchanged for the 8 hours of living labour.

There is not the slightest doubt, therefore, that the part of the finished commodity which is bought by wages and profit combined—which together however are nothing but the total quantity of labour most recently added to the constant capital—is replaced in all its elements: the most recently added labour contained in this part as well as the quantity of labour contained in the constant capital. Further, there is not the slightest doubt that the labour contained in the constant capital has here received its equivalent from the fund of living labour most recently added to it.

But now comes the difficulty. The total product of the 12 hours of weaving labour, and this product is absolutely different from what this weaving labour has itself produced, = 12 yards of linen, of the value of 36 hours' labour or 36s. But wages and profit together, or the total labour time of 12 hours can buy back only 12 of these 36 hours' labour, or of the total product only 4 yards, not a piece more. What happens to the other 8 yards? (Forcade, Proudhon. a)

First we note than the 8 yards represent nothing but the constant capital advanced. It has however been given a changed form of use value. It exists as a new product, no longer as yarn, loom, etc., but as linen. These 8 yards of linen, just like the 4 others which have been bought by wages and profit, contain—considered as value—\( \frac{1}{3} \) labour added in the weaving process, and \( \frac{2}{3} \) pre-existing labour materialised in the constant capital. In the

a The names of Forcade and Proudhon were added by Marx in pencil in the manuscript. The reference is to Notebook V of the 1861-1863 manuscript (see this volume, pp. 345-46).—Ed.
case of the 4 yards previously discussed $\frac{1}{3}$ of the newly-added labour covered the weaving labour contained in these 4 yards, i.e. covered itself; $\frac{2}{3}$ of the weaving labour on the other hand covered the constant capital the 4 yards contained. But now we have it the other way round: in the 8 yards of linen, $\frac{2}{3}$ of the constant capital covers the constant capital they contain, and $\frac{1}{3}$ of the constant capital covers the newly-added labour.

What then happens to the 8 yards of linen, which have absorbed the value of the whole constant capital which has been maintained during the 12 hours' weaving labour, or which went into the production process, but is now in the form of a product destined for direct, individual (not industrial) consumption?

The 8 yards belong to the capitalist. Were he to consume them himself, besides the $\frac{2}{3}$ of a yard representing his profit, [VII-276] then he could not reproduce the constant capital contained in the 12 hours' weaving process; in general—with regard to the capital contained in this 12 hours' process—he is no longer able to function as a capitalist. He therefore sells the 8 yards of linen, transforming them into money to the amount of 24s. or 24 hours' labour. But here we come to the difficulty. To whom does he sell them? Into whose money does he transform them? But we shall return to this in a moment. Let us first have a look at the further process.

When he has transformed into money, sold, converted into the form of exchange value, the 8 yards of linen—i.e., the part of the value of his product which = the constant capital he advanced—he buys again with it commodities of the same kind (with regard to their use value) as those which originally composed his constant capital. He buys yarn and looms and so on. He divides the 24s. between raw materials and means of production, in the proportions in which these are required for the manufacture of new linen.

His constant capital is therefore replaced, in terms of use value, by new products of the same labour as that of which it originally consisted. The capitalist has reproduced the constant capital. This new yarn, looms, etc., however (on the assumption with which we began) likewise consist of $\frac{2}{3}$ of constant capital and $\frac{1}{3}$ of most recently added labour. While the first 4 yards of linen (most recently added labour and constant capital) have thus been paid for exclusively by newly-added labour, these 8 yards of linen are replaced by their own newly-produced elements of production, which consist partly of newly-added labour and partly of constant capital. Hence it seems that at least a part of the constant capital
exchanges for constant capital in another form. The replacement of the products is real, because at the same time as the yarn is being worked up into linen, flax is being worked up into yarn and flax seed into flax; in the same way, while the loom is wearing out, a new loom is being made; and similarly, while the latter is being manufactured, new wood and iron is being produced. The elements are produced in one sphere of production at the same time as they are being worked up in the others. But in all these simultaneous processes of production, although each of them represents a higher stage of the product, constant capital is simultaneously being used up in varying proportions.

The value of the finished product, the linen, therefore resolves itself into two parts, of which one repurchases the simultaneously produced elements of constant capital, while the other is expended on articles of consumption. For the sake of simplification no account is here taken of the retransformation of part of the profit into capital; i.e., as throughout this inquiry, it is assumed that wages + profit, or the total of the labour added to the constant capital, are consumed as revenue.

The only question left is: Who buys the part of the total product with whose value the elements of constant capital that have meanwhile been newly produced are again bought? Who buys the 8 yards of linen? We assume, in order to leave no faux-fuyants\(^a\) that it is a type of linen specially intended for individual consumption, and is not, like perhaps sail-cloth, for industrial consumption. Here also the purely intermediary operations of commerce—so far as they are only mediatory—must be left completely out of account. For example, if the 8 yards of linen were sold to a merchant, and even if they pass through the hands of not 1 but 20 merchants and are 20 times bought and resold, then at the 20th time they must at last be sold by the merchant to the actual consumer, who therefore actually pays the producer or the last, the 20th merchant, who as far as the consumer is concerned represents the first merchant, i.e., the actual producer. These intermediary transactions postpone or, if you like, mediate the final transaction, but they do not explain it. The question remains exactly the same whether it is: who buys the 8 yards of linen from the linen manufacturer, or: [VII-277] who buys them from the 20th merchant into whose hand they have come through a series of exchanges?

The 8 yards of linen, just as the first 4 yards, must pass into the

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\(^a\) Loopholes.—Ed.
fund for consumption. That is to say, they can only be paid for out of wages and profit, for these are the only sources of revenue for the producers, who figure here as the only consumers. The 8 yards of linen contain 24 hours' labour. Let us now assume (taking 12 hours as the generally valid normal working day) that labourer and capitalist in two other branches spend their whole wages and profit on linen, as labourer and capitalist in the weaving industry have done with their whole day's labour (the labourer his 10 hours, the capitalist the 2 hours' surplus value made on his labourer, that is, on 10 hours). Then the linen weaver would have sold the 8 yards, the value of his constant capital for 12 yards would be replaced, and this value could again be spent on the particular commodities of which the constant capital consists, because these commodities, yarn, loom, etc., available on the market, have been produced at the same time as yarn and loom were being worked up into linen. The simultaneous production of yarn and loom as products alongside the production process into which they enter as products but from which they do not emerge as products, explains how it is that the part of the value of the linen=the value of the material, loom, etc., worked up into it can be again transformed into yarn, loom, etc. If this production of the elements of linen did not proceed simultaneously with the production of the linen itself, the 8 yards of linen, even when they have been sold and transformed into money, could not be retransformed once more from money into the constant elements of linen. As for example is now the case with the yarn of cloth of the cotton manufacturers, as a result of the American Civil War. The mere sale of their product is no guarantee for them that it will be retransformed, since there is no cotton on the market.

On the other hand, however, although there may be new yarn, new looms, etc., on the market, and therefore production of new yarn and looms had taken place while finished yarn and finished loom were being transformed into linen—in spite of the simultaneous production of yarn and loom alongside the production of the linen—the 8 yards of linen cannot be retransformed into these material elements of constant capital for the weaving industry before they are sold, before they are converted into money. The continuous real production of the elements of linen, running side by side with the production of linen itself, therefore does not yet explain to us the reproduction of the constant capital, before we know whence comes the fund to buy the 8 yards of linen, to give them back the form of money, of independent exchange value.
In order to solve this last difficulty we have assumed that B and C—which can stand for shoemaker and butcher—have spent their total wages and profit, that is, the 24 hours’ labour time which they have at their disposal, entirely on linen. And this gets us over our difficulty with A, the linen weaver. His whole product, the 12 yards of linen in which 36 hours’ labour is realised, has been replaced by wages and profit alone—i.e. by the whole of the labour time newly added to the constant capital in the spheres of production A, B and C. All the labour time contained in the linen, both that already existing in its constant capital and that newly added in the weaving process, has been exchanged against labour time which did not previously exist as constant capital in any sphere of production, but which was added simultaneously to the constant capital in the 3 production spheres A, B and C, *in the last stage* [of production].

Though therefore it is still wrong to say that the original value of the linen was composed of wages and profit alone—since however it was made up of the value=the total of wages and profit=12 hours’ weaving, and the 24 hours’ labour which, independently of the weaving process, was contained in the yarn, loom, in a word, the constant capital—it would on the other hand be correct to say that the equivalent of the 12 yards of linen, the 36s. for which they have been sold, is composed of wages and profit alone; that is, not only the weaving labour but also the labour contained in yarn and loom are replaced entirely by newly-added labour, namely 12 hours’ labour in A, 12 hours in B and 12 hours in C.

The value of the commodity sold is itself divided [*VII-278*] into newly-added labour (wages and profit) and pre-existing labour (value of the constant capital); that is the value for the seller (*in fact* [the value] of the commodity). On the other hand, the purchasing value, the equivalent given by the buyer to the seller,* is made up entirely of newly-added labour, wages and profit. But as every commodity, before it is sold, is a commodity for sale and becomes money through a mere change of form, so every commodity, after it has been sold, would be made up of other component parts of value than it is composed of as a buying commodity (as money), which is absurd. Further: the labour performed by society for example in one year would not only cover itself—so that if the total quantity of commodities is divided

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*In the manuscript the words “the buyer to the seller” were substituted in pencil, presumably by Engels, for “the seller to the buyer”.—*Ed.
into two equal parts, one half of the year’s labour would form an equivalent for the other half—but \( \frac{1}{3} \) of the labour, which forms the current year’s labour in the total labour contained in the annual product, would cover \( \frac{3}{3} \) of the labour, would be equal to a magnitude 3 times greater than itself. This is still more absurd.

In the above example we have shifted the difficulty, pushed it on from A to B and C. But this has only increased the difficulty, not made it simpler. In the first place, in dealing with A we had the way out that 4 yards, containing as much labour time as had been added to the yarn, that is, the total wages and profit in A, were consumed in linen itself, in the product of A’s own labour. With B and C this is not the case, since they consume the total labour time added by them, their total wages and profit, in the product of sphere A, in linen, and so not in the product of B or C. They have therefore to sell not only the part of their product representing the 24 hours’ labour of constant capital, but also the part of their product which represents the 12 hours’ labour newly added to the constant capital. B must sell 36 hours’ labour, not only 24 like A. C is in same position as B. Secondly, in order to sell A’s constant capital, to get it off his hands and transform it into money, we need the whole most recently added labour not only of B but also of C. Thirdly, B and C cannot sell any part of their product to A, since the whole part of A which constitutes revenue has already been expended in A itself by the producers of A. Nor can they replace the constant part of A by any part of their own product, since on the assumption we have made their products are not production elements for A but commodities which enter into individual consumption. The difficulty increases at each further step.

In order to exchange the 36 hours contained in A’s product (that is, \( \frac{2}{3} \) or 24 hours in constant capital, \( \frac{1}{3} \) or 12 hours in newly-added labour) entirely for labour added to constant capital, A’s wages and profit—the 12 hours’ labour added in A—had to consume \( \frac{1}{3} \) of the product of A itself. The other \( \frac{2}{3} \) of the total product—24 hours represented the value contained in the constant capital. This value was exchanged for the total quantity of wages and profit or newly-added labour in B and C. But in order that B and C should be able, with the 24 hours in their products that make up their wages [and profit], to buy linen, they must sell these 24 hours in the form of their own products—and in addition to replace the constant capital they must sell 48 hours of their own products. They have therefore to sell products of B and C to the
amount of 72 hours, in exchange for the total quantity of profit and wages in the other spheres D, E, etc.; and this means (with a normal 12 hours' day) that 12×6 hours (=72) or the labour added in 6 other spheres of production must be realised in the products B and C; [VII-279] that is, the profit and wages or the total labour added to their respective constant capital in D, E, F, G, H, I.

In these circumstances the value of the total product of B+C would be paid for entirely in newly-added labour, that is, the aggregate wages and profit, in production spheres D, E, F, G, H, I. But in these 6 spheres the total produce would then have to be sold (since no part of these products would be consumed by their producers themselves, as they have already put their whole revenue into products B and C), and no part of it could be accounted for within their own spheres; that is, the product of 6×36 hours' labour = 216, of which 144 represent constant capital and 72 (6×12) newly-added labour. Now in order to transform the products of D, etc., similarly into wages and profit, i.e., into newly-added labour, all the newly-added labour in the 18 spheres K¹—K¹⁸, i.e., the total sum of wages and profit in these 18 spheres, must be entirely expended on the products of spheres D, E, F, G, H, I. These 18 spheres K¹—K¹⁸ would have to sell—since they consumed none of their products themselves, but had already spent their entire revenue in the 6 spheres D—I—18×36 hours' labour or 648 hours' labour, of which 18×12 or 216 are in most recently added labour, and 432 in labour contained in the constant capital. In order therefore to transform this total product of K¹—K¹⁸ into the labour added or total wages and profit in other spheres, the labour added in the spheres L¹—L⁵⁴ would be required; that is to say, 12×54 = 648 hours' labour. Spheres L¹—L⁵⁴, in order to exchange their total product = 1,944 hours (of which 648 = 12×54 = newly-added labour and 1,296 hours' labour = the labour contained in the constant capital) for newly-added labour, would have to absorb the newly-added labour of spheres M¹—M¹⁶², for 162×12 = 1,944; these in their turn must absorb the newly-added labour of spheres N¹—N⁴⁸⁶ and so on.

This is the beautiful progression in infinitum which we arrive at if all products are resolved into wages and profit, newly-added labour—if not only the labour added in the commodity but also its constant capital have to be paid for by newly-added labour in another sphere of production.

In order to convert the labour time contained in product A, 36 hours (¹⁄₃ newly-added labour, ²⁄₃ constant capital), into
newly-added labour, i.e., to have it paid for by wages and profit, we at first assumed that $\frac{1}{3}$ of the product (whose value = the total of wages + profit) was consumed or bought—which is the same thing—by the producers of A themselves. This was the progress:

1) **Production sphere A.** Product = 36 hours' labour. 24 hours' labour, constant capital. 12 hours' labour, newly added. $\frac{1}{3}$ of the product consumed by the shareholders of the 12 hours, wages and profit, labourer and capitalist. There remain to be sold $\frac{2}{3}$ of the product of A, equivalent to the 24 hours' labour contained in the constant capital.

2) **Production spheres B$^1$ — B$^2$.** Product = 72 hours' labour; of which 24 labour added, 48 constant capital. They buy with it the $\frac{2}{3}$ of A's product, replacing the value of A's constant capital. But they have now to sell the 72 hours' labour, of which the value of their total product consists.

3) **Production spheres C$^1$ — C$^6$.** Product = 216 hours' labour; of which 72 added labour (wages and profit). They buy with it the entire product of B$^1$ — B$^2$. But they have now to sell 216, of which 144 are constant capital.

[VII-280] 4) **Production spheres D$^1$ — D$^{18}$.** Product = 648 hours' labour, 216 labour added, and 432 constant capital. With the labour added they buy the total product of production spheres C$^1$ — C$^6$ = 216. But they have to sell 648.

5) **Production spheres E$^1$ — E$^{54}$.** Product = 1,944 hours' labour; 648 labour added and 1,296 constant capital. They buy the total product of production spheres D$^1$ — D$^{18}$. But they have to sell 1,944.

6) **Production spheres F$^1$ — F$^{162}$.** Product = 5,832 of which 1,944 added labour and 3,888 constant capital. With the 1,944 they buy the product of E$^1$ — E$^{54}$. They have to sell 5,832.

7) **Production spheres G$^1$ — G$^{486}$.**

In order to simplify the problem, only one working day of 12 hours is assumed throughout, in every production sphere, divided between capitalist and labourer. It does not solve the problem to increase the number of working days, but complicates it needlessly.

So, to get a clearer picture of the law of this series:

1) **A.** Product = 36 hrs. Constant capital = 24 hrs. **Total of wages and profit or newly-added labour = 12 hrs.** The latter is consumed by capital and labour in the form of the product of A itself.

A's product to be sold, equal to its constant capital, = 24 hrs.

2) **B$^1$ — B$^2$.** We need here 2 days' labour, that is, 2 production spheres, to pay for A's 24 hrs.
Product = 2 x 36, or 72 hrs, of which 24 hrs labour and 48 constant capital.

Product of B\(^1\) and B\(^2\) to be sold = 72 hours’ labour, no part of it consumed in their own spheres.

6) C\(^1\) — C\(^6\). We need here 6 days’ labour, because 72 = 12 x 6, and the total product of B\(^1\) — B\(^2\) has to be consumed by the labour added in C\(^1\) — C\(^6\). Product = 6 x 36 = 216 hours’ labour, of which 72 newly added, 144 constant capital.

18) D\(^1\) — D\(^{18}\). We need here 18 days’ labour, because 216 = 12 x 18; so, since there is \(\frac{2}{3}\) constant capital per day’s labour, 18 x 36 is the total product = 648 (432 constant capital).

And so on.

The figures 1, 2, [etc.] placed at the beginning of paragraphs signify the working days or the different kinds of labour in different production spheres, as we assumed 1 working day in each sphere.

Therefore: 1) A. Product = 36 hrs. Added labour 12 hrs. Product to be sold (constant capital) = 24 hrs.

Or:

1) A. Product to be sold or constant capital = 24 hrs. Total product 36 hrs. Labour added 12 hrs. Consumed in A itself.

2) B\(^1\) — B\(^2\). Buys with added labour = 24 hrs A. Constant capital 48 hrs. Total product 72 hrs.

6) C\(^1\) — C\(^6\). Buys with added labour 72 hrs B\(^1\) — B\(^2\) (=12 x 6). Constant capital 144, total product = 216, etc.

[VII-281] Therefore:

1) A. Product = 3 working days (36 hrs). 12 hrs added labour. 24 hrs constant capital.

2) B\(^{1-2}\). Product = 2 x 3 = 6 working days (72 hrs). Added labour = 12 x 2 = 24 hrs. Constant capital = 48 = 2 x 24 hrs.

6) C\(^{1-6}\). Product = 3 x 6 working days = 3 x 72 hrs = 216 hours’ labour. Added labour = 6 x 12 = 72 hours’ labour. Constant capital = 2 x 72 = 144.

18) D\(^{1-18}\). Product = 3 x 3 x 6 working days = 3 x 18 working days = 54 working days = 648 hours’ labour. Added labour = 12 x 18 = 216. Constant capital = 432 hours’ labour.

54) E\(^{1-54}\). Product = 3 x 54 working days = 162 working days = 1,944 hours’ labour. Added labour = 54 working days = 648 hours’ labour; 1,296 constant capital.

162) F\(^1\) — F\(^{162}\). Product = 3 x 162 = 486 working days = 5,832 hours’ labour, of which 162 working days or 1,944 hours’ labour are added labour, and 3,888 constant capital.

486) G\(^{1-486}\). Product = 3 x 486 working days, of which 486 working
days or 5,832 hours' labour are labour added, and 11,664 constant capital etc.

Here we would already have the goodly total of 1+2+6+18+54+162+486 different working days in different production spheres=729 different production spheres, which already implies a considerably ramified society.

In order to sell the total product of A (where only 12 hours' labour=1 working day is added to the constant capital of 2 working days, and wages and profit consume their own product), that is, only the 24 hours' constant capital—and moreover to sell it again entirely for newly-added labour, for wages and profit—we need 2 working days in B\(^1\) and B\(^2\); which however require a constant capital of 4 working days, so that the total product of B\(^{1-2}\)=6 working days. These must be all sold, because from here on it is assumed that each subsequent sphere does not consume any of its own product, but spends its profit and wages only on the product of the preceding sphere. In order to replace these 6 working days of the product of B\(^{1-2}\), 6 working days are necessary, which however presuppose a constant capital of 12 working days. The total product of C\(^{1-6}\) therefore=18 working days. In order to replace these by labour, 18 working days D\(^{1-18}\) are necessary, which however presuppose a constant capital of 36 working days; so that the product=54 working days. To replace these, 54 working days are needed, E\(^{1-54}\), which presuppose a constant capital of 108. Product=162 working days. Finally, to replace these, 162 working days are needed, which however presuppose a constant capital of 324 working days; that is, total product 486 working days, etc. This is F\(^1\)=F\(^{162}\). Finally, to replace this product of F\(^{1-162}\), we need 486 working days (G\(^{1-486}\)), which however presuppose a constant capital of 972 working days. So the total product of G\(^{1-486}\)=972+486=1,458 working days.

But now let us assume that with sphere G we reach an end to the shifting; and [VII-282] our progression would soon bring us to an end in any society. How would the matter stand then? We have a product comprising 1,458 working days of which 486 newly-added labour and 972 labour realised in constant capital. The 486 working days can then be spent in the previous sphere F\(^{1-162}\). But what is to buy the 972 working days contained in the constant capital? Beyond G\(^{486}\) there is no new sphere of production and therefore no new sphere of exchange. In the spheres that lie behind it, except for F\(^{1-162}\), there is nothing to be exchanged. Moreover, G\(^{1-486}\) has expended all its wages and profit up to the last centime in F\(^{1-162}\). Therefore the 972 working days realised in
the total product of \( G \)\(^{1486} \), which are the equivalent of the constant capital it contains, remain unsaleable. It has thus not helped us at all to shift through nearly 800 branches of production the difficulty of the 8 yards of linen of sphere A, or the 24 hours' labour, the 2 working days, representing in its product the value of the constant capital.

It is no use imagining that the reckoning would have a different result if perhaps A did not spend its whole wages and profits in linen, but spent a part of it on the product of B and C. The limit of the outlays, the hours of labour added which are contained in A, B, C, can always only command a labour time equal to themselves. If they buy more of one product, then they buy less of the other. It would only confuse the reckoning, but in no way alter result.

Que faire donc?\(^a\)

In the above calculation we find\(^{268} \):

<table>
<thead>
<tr>
<th>Product</th>
<th>Working days</th>
<th>Labour added</th>
<th>Constant capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>18</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>D</td>
<td>54</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>E</td>
<td>162</td>
<td>54</td>
<td>108</td>
</tr>
<tr>
<td>F</td>
<td>486</td>
<td>162</td>
<td>324</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>729</strong></td>
<td><strong>243</strong></td>
<td><strong>486</strong></td>
</tr>
</tbody>
</table>

\(^{1/3}\) of A's product consumed by A itself

If the last 324 working days of constant capital in this account=the constant capital which the farmer replaces for himself, subtracts from his product and returns to the land—and so has not to be paid for by new labour—then the account would balance. The riddle, however, would only be solved because a part of the constant capital replaces itself.

In fact therefore we have had consumed 243 working days, corresponding to the newly-added labour. The value of the final product, 486 working days=the value of the total constant capital contained in A—F, which also =486 working days. In order to account for this, we assume 486 days of new labour in G, from which however the only satisfaction we get is that instead of

\(^a\) What then is to be done?—Ed.
having to account for a constant capital of 486 days, [VII-283] we have to account for a constant capital of 972 working days in G's product, which is equal to 1,458 working days (972 constant capital + 486 labour). If now we want to get out of our difficulty by supposing that G works without constant capital, so that the product only =486 days of newly-added labour, the account would of course be cleared; but we would have solved the problem of who pays for the part of the value contained in the product which forms the constant capital, by assuming a case in which the constant capital equals nil and hence forms no part of the value of the product.

In order to sell A's total product entirely for newly-added labour, in order to resolve it into profit and wages, the whole of the labour added in A, B and C²⁶⁹ must be spent on the labour realised in product A. Likewise to sell the total product of B + C, all labour newly added in D¹⁻D¹₈ [is needed].²⁷⁰ Similarly, to buy the total product of D¹⁻D¹₈, all labour added in E¹⁻⁵₄. To buy the total product of E¹⁻⁵₄, all labour added in F¹⁻¹₆². And finally, to buy the total product of F¹⁻¹₆², the total labour time added in G¹⁻⁴₈⁶. At the end, in these 486 production spheres represented by G¹⁻⁴₈⁶, the total labour time added = the total product of the 162 spheres F, and this total product which is replaced by labour is as large as the constant capital in A, B¹⁻², C¹⁻⁶, D¹⁻¹₈, E¹⁻⁵₄, F¹⁻¹₆². But the constant capital of sphere G, twice the size of the constant capital used in A⁻F¹⁻¹₆², is not replaced and cannot be replaced.

In fact we have found, on our assumption that in all production spheres the proportion of the newly-added to the pre-existing labour = 1:2, that always twice as many new production spheres must use all their new labour to buy the product of the preceding spheres—the labour added of A, B¹⁻² and C¹⁻⁶, to buy A's total product; the labour added of 18 D or D¹⁻¹₈(²×⁹), to buy the product of A, B, C, and so on.²⁷¹ In short, that twice as much newly-added labour as the product itself contains is always needed, so that there must be twice as much newly-added labour in the last production sphere G as there actually is, in order to buy the total product. In a word, we find in the result of G what was already there in our starting-point A, that the newly-added labour cannot buy any greater quantity of its own product than it itself amounts to and that it cannot buy the labour pre-existing in the constant capital.

It is therefore impossible for the value of the revenue to cover the value of the total product. But since, apart from the revenue, no fund exists from which this product sold by producers to (individual) consumers can be paid for, it is impossible for the
value of the total product, minus the value of the revenue, ever to be sold, paid for or (individually) consumed. On the other hand it is necessary for every product to be sold and paid for at its price (on the assumption that price here = value).

For that matter, it might have been foreseen from the outset that introducing the acts of exchange, sales and purchases between different commodities or the products of different production spheres, would not bring us a step forward. In A, the first commodity, the linen, we had \( \frac{1}{3} \) or \([\text{VII-283a}]\) 12 hours of newly-added labour and \(2 \times 12 = 24\) hours of pre-existing labour in the capital. Wages and profit could only repurchase that part of the product of commodity A—and therefore also of any equivalent of commodity A in any other product—which is equal to 12 hours' labour. They could not buy back their own constant capital of 24 hours, hence they could not repurchase the equivalent of this constant capital in any other commodity either.

It is possible for the relation of added labour to constant capital to be different in commodity B. But however different the proportion may be of constant capital to newly-added labour in the various spheres of production, we can calculate the average, and so say that in the product of the whole society or of the whole capitalist class, in the total product of capital, the newly-added labour = \(a\), the labour pre-existing as constant capital = \(b\). In other words, the proportion of 1:2 which we assumed in A, the linen, is only a symbolical expression of \(a:b\) and is not intended to imply anything more than that definite and definable relation of some kind or other exists between these two elements—the living labour added in the current year or in any other period selected, and the past labour pre-existing as constant capital. If the 12 hours added to the yarn buy not only linen, but for example linen only to the amount of 4 hours, then they could buy some other product to the amount of 8 hours, but they could never buy more than 12 hours altogether; and if they buy another product to the value of 8 hours, then 32 hours' linen in all must be sold by A. The example A therefore holds good for the total capital of the entire society, and though the problem can be complicated by introducing the exchange of different commodities, the problem itself remains unchanged.

Let us assume that A is the total product of society: then \( \frac{1}{3} \) of this total product can be bought by the producers for their own consumption, bought and paid for with the total of their wages and their profits, = the total newly-added labour, the amount of their aggregate revenue. They have no fund with which to pay
for, to buy and consume, the other $\frac{2}{3}$. Just as the newly-added labour, the $\frac{1}{3}$ which consists of profit and wages, is itself covered by its own product, or withdraws only that part of the value of the product which contains $\frac{1}{3}$ of the total labour, newly-added labour or its equivalent, so must the $\frac{2}{3}$ of pre-existing labour be covered by its own product. That is to say, the constant capital remains equal to itself and replaces itself out of that part of the value which represents the constant capital in the total product. The exchange between various commodities, the series of purchases and sales between different spheres of production, brings about a change in form only in the sense that the constant capitals in the various production spheres mutually replace each other in the proportion in which they were originally contained in them.

We must now examine this more closely.

//Many examples can be given to show how often in the course of his work, when he is explaining actual facts, Adam Smith treats the quantity of labour contained in the product as value and determining value. Some of these are quoted by Ricardo. His whole doctrine of the influence of the division of labour and improved machinery on the price of commodities is based on it. Here one passage will be enough to cite. In Book I, Chapter XI, Adam Smith speaks of the cheapening of many manufactured goods in his time, as compared with earlier centuries, and he concludes with the words:

"It cost a greater quantity of labour [VII-283b] to bring the goods to market. When they were brought thither, therefore, they must have purchased, or exchanged for the price, of a greater quantity" ([Garnier,] t. II, p. 156) [Vol. I, p. 404]. //

This view—that the annual product of the country is divided into wages and profits (rents, interest, etc., included in the latter)—is expressed by Adam Smith, Book II, Chapter II, in examining the circulation of money and the credit system (on this, compare later Tooke), where he says:

"The circulation of every country may be considered as divided into two different branches; the circulation of the dealers with one another, and the circulation between the dealers and the consumers" (Garnier explains that by dealers Adam Smith here means "all traders, manufacturers, artisans, and so on; in a word, the agents of the trade and industry of a country"). "Though the same pieces of money, whether paper or metal, may be employed sometimes in the one circulation and sometimes in the other; yet as both are constantly going on at the same time, each requires a certain stock of money, of one kind or another, to carry it on. The value of the goods circulated between the different dealers never can exceed the

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a D. Ricardo, *On the Principles...*, London, 1821, Ch. I, Section 1.—*Ed.*
b Marx gives the English term in brackets after its French equivalent.—*Ed.*
value of those circulated between the dealers and the consumers; whatever is bought by the dealers being ultimately destined to be sold to the consumers" ([Garnier,] t. II, l. II, ch. II, pp. 292-93) [Vol. II, pp. 79-80].

To this, as well as Tooke, we must come back later.272

Let us return to our example. The day's product of A, a linen weaving factory, = 12 yards = 36s. = 36 hours' labour, of which 12 are newly-added labour divisible into wages and profit, and 24 hours or 2 days = the value of the constant capital, which now however, instead of the old form of yarn and loom, exists in the form of linen, but in a quantity of linen = 24 hours = 24 s. In this there is the same quantity of labour as in the yarn and loom which it replaces, and with it therefore the same quantity of yarn and loom can be bought again (on the assumption that the value of yarn and loom has remained the same, that the productivity of labour in these branches of industry has not altered). The spinner and the loom maker must sell the whole of their year's or their day's product (which for our purpose here is the same thing) to the weaver, for he is the only person for whom their commodity has use value. He is their only consumer.

But if the weaver's constant capital = 2 working days (his daily consumed constant capital), then for one working day of the weaver there are two working days of spinner and machine maker—2 working days which may themselves be divided in very different proportions into labour added and constant capital. But the total daily product of spinner and machine maker together (assuming that the machine maker makes only looms)—constant capital and added labour together—cannot amount to more than 2 days' labour while that of the weaver, because of the 12 hours' labour newly added by him, amounts to 3 working days. It is possible that spinner and machine maker consume as much living labour time as the weaver. Then the labour time contained in their constant capital must be smaller. However that may be, they can in no case use the same quantity of labour (summa summatarum*) objectified and living, as the weaver. It would be possible for the weaver to use proportionately less living labour time than the spinner (the latter for example would certainly use less than the flax-grower); in that case the excess of his constant capital over the variable part of his capital must be so much greater.

[VII-284] The weaver's constant capital thus replaces the entire capital of the spinner and the loom maker, not only their own constant capital but the labour newly added in the spinning

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* Grand total. — Ed.
process and in the manufacture of machines. The new constant capital therefore here replaces other constant capitals completely and, besides that, the total amount of the labour newly added to them. By the sale of their commodities to the weaver, spinner and loom maker have not only replaced their constant capital but have received payment for their newly-added labour. His constant capital replaces for them their own constant capital and realises their revenue (wages and profit together). In so far as the weaver's constant capital replaces for them only their own constant capital, which they have handed over to him in the forms of yarn and loom, constant capital in one form has only been exchanged for constant capital in another form. There has in fact been no change of value in the constant capital.

Let us now go further back. The spinner's produce is divided into two parts, flax, spindles, coal, etc., in a word his constant capital, and the newly-added labour; similarly for the machine maker's total product. When the spinner replaces his constant capital, he pays not only for the total capital of the spindle manufacturer, etc., but also for that of the flax-grower. His constant capital pays for the one part of their constant capital+the labour added. Then as for the flax-grower, his constant capital—after deducting agricultural implements, etc.—consists of seed, manure, etc. We will assume—as in agriculture must always be the case, plus ou moins\(^a\) directly—that this part of the farmer's constant capital is an annual deduction from his own product, which he must return each year, out of his own product, to the land—that is, to production itself. Here we find a part of the constant capital which replaces itself and is never sold, and therefore also is never paid for, and is never consumed, never enters into individual consumption. Seed, etc., are the equivalent of so much labour time. The value of the seed, etc., enters into the value of the total product; but the same value, because it is the same amount of products (on the assumption that the productivity of labour has remained the same), is also deducted again from the total product and returned to production, not entering into circulation.

Here we have at least one part of the constant capital—that which can be regarded as the raw material of agriculture—which replaces itself. Here therefore is an important branch—the most important branch in size and in the amount of capital it contains—of the annual production in which an important part of

\(^a\) More or less.—*Ed.*
the constant capital, the part which consists of raw materials (apart from artificial fertilisers, etc.), replaces itself and does not enter into circulation, and is therefore not replaced by any form of revenue. Therefore the spinner is not obliged to repay to the flax-grower this part of the constant capital (the part of the constant capital the flax-grower himself replaces and pays for); nor has the weaver to pay this part to the spinner, nor the buyer of the linen to the weaver.

Let us assume that all those who directly or indirectly participated in the production of the 12 yards of linen (=36 s.=3 working days or 36 hours' labour) were paid in linen itself. It is clear in the first place that the producers of the elements of the linen, of the constant capital of the linen, could not consume their own product, since these products are produced for production and do not enter into immediate [VII-285] consumption. They must therefore spend their wages and profits on linen—on the product which finally enters into individual consumption. What they do not consume in linen, they must consume in some other consumable product exchanged for linen. As much (in value) linen is therefore consumed by others as they consume in other consumable products instead of linen. It is the same as if they had themselves consumed it in linen, since as much as they consume in another product is consumed in linen by the producers of other products. The whole problem must therefore be cleared up, without any reference to exchange, by considering how the 12 yards of linen are divided up between all the producers who have taken part in its production or in the production of its elements.273

51/3 yards or 16 hours' labour represent the constant capital of the spinner and of the loom maker. Let us assume that of the spinner's constant capital 2/3 is raw material and is spent on flax; then the flax-grower can consume these 2/3 entirely in linen, since his constant capital //but here we take the wear and tear of his implements of labour, etc.=0// is not put into circulation at all; he has already deducted it and reserved it for reproduction. He can therefore buy 2/3 of the 51/3 yards of linen or 16 hours' labour,=35/9 yards, or 102/3 hours' labour. So there remains to be accounted for only 51/3-35/9 yards, or 16-102/3 hours' labour, i.e., 17/9 yards or 51/3 hours' labour. These 17/9 yards or 51/3 hours' labour resolve themselves into the constant capital of the loom maker and the total product of the spinning machinery maker, who are assumed to be one person.

[VII-286] Therefore once again: 1 hr.=1 s. 12 yards=36 s. 1 yard=3 s.
Theories of Surplus Value. Adam Smith

<table>
<thead>
<tr>
<th>Weaver</th>
<th>Total product</th>
<th>Constant capital</th>
<th>Weaving labour added</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 yards linen</td>
<td>8 yards</td>
<td>12 hours</td>
<td>12 hours</td>
<td></td>
</tr>
<tr>
<td>(36 s.)</td>
<td>(24 hours)</td>
<td>=12s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(36 hours' labour)</td>
<td>(24 s.)</td>
<td>=4 yards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the weaver's constant capital let \(\frac{3}{4}\)=yarn and \(\frac{1}{4}\)=loom (means of production in general). The weaver thus pays 6 yards or 18 hours to the spinner and 2 yards or 6 hours to the machine maker, etc.

<table>
<thead>
<tr>
<th>Spinner</th>
<th>Total product</th>
<th>Constant capital</th>
<th>Spinning labour added</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 yards</td>
<td>4 yards</td>
<td>2 yards</td>
<td>2 yards</td>
<td></td>
</tr>
<tr>
<td>(18s.)</td>
<td>(12s.)</td>
<td>6s.</td>
<td>=6s.</td>
<td></td>
</tr>
<tr>
<td>(18 hours)</td>
<td>(12 hours)</td>
<td>6 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Machine maker</th>
<th>Total product</th>
<th>Constant capital</th>
<th>Labour added</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/3 yards</td>
<td>2/3 yard</td>
<td>2/3 yard</td>
<td>6 hours</td>
<td></td>
</tr>
</tbody>
</table>

Of the 8 yards which replace the weaver's constant capital, therefore, 2 yards (=6 s.=6 hours) are consumed by the spinner, and \(\frac{2}{3}\) of a yard (2 s.=2 hours' labour) by the maker of looms, etc.

What remains for us to account for is thus \(8 - 2\frac{2}{3}\) yards=\(5\frac{1}{3}\) yards (=16 s.=16 hours' labour). These remaining \(5\frac{1}{3}\) yards (=16 s.=16 hours' labour) are resolved as follows: We assume that in the 4 yards which represent the spinner's constant capital, that is, the elements of his yarn, \(\frac{5}{4}\) is the equivalent of the flax, and \(\frac{1}{4}\) of the spinning machine. The elements of the [VII-287] spinning machine will be reckoned in further on with the constant capital of the loom maker. The two are assumed to be the same person.

Of the 4 yards which replace the spinner's constant capital, \(\frac{3}{4}\)=3 yards are therefore resolved into flax. A considerable part of the constant capital in the flax, used in its production, has not however to be replaced; for the flax-grower has already returned it to the land in the form of seed, manure, fodder, cattle, etc. Therefore in the part of his product that he sells, only the wear and tear of his instruments of labour, etc., has to be included as constant capital. Here we must rate the labour added at \(\frac{2}{3}\) at least and the constant capital to be replaced at \(\frac{1}{3}\) at the most.
Thus:

<table>
<thead>
<tr>
<th>Total product</th>
<th>Constant capital</th>
<th>Farm labour</th>
<th>Consumable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 yards</td>
<td>1 yard</td>
<td>2 yards</td>
<td>2 yards</td>
</tr>
<tr>
<td>9s.</td>
<td>3s.</td>
<td>6s.</td>
<td>6s.</td>
</tr>
<tr>
<td>9 hours’ labour</td>
<td>3 hours’ labour</td>
<td>6 hours’ labour</td>
<td>6 hours’ labour</td>
</tr>
</tbody>
</table>

Thus what we have still to account for is:
1 yard (3 s., 3 hours’ labour), equal to the flax-grower’s constant capital:
1 1/3 yards (4 s., 4 hours’ labour), equal to the constant capital for the loom;
finally
1 yard (3 s., 3 hours’ labour) for the total product contained in the spinning machine.

First what the machine maker can consume for the spinning machine has to be deducted:

<table>
<thead>
<tr>
<th>Total product</th>
<th>Constant capital</th>
<th>Engineering labour added</th>
<th>Consumable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinning machine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 yard</td>
<td>2/3 yard</td>
<td>1/3 yard</td>
<td>1/3 yard</td>
</tr>
<tr>
<td>3s.</td>
<td>2s.</td>
<td>1s.</td>
<td>1s.</td>
</tr>
<tr>
<td>3 hours’ labour</td>
<td>2 hours’ labour</td>
<td>1 hour’s labour</td>
<td>1 hour’s labour</td>
</tr>
</tbody>
</table>

Moreover, the agricultural machinery, the flax-grower’s constant capital, has to be divided into its consumable and other parts:

<table>
<thead>
<tr>
<th>Total product</th>
<th>Constant capital</th>
<th>Engineering labour</th>
<th>Consumable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural machine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 yard</td>
<td>2/3 yard</td>
<td>1/3 yard</td>
<td>1/3 yard</td>
</tr>
<tr>
<td>3s.</td>
<td>2s.</td>
<td>1s.</td>
<td>1s.</td>
</tr>
<tr>
<td>3 hours’ labour</td>
<td>2 hours’ labour</td>
<td>1 hour’s labour</td>
<td>1 hour’s labour</td>
</tr>
</tbody>
</table>

If therefore we put together that part of the total product which represents machinery, it amounts to 2 yards for the loom, 1 yard for the spinning machine, 1 yard for the agricultural machine, 4 yards in all (12 s., 12 hours’ labour or 1/3 of the total product, 12 yards of linen). Of these 4 yards, the machine maker can consume 2/3 of a yard for the loom, 1/3 for the spinning machine, ditto 1/3 for the agricultural machinery, in all 1 1/3 yards. 2 2/3 yards are left, that is, 4/3 constant capital for the loom, 2/3 for the spinning machine, and 2/3 for the agricultural machine=8/3=2 2/3 yards.
(=8 s. =8 hours’ labour). This therefore forms the machine builder’s constant capital which has to be replaced. Of what now does this constant capital consist? On the one hand, of its raw material, iron, wood, leather belting; and so on. But on the other hand, of that part of the machine he works with (which he may have built himself) which he uses in building machines and which gets worn out. Let us assume that the raw material amounts to \(2/3\) of the constant capital, and the machine-building machine to \(1/3\). This latter \(1/3\) is to be examined later. The \(2/3\) for wood and iron [VII-288] amount to \(2/3\) of the \(22/3\) yards = \(8/3\) yards = \(24/9\) yards. \(1/3\) of this = \(8/9\), therefore \(2/3 = 16/9\) yards.

Let us then assume that here in machinery is \(1/3\) and added labour \(2/3\) (since there is nothing for raw material); then \(2/3\) of the \(16/9\) yards replace labour added, and \(1/3\) machinery. Thus what is left again for machinery is \(16/27\) yard. The constant capital of the producers of iron and wood, in short, of the extractive industry, consists only of instruments of production—which we here call machinery in general—and not of raw material.

Therefore \(8/9\) yard for the machine-building machine, \(16/27\) yard for the machinery used by the producers of iron and wood. So \(24/27 + 16/27 = 40/27 = 13/13\) yards. This, therefore, has in turn to be put down to the machine builder's account.

_Machinery_, \(24/27\) of a yard forms the replacement for the machine-building machine. But this in turn is divided into raw material (iron, wood, etc.), the part of the machinery used up in building the machine-building machine, and labour added. So, if each of the elements is \(1/3\) of the total, \(8/27\) of a yard would go for the labour added, and \(16/27\) of a yard would be left for the _constant capital_ to be replaced in the machine-building machine, that is, \(8/27\) of a yard for raw material and \(8/27\) of a yard to replace the part of the value representing the machinery used up in working up this raw material (together \(16/27\) of a yard).

On the other hand the \(16/27\) of a yard, which replace the iron and wood producers' machinery, likewise consist of raw material, machinery and labour added. This last \(= 1/3\), that is, \(16/27 \times 3 = 16/81\) of a yard, and the constant capital in this part of the machinery consists of \(32/81\) of a yard, of which \(16/81\) is for the raw material, \(16/81\) to make good the wear and tear of the machinery.

Thus there remains in the machine builder’s hands, as constant capital to make good the wear and tear of his machinery, \(8/27\) of a yard, with which he replaces the wear and tear of his machine-building machine, and \(16/81\) of a yard for the wear and tear of the
iron and wood producers’ machinery that has to be replaced.

Apart from this he had, for the replacement of his constant capital, $\frac{8}{27}$ of a yard for the raw material (contained in the machine-building machine) and $\frac{16}{81}$ for the raw material contained in the iron and wood producers' machines. Of this, however, another $\frac{2}{3}$ consist of labour added and $\frac{1}{3}$ of machinery used up. Therefore $\frac{2}{3}$ of the $\frac{24}{81} + \frac{16}{81} = \frac{40}{81}$ is paid for labour, that is, $\frac{262/3}{81}$. Of this raw material, [VII-289] $\frac{131/3}{81}$ is again left to replace machinery. This $\frac{131/3}{81}$ of a yard therefore comes back to the machinery manufacturer.

Now there would again be in the hands of the latter: $\frac{8}{27}$ of a yard for the replacement of the wear and tear of the machine-building machine, $\frac{16}{81}$ to replace the wear and tear of the iron, etc., producers' machinery, and $\frac{131/3}{81}$ for the part of the value to replace the machinery in the raw material, iron, etc.

And so we might go on calculating to infinity, with ever smaller fractions, but never able to divide the 12 yards of linen without a remainder.

Let us briefly resume the course of our inquiry up to this point.

We said at the start that in the different spheres of production there are different proportions as between the newly-added labour (which partly replaces the variable capital laid out in wages, and partly forms the profit, the unpaid surplus labour) and the constant capital to which this labour is added. We could however assume an average proportion, for example, $a$—labour added, $b$—constant capital; or we could assume that the proportion of the latter to the former is $2:1 = \frac{2}{3} : \frac{1}{3}$. If this holds good in each production sphere of capital, we went on, then the labour added (wages and profit together) in one particular sphere of production can always only buy $\frac{1}{3}$ of its own product, since wages and profit together form only $\frac{1}{3}$ of the total labour time realised in the product. But the other $\frac{2}{3}$ of the product, which replace his constant capital, also belong to the capitalist. If he wishes to continue production, however, he must replace his constant capital, that is, retransform $\frac{2}{3}$ of his product into constant capital. To do this, he must sell the $\frac{2}{3}$.

But to whom? We have already deducted $\frac{1}{3}$ of the product that can be bought with the total of wages and profit. If this total represents 1 day's labour or 12 hours, then the part of the
product whose value is equal to the constant capital represents 2 days’ labour or 24 hours. So we assume that [the second] \( \frac{1}{3} \) of the product is bought by profit and wages in another branch of production, and the last \( \frac{1}{3} \) is bought in turn by profit and wages in a third branch of production. But then we have exchanged the constant capital of Product I for wages and profit exclusively, i.e., for newly-added labour, by making the whole labour added to Products II and III be consumed in the form of Product I. Of 6 working days contained in Products II and III, in both newly-added and pre-existing labour, none has been replaced or bought by the labour contained in either Product I or in Products II and III. So we had in turn to make the producers of other products spend all their labour added on Products II and III, and so on. Finally we had to come to a halt at a Product X, in which the labour added was as much as the constant capital of all the earlier products; but its own constant capital \( \frac{2}{3} \) larger, would be unsaleable. Thus we have not come one step forward with the problem. In the case of Product X, as in the case of Product I, the question remains: to whom is the part of the product sold which replaces the constant capital? Or is \( \frac{1}{3} \) new labour added to the product to replace the \( \frac{1}{3} \) new labour + \( \frac{2}{3} \) pre-existing labour contained in the product? Is \( \frac{1}{3} = \frac{3}{3} \)?

So from this it became clear that the shifting of the difficulty from Product I to Product II, etc., in a word, bringing in an intermediate link merely amounting to the exchange of commodities, was of no avail.

[VII-290] So we had to pose the question in a different way.

We assumed that the 12 yards of linen = 36 s. = 36 hours’ labour were a product containing 12 hours’ labour or 1 working day of the weaver (necessary labour and surplus labour together, that is, the equivalent of the total of profit and wages), while \( \frac{2}{3} \) represented the value of the constant capital, yarn and machinery, etc., contained in the linen. We further assumed, in order to eliminate any recourse to quibbles and intermediate transactions, that the linen was of a kind destined only for individual consumption, and therefore could not serve in turn as raw material for some new product. By this we assumed that it was a product that had to be paid for from wages and profit, that it must be exchanged for revenue. And finally to simplify things we assume that no part of the profit is reconverted into capital, but that the whole profit is spent as revenue.

As for the first 4 yards, the first \( \frac{1}{3} \) of the product, equal to the 12 hours’ labour added by the weaver, we soon settled that. They
are resolved into wages and profit; their value is the same as the value of the weaver's total profit and wages. They are therefore consumed by him and his workmen themselves. This solution for the 4 yards is unconditionally valid. For if profit and wages are consumed not in linen but in some other product, this can only happen because the producers of some other product consume the part of it which is consumable by them in linen and not in their own product. If of the 4 yards of linen, for example, only 1 is consumed by the linen weaver himself, and 3 yards in meat, bread, and cloth, then just the same as before, the value of the 4 yards of linen is consumed by the linen weavers themselves; only they have consumed $\frac{3}{4}$ of this value in the form of other commodities, while the producers of these other commodities have consumed in the form of linen the meat, bread and cloth consumable by them as wages and profit. //Here, as throughout this inquiry, it is of course always assumed that the commodity is sold and sold at its value.//

But now comes the real problem. The weaver's constant capital exists now in the form of 8 yards of linen (≈24 hours' labour=24 s.); if he wants to continue production, he must transform these 8 yards of linen into money, £1 4s., and with this £1 4s. he must buy newly-produced commodities, to be found on the market, of which his constant capital consists. To simplify the problem, let it be assumed that he does not replace his machinery within a period of years, but that every day, out of the proceeds of his product, he has to replace in natura the part of the machinery that is equal to the part of the value of the machinery worn out each day. He must replace the part of the product=the value of the constant capital consumed by him with the elements of this constant capital, or the objective conditions of production for his labour. On the other hand, his product, the linen, does not enter any other sphere of production as a condition of production, but passes into individual consumption. He can therefore replace the part of his product which represents his constant capital only by exchanging it for revenue or for the part of the value of the product of other producers which consists of wages and profit, hinc of newly-added labour. The problem is thus posed in its correct form. The question is only: in what conditions can it be solved?

A difficulty that arose in our first presentation of it has now been partly overcome. Although in each sphere of production the

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\[a\] Hence.—Ed.
labour added = \frac{1}{3}, the constant capital, on the assumption made, = \frac{2}{3}, this \frac{1}{3} labour added—or the total value of the revenue (of wages and profit; as already noted earlier, no account is here taken of the part of the profit which is again transformed into capital)—is only consumable in the products of the branches of industry which work directly for individual consumption. The products of all other branches of industry can only be consumed as capital, can only enter into industrial consumption.

[VII-291] The constant capital represented by the 8 yards (=24 hours=24s.) consists of yarn (raw material) and machinery. Let us say \frac{3}{4} raw material and \frac{1}{4} machinery. (Under raw material we can here also reckon all *matériaux instrumentaux* such as oil, coal, etc. But for the sake of simplicity it is better to disregard these.) The yarn would cost 18s. or 18 hours’ labour = 6 yards; the machinery 6s. = 6 hours’ labour = 2 yards.

If therefore the weaver uses his 8 yards to buy yarn for 6 yards and machinery for 2 yards, with his constant capital of 8 yards he has covered not only the constant capital of the spinner and the loom manufacturer, but also the labour newly added by them. A part of what appears as the weaver’s constant capital therefore represents newly-added labour on the part of the spinner and the machinery manufacturer, and consequently is for them not \textit{capital} but revenue.

Of the 6 yards of linen, the spinner can himself consume \frac{1}{3} = 2 yards (= the labour newly added, profit and wages). But 4 yards replace for him only flax and machinery. Say 3 yards for flax, 1 yard for machinery. He must pass on the payment for these. Of the 2 yards the machinery manufacturer can himself consume \frac{2}{3} of a yard; but \frac{4}{3} only replace for him iron and wood, in a word, raw material, and the machinery used for building the machine. Say, of the \frac{4}{3} yards, 1 yard for raw material and \frac{1}{3} of a yard for machinery.

Of the 12 yards of linen, we have consumed up to this point: 1) 4 for the weaver, 2) \[2\] for the spinner, and 3) \(\frac{2}{3}\) for the machine builder; together 6\(\frac{2}{3}\). So \(5\frac{1}{3}\) remain to be accounted for. And these \(5\frac{1}{3}\) are distributed as follows:

The spinner has to replace, out of the value of 4 yards, 3 for flax, 1 for machinery.

The machinery manufacturer has to replace, out of the value of \(\frac{4}{3}\) yards, 1 for iron, etc., \(\frac{1}{3}\) for machinery (what he has himself used up in building the machines).

The 3 yards for flax are therefore paid by the spinner to the flax-grower. In the case of the latter, however, there is the special
feature that a part of his constant capital (namely, seed, manure, etc., in short all products of the land which he returns to the land) does not enter at all into circulation, and consequently does not need to be deducted from the product that he sells; this product on the contrary expresses only added labour, and consequently consists entirely of wages and profit (except for the part which replaces machinery, artificial fertilisers, etc.). So let us assume as before that 1/3 of the total product is labour added; then 1 yard of the 3 would come under this category. Taking as before for the 2 other yards that 1/4 is for machinery, that would be 2/4 yard. The other 6/4, on the other hand, would also be for labour added, since in this part of the flax-grower's product there is no constant capital, which he has already deducted earlier. So 2 2/4 yards would go for the flax-grower's wages and profit. What remains is 2/4 yard for replacement of machinery. Thus of the 5 1/3 yards which we had to consume, 2 2/4 have gone (5 4/12 - 2 6/12 = 2 10/12 = 2 5/6 yards). This last 2/4 of a yard would therefore be used by the flax-grower to buy machinery.

The machinery manufacturer's account would now stand like this: of the constant capital for the loom he had laid out 1 yard for iron, etc.; 1/3 of a yard for the wear and tear of the machine-building machine in producing the loom.

In addition, however, the spinner buys from the machinery manufacturer spinning machinery for 1 yard, and the flax-grower buys from him agricultural implements for 2/4 of a yard. Of these 6/4 yards, the machinery manufacturer has to consume 1/3 for labour added, and to expend 2/3 for the constant capital laid out in the spinning machine and the agricultural implements. 6/4 however = 18/12. So the machine builder would have 5/12 of a yard [VII-292] again for consumption, 12/12 or 1 yard to convert into constant capital. (Of the 2 5/6 yards not yet consumed, 1/2 yard therefore has gone. 14/6 yards are left, or 2 2/6, or 2 1/3 yards.)

Of this yard the machinery manufacturer would have to expend 3/4 on raw material, iron and wood, etc., 1/4 to pay to himself for the replacement of the machine-building machine.

So the total account would now stand like this:

**Machinery manufacturer's constant capital**

For the loom: 1 yard for raw material, 1/3 of a yard for wear and tear of his own machinery.

For spinning machine and agricultural implements: 3/4 of a yard for raw material, 1/4 of a yard for wear and tear of his own machinery.

HENCE: 1 3/4 yards for raw material, 1/3 + 1/4 for wear and tear of his own machinery.
The 1¾ yards or 7/4 yards therefore buy from the iron and wood manufacturers iron and wood to this value. 7/4 = 21/12. But here a new question arises. In the case of the flax-grower, the raw material which is part of the constant capital did not enter into the product he sold, because it had already been deducted. In this case we must resolve the total product into labour added and machinery. If we even assumed that here the added labour = 2/3 of the product, the machinery = 1/3, 14/12 would be consumable. And 7/12 would remain as constant capital for machinery. This 7/12 would come back to the machinery manufacturer.

What was left of the 12 yards would then amount to 1/3 + 1/4 yard, which the machinery manufacturer would have to pay to himself for the wear and tear of his own machinery, and 7/12 of a yard, which the iron and wood manufacturers return to him for machinery. Hence 1/3 + 1/4 = 4/12 + 7/12 = 11/12. In addition, the 7/12 returned by the iron and wood manufacturers. (Together 14/12 = 1 2/12 = 1 1/6.)

The iron and wood manufacturers' machinery and instruments of labour must be bought from the machinery manufacturer, just as those of the weaver, the spinner and the flax-grower. Thus of the 7/12 of a yard, let 1/3 = 2/12, be labour added. This 2/12 of a yard can therefore also be consumed. The remaining 5/12 (actually 4/12 and 2/3, but there's no need to be so exact) represents the constant capital contained in the wood-cutter's axe and the iron manufacturer's machinery, 3/4 pig-iron, wood, etc., and 1/4 machinery used up. (Of the 14/12 yards 12/12 is left, or 1 yard = 3 hours' labour = 3s.) Therefore of the 1 yard, 1/4 of a yard for replacement of the machine-building machine and 3/4 of a yard for wood, iron, etc.

Hence for the wear and tear of the machine-building machine 7/12 of a yard + 1/4 of a yard = 7/12 + 3/12 = 10/12 of a yard. On the other hand it would now be quite pointless again to resolve the 3/4 of a yard for wood and iron into their component parts and to return a part of it once more to the machinery manufacturer, who would return a part of it again to the iron [VII-293] and wood manufacturers. Something would always be left over and a progressus in infinitum.

Let us then take the problem as it now stands. 10/12 or 5/6 of a yard in value has to be replaced by the machinery manufacturer himself in the worn-out machine.

3/4 or 9/12 of a yard represents an equal amount of value in wood and iron. The machinery manufacturer has given it to the iron
and wood manufacturers, in order to replace his raw material. We have in hand the residuum of $\frac{19}{12}$ or $1\frac{7}{12}$ yards.

The balance of $\frac{5}{6}$ of a yard which the machinery manufacturer keeps for making good his wear and tear $=\frac{15}{6}s. = \frac{15}{6}$ hours' labour, that is, $2\frac{3}{6}$, or $2\frac{1}{2}s.$, or $2\frac{1}{2}$ hours' labour. The machinery manufacturer cannot accept any linen for this value; he would himself have to sell it again, in order with the $2\frac{1}{2}s.$ to make good the wear and tear of his machinery, in a word, to make new machine-building machines. But to whom is he to sell it? To producers of other products (other than iron and wood)? But these producers have consumed in linen all that they were able to consume in this form. Only the 4 yards which constitute the weaver's wages and profit are exchangeable for other products (apart from those contained in the constant capital or the labour of which this capital consists). And we have already accounted for these 4 yards. Or is he to pay workers with it? But we have already deducted from his products all that labour has added to them, and we have taken it as all consumed in linen.

To put the matter in another way:

The weaver has to replace for machinery =2 yards =6s. =6 hours' labour
The spinner.............. ditto ditto =1 " =3 " =3 " "
The flax-grower ........... ditto ditto = $2/4$ " = $1\frac{1}{2}$ " = $1\frac{1}{2}$ " "
The iron and wood producers................. ditto ditto = $\frac{7}{12}$ " = $1\frac{3}{4}$ " = $1\frac{3}{4}$ " "

Total yards expended on machinery or the part of the value of the linen which consists of machinery

| ditto | $4\frac{1}{12}$ yards | $12\frac{1}{4}$s. | $12\frac{1}{4}$ hours' labour |

To simplify the calculation, say 4 yards=$12s. = 12$ hours' labour.

Of this, for labour (profit and wages) $\frac{1}{3}=\frac{4}{3}$ yards=$1\frac{1}{3}$ yards.

$2\frac{2}{3}$ remain for constant capital. Of this, $\frac{3}{4}$ for raw material, $\frac{1}{4}$ for wear and tear of machinery. $2\frac{2}{3}=\frac{8}{3}=\frac{32}{12}$. Of this $\frac{1}{4}=\frac{8}{12}$.

This $\frac{8}{12}$ of a yard for wear and tear of machinery is all that the machinery manufacturer is still burdened with. For he pays $\frac{24}{12}$ or 2 yards to the iron and wood manufacturers for raw material.

[VII-294] It is wrong, then, to charge the iron and wood manufacturers again for machinery, since all that they have to replace in machinery, namely $\frac{7}{12}$ of a yard, has already been brought into the machinery manufacturer's account. In the latter's
ITEM, the whole of the machinery that they need for the production of iron and wood has already been included, and it therefore cannot come a second time into the reckoning. The last 2 yards for iron and wood (the residuum of $2^{8/12}$) consist therefore entirely of labour, since there is no raw material used, and can therefore be consumed in linen.

Thus the whole residuum is $8/12$ of a yard or $2/3$ of a yard for wear and tear of the machinery used by the machinery manufacturer.

The whole problem was partly solved by the fact that the part of the farmer’s constant capital, which does not itself consist of labour newly added or in machinery, does not circulate at all, but is already deducted, replaces itself in its own production, and therefore also—apart from the machinery—his whole circulating product consists of wages and profit and consequently can be consumed in linen. This was one part of the solution.

The other part was that what appears in one sphere of production as constant capital, in other spheres of production appears as new labour added during the same year. What in the weaver’s hand appears as constant capital consists in large part of the revenue of the spinner, machinery manufacturer, flax-grower and iron and wood producers (also of the collier, etc.; but for the sake of simplification this is not brought into it). (This is so clear that, for example, when the same manufacturer both spins and weaves, his constant capital seems to be smaller than that of the weaver and the labour added by him greater, i.e., the part of his product which consists of labour added, revenue, profit and wages. Thus in the case of the weaver revenue = 4 yards = 12s., constant capital = 8 yards = 24s. If he both spins and weaves, his revenue = 6 yards. His constant capital = 6 yards ditto; that is, 2 yards = loom, 3 yards flax, and 1 yard spinning machinery.)

Thirdly, however, the solution so far found is that all production processes which supply only raw material or means of production for the product which finally enters into individual consumption, cannot consume their revenue—profit and wages, the [labour] newly added—in their own product, but they can consume the part of the value of this product which represents revenue only in the consumable product, or, what is the same thing, [they have to exchange it] for a consumable product of other producers containing the same amount of value. Their newly-added labour enters into the final product as a component part of the value, but is only consumed in the form of the final
product, while as a use value it is contained in the final product as raw material or machinery used up.

Hence the part of the problem which now remains to be solved is reduced to this: What happens to the \( \frac{2}{3} \) of a yard for the wear and tear—not of the machines used in production, for these represent new labour, that is, new labour which gives the raw material (which has itself no raw material that costs anything) the form of new machinery but—[what happens] to the depreciation of the machinery manufacturer’s machine-building machine? Or to put it another way: Under what conditions can the machinery manufacturer consume the \( \frac{2}{3} \) of a yard = 2s. = 2 hours’ labour in linen, and at the same time replace his machinery? That is the real question. This takes place in fact. It necessarily takes place. Hence the problem: how is this phenomenon to be explained?

[VII-295] Here we leave entirely out of account the part of the profit which is transformed into new capital (both circulating and fixed, variable and constant capital). It has nothing to do with our problem, for here new variable capital as well as the new constant capital are created and replaced by new labour (a part of the surplus labour).

So putting this case on one side, the total of labour newly added, in a year e. g., = the total of profit and wages, i. e., = the total of the annual revenue spent on products which enter into individual consumption, such as food, clothing, heating, dwelling-house, furniture, etc.

The total of these products going into consumption is = in value to the total labour added annually (to the total value of the revenue). This quantity of labour must = total labour contained in these products, both the added and the pre-existing labour. In these products not only the labour newly added, but also the constant capital they contain, must be paid for. Their value therefore = the total of profit and wages. If we take linen as the example, then the linen represents for us the aggregate of the products entering into individual consumption annually. This linen must not only be equal to the value of all its elements of value, but its whole use value must be consumable by the various producers who take their share of it. Its whole value must be resolvable into profit and wages, i. e., labour newly added each year, although it consists of labour added and constant capital.

This is partly explained, as we have said, by:

First. A part of the constant capital required for the production of the linen does not enter into it, either as use value or as exchange value. This is the part of the flax which consists of seed,
etc.; the part of the constant capital of the agricultural product which does not enter into circulation, but is directly or indirectly returned to production, to the land. This part replaces itself, so it does not need to be repaid out of the linen. // A peasant may sell his whole harvest, say 120 qrs. But then he must buy from another peasant for example 12 qrs of seed, and the latter has then to use as seed, out of his 120 qrs, 24 qrs instead of 12 qrs, \(\frac{1}{5}\) instead of \(\frac{1}{10}\) of his product. As before 24 qrs of the 240 qrs are given back to the land as seed. Of course, this makes a difference in the circulation. In the first case, where each deducts \(\frac{1}{10}\), 216 qrs enter circulation. In the second case 120 qrs of the first and 108 qrs of the second enter circulation, that is, 228 qrs. As in the previous case, 216 qrs reach the actual consumers. Here therefore we have an example of the fact that the total of values as between dealers and dealers is greater than the total of values as between dealers and consumers.// (Moreover there is the same difference in all cases in which a part of the profit is transformed into new capital; moreover, transactions between dealers and dealers extend over many years, etc.)

This part [required] for the production of the linen, i.e. the consumable products, therefore does not have to replace a considerable part of the constant capital required for its production.

Secondly. A large part of the constant capital required for the linen, that is, for the annual consumable product, appears at one level as constant capital, at another level as labour newly added, and consequently in fact consists of profit and wages, revenue, for one, while the same sum of value appears as capital for another. Thus a part of [the weaver's] constant capital is reducible to the labour of the spinner, etc.

[VII-296] Thirdly. In all the intermediate processes that are necessary to produce the consumable product, a large part of the products, apart from the raw material and certain matériaux instrumentaux, never passes into the use value, but only enters into the consumable product as a component part of its value—such as machinery, coal, oil, tallow, leather belting, etc. In each of these processes which in fact always only produce the constant capital for the next stage—in so far as, through the division of social labour, they take the form of separate branches of business—the product of each stage is divided into one part representing the newly-added labour (consisting of profit and wages, and, with the

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\(\text{\textsuperscript{31\*}}\)

\[\text{\textsuperscript{a}}\] See this volume, pp. 429-30.—\textit{Ed.}
proviso made above,\textsuperscript{a} forms revenue), and another part which represents the value of the constant capital consumed. It is therefore clear that in each of these spheres of production only that part of the product can be consumed by its own producers which represents wages and profit—only that part which remains over after deducting the quantity of products equal to the value of the constant capital they contain. But none of these producers consumes any part whatever of the products of the previous stage, or of the products of all the stages, which in fact produce nothing but constant capital for a further stage.

Thus although the final product—the linen, which represents all consumable products—consists of newly-added labour and constant capital, and so the final producers of this consumable product can only consume that part of it which consists of the labour most recently added, of their total wages and profits, their revenue—nevertheless all the producers of constant capital consume or realise their newly-added labour only in the consumable product. Thus although this consists of labour added and constant capital, its purchase price consists—in addition to that part of the product which the quantity of labour most recently added—of the total quantity of all the labour added in the production of its constant capital. They realise all added labour in the consumable product instead of in their own product—so that in this respect it is the same as if the consumable product consisted entirely of wages and profit, of labour added.

From the consumable product, the linen (the exchange of consumable products for each other and the previous transformation of the commodities into money makes no difference), the producers from whose sphere of production it emerges as a finished product themselves deduct the part of the product equal to their revenue=the labour most recently added by them=the total wages and profit. With the other part of the consumable product they pay the component part of the value due to the producers who have directly supplied them with their constant capital. All of this part of their consumable product therefore covers the value of the revenue and constant capital of the producers of this constant capital in its nearest stage. The latter however keep only the part of the consumable product whose value=their revenue. With the other part they pay in turn the producers of their constant capital= revenue+constant capital. \textit{The account, however, can only be settled} if it is only revenue, newly-added labour, not constant capital,

\textsuperscript{a} See this volume, p. 444.—\textit{Ed.}
that has to be replaced by the last part of the linen, the consumable product. For on the assumption we have made the linen enters only into consumption and does not in turn form the constant capital of another phase of production.

This has already been shown to be the case for a part of the product of agriculture.

In general, it is only products that enter as raw materials into the final product of which it can be said that they are consumed as products. Other products enter into the consumable product only as component parts of value. The consumable product is bought by revenue, that is, by wages and profit. Its total value must therefore be resolvable into wages and profit, that is, into the labour added in all its stages. The question now arises: in addition to the part of the product of agriculture which is returned to [VII-297] production by its producers themselves—seed, cattle, manure, etc.—is there yet another part of the constant capital which does not enter into the consumable product as a component part of value, but is replaced *in natura* in the process of production itself?

Fixed capital in all its forms can of course only be considered here to the extent that its value enters into production and is consumed.

Apart from agriculture (including cattle-raising and fish farming, and forestry, in which reproduction is artificially organised, etc.)—and so apart from all raw materials for clothing, actual means of sustenance and a large part of the products entering into fixed capital in industry, such as sails, rope, belting, etc.—in mining there is the partial replacement of constant capital *in natura* out of the product, so that the part which enters into circulation does not have to replace this part of the constant capital. For example, in coal production some of the coal is used to work the steam-engine which pumps out water or raises coal.

The value of the annual product therefore partly=the part of the labour pre-existing in coal and consumed in producing the coal, and partly=the quantity of labour added (leaving out of account wear and tear of machinery, etc.). Of the total product, however, the part of the constant capital which consists in coal itself is directly deducted and returned to production. No one has to replace this part for the producer, because he replaces it himself. If the productivity of labour has neither fallen nor risen, then too the part of the value which this part of the product represents remains unchanged,=a definite aliquot part of the quantity of labour existing in the product—partly pre-existing
[labour], partly the quantity of labour added during the year. In the other mining industries too there is a partial replacement of the constant capital in natura.

Waste products—as for example cotton waste and so on—are fed to the fields as fertiliser or become raw material for other branches of industry, as for example linen rags [in the production] of paper. In such cases, as in the former case, part of an industry’s constant capital may be directly exchanged for the constant capital of another industry. For example, cotton for cotton waste used as fertiliser.

In general, however, there is a cardinal difference between the production of machines and primary production (of raw materials: iron, wood, coal) and the other phases of production: in the latter, there is no interaction between them. Linen cannot be a part of the spinner’s constant capital, nor can yarn (as such) be part of the constant capital of the flax-grower or machinery manufacturer. But the raw material of machinery—apart from such agricultural products as leather belting, rope, etc.—is wood, iron and coal, while on the other hand machinery in its turn enters as a means of production into the constant capital of the producers of wood, iron, coal, etc. In fact, therefore, both replace each other a part of their constant capital in natura. Here there is exchange of constant capital for constant capital.

Here it is not merely a question of accounting. The producer of iron debits the machinery manufacturer for the wear and tear of the machinery used up in producing the iron and the machinery manufacturer debits for the wear and tear of his machinery in constructing the machines. Let the producers of iron and coal be the same person. First, he himself replaces the coal, as we have seen. Secondly, the value of his total product of iron and coal = the value of the labour added + the labour pre-existing in the worn-out machinery. After deducting from this total product the quantity of iron that replaces the value of the machinery, the quantity of iron which is left represents the labour added. The latter part forms the raw material of manufacturers of machinery, instruments, etc. The machinery manufacturer pays the iron manufacturer for this latter part in linen. In exchange for the first part, he supplies him with machinery to replace the old.

On the other hand, the part of the machinery manufacturer’s constant capital which represents the wear and tear of his machine-building machines, instruments, etc.—and therefore consists neither of raw material (leaving out of account here the machinery used [VII-298] and the part of the coal which replaces
itself) nor of labour added, and so neither of wages nor profit—this wear and tear is in fact made good by the machinery manufacturer appropriating for himself one or two of his own machines to serve as machine-building machines. This part of his product merely comes to an excess consumption of raw material. For it does not represent labour newly added, since in the total product of the labour so many machines=the value of the labour added, so many machines=the value of the raw material, and so many machines=the part of the value that was contained in machine-building machines. It is true that this last part does contain labour added. But in terms of value this=zero, since the labour contained in the raw material and in the machinery used up is not reckoned in the group of machines that represents labour added; and the part which replaces the new labour and machinery is not reckoned in the 2nd group, which replaces the raw material; and consequently in the 3rd part—considered in terms of value—neither labour added nor raw material is contained, but this group of machines represents only the wear and tear of the machinery.

The machinery of the machinery manufacturer himself is not sold. It is replaced in natura, deducted from the total product. Consequently the machines which he sells represent only raw material (which consists only of labour, if he has already been charged for the wear and tear of the raw material producer's machinery) and labour added, and therefore are resolvable into linen for himself and for the raw material producer. As for what specially concerns the relations between the machinery manufacturer and the producer of raw materials, the latter has deducted, in respect of the part of his machinery that has been wasted, a quantity of iron equal to its value. He exchanges this with the machinery manufacturer, so that each of them pays the other in natura, and this process has nothing to do with the division of revenue between them.

So much for this question, to which we shall return in connection with the circulation of capital.265

In reality, the constant capital is replaced by being constantly produced anew and in part by reproducing itself. The part of the constant capital which enters into the consumable product is however paid for out of the living labour which enters into the non-consumable products. Because the latter labour is not paid for in its own products, it can resolve the whole consumable product into revenue. A part of the constant capital is, seen in terms of the year, only seemingly constant capital. Another part, although it enters into the total product, does not enter into the consumable
product either as a component part of its value or as a use value, but is replaced \textit{in natura}, remaining always incorporated in production.

Here we have considered how the total consumable product is divided up and resolved into all the component parts of value and conditions of production that have entered into it.

But always there are, simultaneously and side by side, the consumable product (which, in so far as it consists of wages=the variable part of capital), the production of the consumable product, and the production of all parts of the constant capital required for its production, whether it enters into it or not. In the same way, each capital is always simultaneously divided into constant and variable capital, and although the constant capital, like the variable, is continuously replaced by new products, it always continues to exist in the same manner, as long as the same kind of production continues.

[VII-299] The relation between the machinery manufacturer and the primary producers—of iron, wood, etc.—is that they in fact exchange with each other a part of their constant capital (which has nothing in common with the transformation of a part of the constant capital of one into revenue for the other\textsuperscript{275}), because their products—although one is a previous stage for the other—on both sides enter as means of production into the constant capital of the other. In return for the machinery which the producer of iron, wood, etc., needs, he gives the machine builder iron, wood, etc., to the value of the machine to be replaced. This part of the machine builder's constant capital is for him just the same as seed is for the peasant. It is part of his annual product which he replaces \textit{in natura} for himself and which is not resolved into revenue for him. On the other hand, what is thus replaced for the machine builder in the form of raw material is not only the raw material contained in the iron producer's machine, but also the part of the value of this machine which consists of labour added and wear and tear of his own machinery. Thus it replaces for him not only the wear and tear of his own machinery, but can be regarded as accounting for (replacing) a part of the wear and tear contained in the other machines.

It is true that this [machine sold] to the producer of iron also contains component parts of value=the raw material and the labour added. But on the other hand there is correspondingly less wear and tear to be accounted for in the other machines. This part of their [the iron producers', etc.] constant capital—that is, of the product of their annual labour which replaces only the part of
value of the constant capital representing wear and tear—
therefore does not enter into the machines which the machine
builder sells to other industrialists. But as regards the wear and
tear in these other machines, it is in fact [replaced] for the
machine builder by the above-mentioned \( \frac{2}{3} \) of a yard of linen, the
equivalent of 2 hours’ labour. With that, he buys pig-iron, wood,
etc., to the same value, and replaces the wear and tear in another
form of his constant capital—[in the form] of iron. Thus a part of
his raw material replaces for him the value of his wear and tear, in
addition to the value of the raw material. This raw material,
however, as far as the producer of iron, etc., is concerned, consists
only of the labour time added, as the machinery of these
producers of raw materials (iron, wood, coal, etc.) has already
been accounted for.

Thus all the elements of the linen are resolved into a sum of
quantities of labour=the amount of labour newly added, but not
equal to the amount of the total labour contained in the constant
capital and perpetuated by reproduction.

That the quantity of labour consisting partly of living labour,
partly of pre-existing labour, which forms the total of commodities
which enter each year into individual consumption, and thus are
consumed as revenue, cannot be greater than the labour added
annually, is for that matter a tautology. For the revenue=the total of
profit and wages=the total labour newly added=the total of the
commodities which contain an equal quantity of labour.

The case of iron producer and machine builder is only one
example. Between different spheres of production, where the
products of each enter into the other as means of production, an
exchange in natura takes place too (even though concealed by a
series of money transactions) between the constant capital of the one
and that of the other. In so far as this is the case, the consumers
of the final product which enters into consumption have not
got to replace this constant capital, since it has already been
replaced.

Adam Smith’s contradictions are of significance because they
contain problems which it is true he does not solve, but which he
reveals by contradicting himself. His correct instinct in this
connection is best shown by the fact that his successors take
opposing stands based on one aspect of his teaching or the other.
NOTES
AND
INDEXES
NOTES

1 After completing the economic manuscript of 1857-58 (see present edition, vols 28 and 29), Marx started work to realise his idea of a substantial economic work to encompass all aspects of life in capitalist society. The first step was the publication, in 1859, of A Contribution to the Critique of Political Economy. Part One. In the Preface to this work, Marx sets out the plan of his ambitious project: “I examine the system of bourgeois economy in the following order: capital, landed property, wage-labour; the State, foreign trade, world market... The first part of the first book, dealing with Capital, comprises the following chapters: 1. The commodity; 2. Money or simple circulation; 3. Capital in general. The present part consists of the first two chapters” (see present edition, Vol. 29, p. 261).

From extant correspondence (see present edition, Vol. 40) it is clear that after publishing Part One Marx intended to start immediately on the second part, which was to consist of a chapter on capital in general. However, certain other circumstances, his preoccupation with Herr Vogt among them, prevented him from carrying through this intention. Preparatory work continued up to the summer of 1861 (drafting plans, reviewing the 1857-58 manuscript and excerpts dealing with capital, making new excerpts, etc.), and in August 1861 Marx began writing. Viewed as the second part of A Contribution to the Critique of Political Economy, the manuscript of 1861-63 originally bore the same title. But soon its size grew considerably and reached 23 notebooks, 1,472 large pages in all. In addition to the main title, the covers of the first two notebooks were given the subtitle “Third Chapter. Capital in General”.—5

2 This note was made on the inside cover of Notebook I (which Marx marked “A”), presumably once it was complete. Other notes on the cover have been inserted in the relevant passages of the manuscript by the compilers.—6

3 This note was originally made on the inside cover of Notebook II, which Marx also marked “A”.—6

4 In the economic manuscript of 1857-58, Marx had pointed out that “exchange value expresses the social form of value” (see present edition, Vol. 29, p. 244), but he still used these concepts interchangeably. Only starting with the
second edition of Volume I of *Capital* in 1872 did he begin to differentiate clearly between them.—11

5 Marx summarised the following passage from MacLeod: “When currency is employed in this method, that is when it is employed in producing articles which are themselves intended to be subservient to the production of other articles, it is usually called CAPITAL, and the use of the word Capital is also extended to apply to the article itself so produced to act as an agent in the production of others” (H. D. MacLeod, *The Theory and Practice of Banking*, Vol. I, London, 1855, p. 55).—13

6 Part of the text from pages 16 and 17 of the manuscript has been transferred here in accordance with Marx’s note: “Addition to I 1) a. p. 4, line 2.”—13

7 Commenting on Malthus’ views on pp. XIII—758-759 of the manuscript of 1861-63, Marx quotes Malthus’ *Definitions in Political Economy* and Torrens’ *Essay on the Production of Wealth* (see present edition, Vol. 32). On pp. XIV—777-778 of the manuscript Marx deals once more with Ricardo’s followers’ critique of Malthus’ concept of “the mere consumers” (Vol. 32).—14

8 This work by James Steuart was first published in 1767. In his Excerpt Notebook VII, Marx copied out passages from the six-volume edition of this work published in London in 1805. When writing his synopsis, Marx mistakenly put 1801 as the year of publication. This error occurred again in the manuscript of 1861-63 and in all four editions of Volume I of *Capital*.—16, 348, 352

9 As part of his economic studies in the summer of 1858, Marx wrote a synopsis of Aristotle’s *Republic*, noting, among other things, that the latter drew a distinction between economics and chrematistics. Both the extant part of the original version of *A Contribution to the Critique of Political Economy* and the published version emphasise that Aristotle counterposed the two forms of circulation: \( C \rightarrow M \rightarrow C \) and \( M \rightarrow C \rightarrow M \) (see present edition, Vol. 29, pp. 370 and 488). In Part II, Ch. IV of Volume I of *Capital* Marx dealt in more detail with Aristotle’s views on the subject (see present edition, Vol. 35).—19

10 Marx described the nature of the general connection between the productivity of labour and value—the inverse ratio between the labour time contained in the commodity and the productivity of labour—in Part One of *A Contribution to the Critique of Political Economy* (see present edition, Vol. 29, p. 279).—20, 167, 235, 242

11 Part of the text from page 14 of the manuscript has been transferred here in conformity with Marx’s note: “Addition to a.”—20

12 This and the following paragraph reproduce, in places verbatim, a passage from the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 190-92).—20

13 Later, in notebooks XIII and XIV of the manuscript of 1861-63, Marx returns to his analysis of Malthus’ views and the critique of his theory of “the mere consumers” (see present edition, Vol. 32).—28

14 This quotation is followed by Marx’s German translation.—28

15 In the economic manuscript of 1857-58 Marx already described merchant’s capital and usurer’s capital as, on the one hand, the historically earliest forms of capital and, on the other, as derived, secondary forms of it in developed bourgeois production (see present edition, Vol. 28, pp. 184-85 and 430-36;
Vol. 29, pp. 231-32). In notebooks XI and XV of the manuscript of 1861-63 Marx again takes up his analysis of these forms of capital as the historical prerequisites for the emergence of industrial capital (see present edition, vols 31 and 33).—29, 103

16 Initially, the Greek word κεφάλαιον meant “the principal”, “the basic”, and later, “a sum of money”, “capital”. Marx borrowed the etymological entry from Ducange’s *Glossarium mediae et infimae latinitatis*, Vol. II, Paris, 1842, pp. 139-41. Cf. also Marx’s notes in the Economic Manuscripts of 1857-58 (see present edition, Vol. 28, p. 437).—31

17 A detailed analysis of interest-bearing capital is contained in Notebook XV of this manuscript (see present edition, Vol. 32).—31

18 Marx takes up this issue in Notebook XXI of the manuscript, in the fragment entitled “Transitional Forms” (see present edition, Vol. 34).—32

19 In his analysis of capital in the manuscript of 1861-63 Marx followed the plan he had evolved when working on the economic manuscript of 1857-58. On April 2, 1858, he wrote to Engels about the structure of the book: “Capital falls into 4 sections. a) Capital en général... b) Competition, or the interaction of many capitals. c) Credit, where capital, as against individual capitals, is shown to be a universal element. d) Share capital as the most perfected form (turning into communism) together with all its contradictions” (see present edition, Vol. 40, p. 298).

During his work on the manuscript of Volume III of *Capital*, Marx decided to discuss some questions on credit in the section devoted to capital (Ch. XXV) (see present edition, Vol. 37).—33

20 While working on the manuscript of 1861-63, Marx repeatedly described the prerequisites for analysing capital proper. He thus pointed out a characteristic feature of the dialectical approach to the subject, the transition from the abstract to the concrete, and continued, as it were, his criticism of the vulgar economists, which he had begun in the manuscript of 1857-58 (see present edition, Vol. 28, pp. 180-81, 195-96, 248), for their attempts to reduce the fundamental production relation between the wage labourer and the capitalist to a simple relation between commodity owners, as it appears on the surface of capitalist production in the process of simple commodity circulation.—33, 35, 37, 39, 69, 105, 134, 312, 314, 316

21 Cf. Marx’s description of the historical conditions of the existence of the worker as a free worker in the original version of the beginning of Chapter Three of *A Contribution to the Critique of Political Economy* (present edition, Vol. 29, pp. 504-05).—35, 37, 38, 87, 109, 111, 131

22 Marx returned to his analysis of the historical conditions that gave rise to the free worker, i.e. to a discussion of primitive accumulation, in notebooks XXII and XXIII of the manuscript (see present edition, Vol. 34). The most logical and complete form of his analysis of how the relation between the wage labourer and the capitalist emerged is to be found in Volume I of *Capital*, Part VIII, “The So-Called Primitive Accumulation” (see present edition, Vol. 35).—38

23 In Part One of *A Contribution to the Critique of Political Economy* Marx returns several times to the prerequisites for money circulation (see present edition, Vol. 29, pp. 338-39, 357).—39
24 Marx presents the correlation between the development of money as a hoard and the historical stages in the development of the social process of production in Part One of A Contribution to the Critique of Political Economy (see present edition, Vol. 29, pp. 361-65).—39

25 Being-for-itself ("Fürsichsein", "Fürsichseidend") is a Hegelian term denoting the condition of an attribute regarded in its fixity or relative self-containment.—39, 114

26 Cf. Marx's description of production as given in the Introduction to the economic manuscript of 1857-58 (present edition, Vol. 28, p. 25).—40

27 Marx analysed bourgeois economists' views on the genesis of surplus value in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 251-56).—41

28 Cf. the beginning of Chapter Three in the original version of A Contribution to the Critique of Political Economy (present edition, Vol. 29, p. 502).—41

29 Marx described the relation between master and journeyman on p. XXI—1303 of the manuscript of 1861-63, in the section dealing with the formal and the real subsumption of labour under capital (see present edition, Vol. 34).—42, 94

30 After the publication of Part One of A Contribution to the Critique of Political Economy, Marx drafted a plan for Chapter Three ("Chapter on Capital"). In this, item 5 is "Wage Labour and Capital" (see present edition, Vol. 29, p. 514). While working on the manuscript of 1861-63, Marx became convinced that the material on this issue should be transferred to the end of Section III, "Capital and Profit", as can be seen from the draft plan of this section on p. XVIII—1139 of the manuscript (see present edition, Vol. 33).—42, 304

31 Cf. a similar definition of value as the law of market prices in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 74-75).—44

32 According to the plan given in the Preface to Part One of A Contribution to the Critique of Political Economy, Marx intended to consider these issues in a separate book entitled Wage Labour, a comprehensive research he was planning to undertake into bourgeois economy (see present edition, Vol. 29, p. 261).—44, 82

33 On pp. XX—1284-1296 of the manuscript of 1861-63, Marx repeatedly turned to the analysis of wages (see present edition, Vol. 34). See also this volume, p. 224.—45, 195, 232

34 Turgot wrote his chief economic work in 1766. It was first published by Dupond de Nemours in 1769-70.—46, 352, 363

35 Part of the text from page 26 of the manuscript has been transferred here in conformity with Marx's note: "Addition to p. 29."—46

36 Marx again touches upon this issue as being a consequence of the factory system on pp. XX—1243-1244 of the manuscript of 1861-63 (see present edition, Vol. 33).—46

37 The passage in question is quoted by Marx in the Additions to the chapter "Absolute Surplus Value" (see this volume, p. 217). Later, he used this quotation in Capital, Vol. I, Ch. X (see present edition, Vol. 35).—47
In the manuscript of 1861-63 Marx comments repeatedly on Bailey's attacks on Ricardo's labour theory of value (see this volume, p. 101). This quotation, coming from A Critical Dissertation, occurs again on p. XIV—827, where Marx gives a detailed analysis of Bailey's views on value (see present edition, Vol. 32).—48, 101


Marx gave a detailed analysis of the development of money from the difference between use value and exchange value in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 78-85, 88). Cf. also Part One of A Contribution to the Critique of Political Economy (present edition, Vol. 29, pp. 287-90).—54

On the inside cover of Notebook I marked “A” (see Note 2), Marx copied out a fragment from the manuscript of 1857-58 containing a short résumé of the problem of the exchange between labour and capital and the transition to the question of the actual consumption of the commodity labour capacity, i.e. to an analysis of the labour process and of the process of valorisation (see present edition, Vol. 28, pp. 204-05). This fragment has, therefore, been placed at the beginning of the section “The Labour Process”.—54

In the economic manuscript of 1857-58, Marx criticised Frédéric Bastiat, one of the preachers of economic harmony between the classes in capitalist society, for reducing all economic relations to a simple relation of circulation (see present edition, Vol. 28, pp. 244-45).—54

In the section “The Labour Process” Marx turns repeatedly to his description of real labour as the source of use value, which he gave in Part One of A Contribution to the Critique of Political Economy (see present edition, Vol. 29, p. 278). Here he examines the subject in greater detail.—55, 63

Following Hegel, Marx uses the notion “ideal” in the sense of action mediated by consciousness. Thus, Marx interprets the “idealisation” of the materials of nature, as is clear from the text that follows, as giving a product, through labour, that is, through man's conscious activity, a “higher use value”.—55

Marx gives a description of the interdependence of the division of labour, exchange and exchange value in the original text of Chapter Two of A Contribution to the Critique of Political Economy (see present edition, Vol. 29, pp. 464-68).—55

Cf. Marx’s description of the worker’s indifference to the specificity of his labour in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 222-23).—55

Cf. this passage with Marx’s statement concerning the analysis of the use values of commodities as such in Part One of A Contribution to the Critique of Political Economy (present edition, Vol. 29, p. 270).—55

Cf. Marx’s definition of the simple moments of the labour process in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 224-25).—56

Cf. the description of productive consumption in the economic manuscript of 1857-58 (present edition, Vol. 28, p. 227).—58
Cf. the description of the means and instruments of labour as "objectification of living labour" in the economic manuscript of 1857-58 (present edition, Vol. 28, p. 285).—58

Cf. Marx's definition of a "higher use value" in the economic manuscript of 1857-58 (present edition, Vol. 28, p. 237).—58, 63

The rest of this paragraph and the beginning of the next one contain passages with minor changes taken from the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 226-27).—59

In the economic manuscript of 1857-58 Marx stressed that "for use value, only the quality of the labour already objectified is relevant" (present edition, Vol. 28, p. 288).—62

Cf. Part One of *A Contribution to the Critique of Political Economy* (present edition, Vol. 29, p. 270), in which Marx gives a similar description of use value as a result of the labour process as such.—64

Marx had already pointed out the changes in the character of the labour process resulting from its subsumption under capital in the economic manuscript of 1857-58 (see present edition, Vol. 29, pp. 81-84). In the manuscript of 1861-63, Marx repeatedly noted the varying impact of the capitalist relation on the character of the labour process and the creation by capital of a mode of production corresponding to it.—64, 92, 137, 262, 271, 280

In the economic manuscript of 1857-58, Marx had already criticised economists who, as apologists of bourgeois society, confused capital with the material elements of the labour process (see present edition, Vol. 28, pp. 188-89, 235-36). In the manuscript of 1861-63, Marx took up the issue once more in the section "Unity of the Labour Process and the Valorisation Process" (see this volume, pp. 95 and 98-99) and when considering Thomas Hodgskin's views on p. XV—864 (see present edition, Vol. 32).—65, 95, 98, 140, 143, 150, 154

The remark in parenthesis probably means that Marx wanted to give another definition of productive labour as a moment of the labour process as such. Later, in Ch. VII of Volume I of *Capital*, having left this passage virtually unchanged, he supplied a footnote pointing out the specifics of the application of this concept to the capitalist production process (see present edition, Vol. 35).—65

In the section "Forms Preceding Capitalist Production" of the economic manuscript of 1857-58, Marx dealt at length with the conditions of human labour already present in nature (see present edition, Vol. 28, pp. 412, 416).—65, 134

At the end of the section "Forms Preceding Capitalist Production" of the economic manuscript of 1857-58, Marx already stated that, just as wealth existing in the form of money constituted an historical prerequisite for the emergence of industrial capital, an analysis of the role of money was a theoretical prerequisite for an analysis of capital (see present edition, Vol. 28, pp. 427-36).—69

In the manuscript of 1861-63, in the course of his further analysis, Marx repeatedly pointed to one of the specific features of his method for analysing capitalist production relations: the transformation of the prerequisite for the analysis into its result (of the commodity as the most elementary form of wealth.
into a product of capital) (see this volume, pp. 96-97 and 291 and also Vol. 32, p. XV—899). Marx returns to this issue in the manuscript of Volume I of Capital, Chapter Six, “The Results of the Direct Process of Production” (see present edition, Vol. 34).—69, 97, 291, 298, 313

61 In the Introduction to the economic manuscript of 1857-58 Marx exhaustively criticised the way bourgeois economists broke down the subject of research into production, distribution, exchange and consumption (see present edition, Vol. 28, pp. 17-37). Cf. also Marx’s note on p. XIV—793 of the manuscript of 1861-63 on James Mill’s “unsatisfactory divisions” (present edition, Vol. 32).—69, 159

62 Marx discusses the question of the relations of distribution being determined by the relations of production in the manuscript of Volume III of Capital, Ch. LI (see present edition, Vol. 37). Cf. also the presentation of this problem in the economic manuscript of 1857-58 (present edition, Vol. 29, p. 142).—70, 145, 159

63 Marx returned to this question in Notebook V of the manuscript of 1861-63 (see this volume, p. 325 et seq.). Cf. also Marx’s letter to Engels of August 20, 1862, in which he inquires about the method of calculating the wear and tear of machinery (present edition, Vol. 41, pp. 411-12).—70

64 For more detail, see the section on the Physiocrats in Notebook VI of the manuscript of 1861-63 (this volume, pp. 352-76). Cf. also the pertinent passage in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 253-55).—70, 167

65 At the bottom of page 36 of Notebook I of the manuscript of 1861-63, Marx copied out two paragraphs from the economic manuscript of 1857-58 with slight changes (see present edition, Vol. 28, pp. 236-37).—71


67 Marx is referring to Wakefield’s theory of colonisation. He already touched on the views of this English economist in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 208, 484-85). Later, Marx devoted a whole chapter (Ch. XXIII) to this theory in Volume I of Capital (see present edition, Vol. 35).—75, 116, 257, 292

68 When analysing the boundaries of capitalist production in the economic manuscript of 1857-58, Marx cited J. R. McCulloch’s views to illustrate how the vulgar economists denied the existence of overproduction. McCulloch reduced production based on capital to production for immediate use value, to all intents and purposes identifying production with consumption under capitalism and reducing the goal of the capitalist production process to the consumption of its products by the producers themselves (see present edition, Vol. 28, pp. 338-39). On pp. XIII—707, 717 of the manuscript of 1861-63, Marx returns to this question when describing the specifics of the capitalist production process (see present edition, Vol. 32).—81, 133

69 In the economic manuscript of 1857-58, when evolving the concept of value, Marx proceeded from ordinary (simple) average labour, on which he based the determination of exchange value by labour time (see present edition, Vol. 28, pp. 249, 531). The problem of the definition of simple labour, and the need for further research into the law of the reduction of complex labour to
simple labour was formulated for the first time in the economic manuscript of 1857-58 and then, in more detail, in Part One of *A Contribution to the Critique of Political Economy* (see present edition, Vol. 29, pp. 222, 272-73).—81, 90, 231

70 Cf. the definition of necessary labour time as it is formulated in Part One of *A Contribution to the Critique of Political Economy* (present edition, Vol. 29, p. 274).—82, 242, 313

71 Cf. the economic manuscript of 1857-58, where Marx says that “Californian gold is the product of simple labour” (present edition, Vol. 29, p. 222).—82

72 Cf. the definition of the use value of the commodity labour capacity in the original version of *A Contribution to the Critique of Political Economy* (present edition, Vol. 29, p. 506).—87

73 Marx discussed the socialists' inability to explain surplus value theoretically in his economic manuscript of 1857-58 (see present edition, Vol. 28, p. 340) and in Part One of *A Contribution to the Critique of Political Economy* (Vol. 29, p. 301).—89

74 Cf. Marx's similar statement concerning the consumption of material by labour and capital's consumption of labour by means of the material in the economic manuscript of 1857-58 (present edition, Vol. 28, p. 237).—93

75 The formal subsumption of the labour process under capital and the formation by capital of a corresponding mode of production, i.e. the real subsumption of the labour process under capital, are examined in detail in Notebook XXI of the manuscript of 1861-63 (see present edition, Vol. 34).—93, 135, 262, 311

76 Marx repeatedly discussed the various aspects of “labour of superintendence” in the manuscript of 1861-63 (see this volume, pp. 262, 387 and 413, and also vols 32 and 33, pp. XIV—782, XV—919, 924, XVIII—1100). A special analysis of this issue is to be found in *Capital*, Vol. III, Ch. XXIII (see present edition, Vol. 37).—94, 262, 387

77 Marx re-examines the way Ricardo confused capital with the objective conditions of the labour process on p. XII—653 of the manuscript of 1861-63 (see present edition, Vol. 32). Cf. also Marx's criticism of Ricardo's views in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 188, 235-36).—95

78 The English bourgeois economists' phrase, “capital employs labour”; was also used by Ricardo: “capital, or ... the means of employing labour”. Marx returned several times to this problem in the manuscript of 1861-63 (see present edition, vols 32 and 34, pp. XII—663, XIV—808, XV—864, XXI—1317).—95

79 Marx later reproduced this description of John Wade's work in Volume I of *Capital* in a note to the chapter “The Working-Day” (see present edition, Vol. 35).—96

80 In the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 94-95, 171; Vol. 29, pp. 40, 77-78, 431-32, 487) and Part One of *A Contribution to the Critique of Political Economy* (Vol. 29, pp. 275-76, 289), Marx repeatedly noted the fusion of production relations with their objective being, which is manifested in the fact that social relationships of persons appear in money and capital as social relationships of things.—96, 135

The section which is to be found at the end of Notebook XVII and the beginning of Notebook XVIII of the manuscript of 1861-63, deals again with this question (see present edition, Vol. 33). Marx considered this problem in detail in Volume II of *Capital* (see present edition, Vol. 36).—97, 99

Here, Marx develops an earlier idea of the interdependence of the natural conditions of production at the first stage of the development of human society and the product of the labour process as a result of man's social activities (see present edition, Vol. 28, pp. 188-89, 511). See also Note 58.—97

A reference to A. Turgot, *Réflexions sur la formation et la distribution des richesses*, pp. 34-35. Marx again stresses this idea on p. XIX—1163 of this manuscript (see present edition, Vol. 33).—97

Marx quotes B. Franklin's definition of man from: [Thomas Bentley,] *Letters on the Utility and Policy of Employing Machines to Shorten Labour; Occasioned by the Late Disturbances in Lancashire...*, London, 1780, pp. 2-3. In his Notebook VII of excerpts covering 1859-63, Marx copied out the following passage from that work: "Man has been defined many ways ... a *tool-making animal, or engineer* (Franklin), has by some been adopted as the best and most characteristic definition of men."—98

Marx refers to pp. 153-54 of his Notebook VII of excerpts, covering 1859-62, where he wrote down passages from Volumes One and Three of Colins' three-volume work *L'économie politique...* (Paris, 1856-57).—98

Cf. Marx's description of the individual as a member of a community, given in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 409-10).—98

The assertions made by James Mill and J. B. Say on the impossibility of overproduction under capitalism were critically analysed by Marx in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 338-39, 352).—99

In the economic manuscript of 1857-58, Marx had proved the bourgeois economists' views on capital as an original source of value existing apart from labour to be unsound (see present edition, Vol. 28, pp. 470, 473). Marx repeatedly took up this question in the manuscript of 1861-63 (the section "Capital and Profit"), and when analysing the views of Malthus, Torrens and Ramsay (see present edition, vols 32 and 33).—103

The passages that follow have been transferred here from the inside cover of Notebook II, marked "A". Marx copied them out, with minor changes, from the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 212, 219-20).—103

In the chapter "Piece-Wages" of Volume I of *Capital* (see present edition, Vol. 35), Marx quotes a pertinent passage from A. Ure's *The Philosophy of Manufactures*, London, 1835. —104

Cf. in Marx's economic manuscript of 1857-58: "Such belletristic phrases, which by means of some sort of analogy relate everything to everything else, may even appear profound when are said for the first time, and the more so the more they identify the most disparate things. If repeated, and especially if repeated
complacently, as statements of scientific value, they are *tout bonnement* foolish. Suitable only for belletristic story-tellers and empty chatterboxes who besmear all sciences with their liquorice-sweet rubbish” (see present edition, Vol. 28, pp. 219-20).—104, 159

93 The relation of superordination and subordination under capitalism viewed as a purely economic relation, as distinct from its forms in pre-bourgeois societies, had previously been discussed, in general terms, in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 96, 100-01, 176, 424-25).—106, 132

94 In the manuscript of Volume III of *Capital*, Ch. XXXVI (see present edition, Vol. 37), Marx, defining interest-bearing capital, in which valorisation appears in its pure form and the production of surplus value is concealed, wrote that “this accounts for the fact that even some political economists, particularly in countries where industrial capital is not yet fully developed, as in France, cling to interest-bearing capital as the fundamental form of capital”.—109

95 Marx had written about the formation of bourgeois landed property by capital as a necessary prerequisite for the existence of wage labour in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 206-09).—112, 314

96 In the economic manuscript of 1857-58, Marx repeatedly discussed the inverse relation between object and subject, and the nature of the objective conditions of labour under capitalism that confront labour capacity as an alien, independent power (see present edition, Vol. 28, pp. 233-34, 381-83, 389-90).—113

97 Similar criticism of Bastiat's attempts to represent the form of wage labour as inessential, merely superficial and having nothing to do with the economic relation of labour and capital, is contained in the economic manuscript of 1857-58 (see present edition, Vol. 28, p. 248).—114, 148

98 In examining the views of James Mill on pp. XIV—795-796 of the manuscript of 1861-63, Marx resumes his critique of the views on “the price of labour's being advanced” by capital expounded by a number of bourgeois economists (see present edition, Vol. 32).—115

99 This quotation from F. Wayland's work has been transferred here from pp. II—61-62 of the manuscript. Marx set it off from the main text by a line; it is marked by two crosses and supplied with the note: "To p. 60". On p. 61 of the main text, the same note was made after the word "Wakefield" (see this volume, p. 116). The quotation and Marx's note make it clear, however, that he probably intended to illustrate the passage marked in the main text by another quotation, one from Wakefield's work on the development of capitalist relations in the colonies. That is why the quotation from Wayland is given as a footnote here.—115

100 Marx makes a brief remark about this only on p. XXIII—1461 of the manuscript of 1861-63. He dealt with this question in more detail in Chapter Six of the manuscript of Volume I of *Capital*, "The Results of the Direct Process of Production" (see present edition, Vol. 34).—115, 142

101 Cf. the presentation of this problem in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 511-14). See also this volume, pp. 138-50.—117, 134
In the economic manuscript of 1857-58, Marx had already drawn an analogy between coal, oil and means of subsistence, as being instrumental materials in the labour process (see present edition, Vol. 29, p. 82).—117, 133, 143, 144, 157

These figures differ from the earlier ones. While making the calculations, Marx changed the figures from which he proceeded initially. At first, the value of the product (£5) was composed of the following elements: raw material, £2 10s.; wear and tear of the machinery, £1; the value added by fresh labour, £1 10s. Later, he estimated the raw material at £1 10s., wear and tear of the machinery, at £1, and the value added by fresh labour, at £2 10s. A confusion arose later from the fact that, having switched to new figures in his calculations, in one instance Marx referred to the initial value of raw material, i.e. £2 10s.—120

As Marx himself wrote about the value magnitudes in the given example, “the figures are here a matter of indifference” (see this volume, p. 120). In this case, as in the above, he does not stick to the natural indices initially adopted. At first he assumed the amount of cotton spun daily to be 80 lbs (6 2/3 lbs per hour), whereas later he cites different figures: the amount of cotton spun per hour is 6 lbs, or 72 lbs for 12 hours.—125, 127

Marx critically analysed Rossi's views in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 511-14).—135, 141

Cf. Marx's description of pre-bourgeois property in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 428-32). Marx took up this issue once more on pp. XXI—1328-1329 of the manuscript of 1861-63 (see present edition, Vol. 34).—135

Marx considered the distinction between services and productive wage labour in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 202-03, 393-99). In notebooks VII, IX and XXI of the manuscript of 1861-63, he examined in detail the economic specificity of services in capitalist society (see present edition, vols 31 and 34).—136, 137

When discussing the views of bourgeois economists in the manuscript of 1861-63, Marx returned more than once to the nature of productive and non-productive labour under the conditions of bourgeois production (see present edition, vols 31 and 34, pp. VII—300, IX—419, XXI—1317-1331).—136, 312

Marx discussed the role of trade in establishing the capitalist mode of production in the economic manuscript of 1857-58 (see present edition, Vol. 29, pp. 227-36) and reproduced the fragment from it in Notebook XV of the manuscript of 1861-63 (see present edition, Vol. 33).—136

Marx had already pointed out in the economic manuscript of 1857-58 that Say's definition of capital as a sum of values was unsound (see present edition, Vol. 28, p. 182).—138

In Ramsay this passage reads as follows: “The sources of national wealth would unquestionably be as great in the former case as in the latter. Nothing can prove more strongly that circulating capital...” —139

Marx returned to the analysis of Ramsay's views in Notebook XVIII of the manuscript of 1861-63 (see present edition, Vol. 33).—140

The problem of the functioning of fixed capital in the process of reproduction and partial valorisation of the product had been exhaustively examined by Marx
in the economic manuscript of 1857-58 (see present edition, Vol. 29, pp. 8-128). In the manuscript of 1861-63 he made no special study of this question, although he took it up again when analysing the views of certain bourgeois economists in notebooks IX and XVII (see present edition, vols 31 and 33).—140

On pp. XXII—1403-1404 of the manuscript of 1861-63, summing up the material contained in the works of bourgeois economists dealing with the primitive accumulation of capital, Marx noted that the concentration of small farms in few hands and the competition between big farmers had helped turn independent peasants into wage labourers stripped of all property (see present edition, Vol. 34).—142

Marx borrowed this quotation, which he had translated himself, from the economic manuscript of 1857-58 (see present edition, Vol. 28, p. 511).—146

Marx probably borrowed the quotations from Say and Sismondi, as well as the phrase immediately preceding them, from the economic manuscript of 1857-58 (see present edition, Vol. 28, p. 235). The figure LX denotes a page in one of Marx’s Brussels notebooks of excerpts for 1845, where a synopsis of Sismondi’s quoted work is to be found.—150

Cf. the relevant passage in the economic manuscript of 1857-58 (present edition, Vol. 28, p. 230). Further on Marx copied out some passages from it (see this volume, pp. 159-61).—151

Cf. the relevant passage in the economic manuscript of 1857-58 (present edition, Vol. 28, p. 229).—151

R. Torrens says: “In that early period of society which precedes the separation of the community into a class of capitalists and a class of labourers, and in which the individual who undertakes any branch of industry, performs his own work, the total quantity of labour, accumulated and immediate, expended on production, is that on which comparison and competition turn, and which, in the transactions of barter or sale, ultimately determines the quantity of one commodity which shall be received for a given quantity of another” (pp. 33-34).—151

Pages 23-30 of the London Notebook XVI of excerpts contain a synopsis of the work *Gratuité du crédit*, from which Marx copied this quotation.—153

Cf. the relevant passage in the economic manuscript of 1857-58 (present edition, Vol. 28, pp. 195-96).—154


Marx quotes the same passage from P. Verri at the end of the section dealing with the Physiocrats (see this volume, p. 376).—156

Marx made a detailed analysis of this problem in Chapter Six, “The Results of the Direct Process of Production”, of the manuscript of Volume I of *Capital* (see present edition, Vol. 34). See also Note 100.—158
Marx is referring to item 4 of Section I in the Draft Plan of the Chapter on Capital for *A Contribution to the Critique of Political Economy*, which he drew up after Part One had been published (see present edition, Vol. 29, pp. 513-14). Marx examined questions relating to the primitive accumulation of capital in Notebook XXII of the manuscript of 1861-63 (see present edition, Vol. 34); he made extensive use of the corresponding section of the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 387-99).—159, 192

Marx described surplus value as income in notebooks XV and XXII of the manuscript of 1861-63 (see present edition, vols 32 and 34).—159, 312

Marx examined all these questions in notebooks II and III of the economic manuscript of 1857-58, in the section “Exchange between Capital and Labour” (see present edition, Vol. 28, pp. 213-21, 231-36).—159

This refers to Notebook III of the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 231-34).—159

Marx reproduced these data on p. 186 of the first edition of Volume I of *Capital*. As his letter to Engels of May 7, 1868 indicates (see present edition, Vol. 49), these data refer to the factory of which Engels was co-owner. According to Marx (see his letter to Engels of May 16), Engels himself put them down in his notebook.—161

In a letter to Engels of September 28, 1861, Marx thanked him for the “Manchester Guardians most useful to me” (see present edition, Vol. 41, p. 321).—162

Marx deals with this question in notebooks XVI and XVII of the manuscript of 1861-63 (see present edition, Vol. 33).—163

Originally Marx left the end of Notebook II (pp. 89-94 of the manuscript) blank and, starting most probably in late 1861, filled it in with additional material as he worked on the subsequent part of this manuscript.—163

Marx refers to the analysis of the impact made on profit and the rate of profit by changes in the value of constant capital. This analysis is to be found in Notebook XVI of the manuscript of 1861-63 (see present edition, Vol. 33).—165

Marx borrowed the facts pertaining to the economic development of Hungary from a work by Richard Jones, *An Essay on the Distribution of Wealth...*, London, 1831, a synopsis of which is to be found in Marx's London Notebook IX of excerpts for 1851.—167

Marx borrowed the statistics from “Coal mine accidents. Abstract of return to an address of the Honourable the House of Commons, dated 3 May 1861. Ordered, by the House of Commons, to be printed, 6 February 1862”. Marx later used this material in *Capital*, Vol. III, Ch. V (see present edition, Vol. 37).—168

Marx touched briefly on this issue on pp. XVI—985-98 of the manuscript of 1861-63 (see present edition, Vol. 33). A detailed analysis of the concentration of workers and the economy in the employment of constant capital as factors increasing the rate of profit can be found in *Capital*, Vol. III, Ch. V (see present edition, Vol. 37).—169

Marx reproduces this quotation in the Additions to the chapter “Absolute Surplus Value” (see this volume, p. 224).—170
The passages on pp. 170-71 of this volume were borrowed by Marx from the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 221-22, 231-32).—170

This paragraph, containing a mathematical interpretation of the production of surplus value, was probably inserted by Marx later, between the heading and the text. Marx deals in more detail with the mathematical interpretation of capitalist production as production of surplus value in Chapter Six, "The Results of the Direct Process of Production", of the manuscript of Volume I of Capital (see present edition, Vol. 34).—172

Marx made these calculations on the inside cover of Notebook I, without referring specifically to the text. The calculations have been inserted here by the compilers of the volume.—178

According to the original plan, Marx considered this problem in the section on capital and profit in Notebook XVI of the manuscript of 1861-63 (see present edition, Vol. 33).—178

In the given instance, apart from the "primary" converted forms of surplus value—profit, interest and rent—Marx operates with its "secondary" form—taxes. Here as earlier in the manuscript (see this volume, p. 158), he breaks down surplus value into different kinds of income as industrial capitalists did in everyday practice.—179, 206

Cf. this volume, pp. 199-204. See also Marx's criticism of Senior's "last hour" theory in Capital, Vol. I, Ch. IX (present edition, Vol. 35).—179, 199

These points, which Marx had planned to consider in the section dealing with surplus value, were touched upon in the economic manuscript of 1857-58, e.g. the civilising influence of capital (see present edition, Vol. 28, pp. 336-38, 466); the relation of labour time to free time (Vol. 29, p. 97); and the relation of population and capital (Vol. 28, pp. 925-926). Marx gave a detailed analysis of Proudhon's erroneous thesis in Notebook IV of the manuscript of 1857-58 (Vol. 28, pp. 352-62).—180

Marx wrote briefly on the extremely hard work done by the English bakers in the Additions to this chapter (see this volume, p. 228). In notebooks XVIII and XIX of the manuscript of 1861-63 Marx three times cited facts illustrating the merciless exploitation of dressmakers in London which was an additional source of surplus value for the employers (see present edition, vols 33 and 34).—181

Killing No Murder was the title of a pamphlet that appeared in England in 1657. Its author, Edward Sexby, stated that it was a patriotic duty that Lord Protector Oliver Cromwell, a hated and cruel tyrant, be assassinated.—185


The dependence of the amount of surplus value on the surplus labour of an individual worker and the number of simultaneously employed workers was defined by Marx as a law of surplus value (see this volume, p. 206).—185

Marx had touched on some aspects of the interdependence of the growth of capital and that of the population in the economic manuscript of 1857-58 (see present edition, Vol. 29, pp. 147-48). Later, in the manuscript of 1861-63, he
noted repeatedly that this question should be examined specially when analysing accumulation (e.g. see this volume, p. 190). Marx realised his idea in Part VII of Volume I of *Capital* (see present edition, Vol. 35).—189, 190, 290, 295

151 Marx analysed this problem thoroughly in *Capital*, Vol. I, Ch. XXV (see present edition, Vol. 35).—189

152 Marx again took up the question of the drop in the value of labour capacity as a result of women and children being drawn into capitalist exploitation on pp. XX—1243, 1257 of the manuscript of 1861-63 (see present edition, vols 33 and 34).—189

153 Quite early, in his economic manuscript of 1857-58, Marx gave a description of time as scope for the development of human capacities (see present edition, Vol. 29, p. 93). On p. XX—1244 of the manuscript of 1861-63 he repeats this definition (see present edition, Vol. 33).—191, 301

154 Marx's first detailed description of the antagonistic form of free time as free time only for the few in societies based on the appropriating of the surplus labour of the toiling majority is to be found in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 324-25).—191, 192, 196, 301

155 This definition of wealth as disposable time was inserted later and is a translation of a quotation from the work *The Source and Remedy of the National Difficulties*, London, 1821, p. 6: “Wealth is disposable time and nothing more.” Marx quoted it in the original language in the Additions to the chapter “Absolute Surplus Value” (see this volume, p. 204), most probably after looking through the economic manuscript of 1857-58, where he first used this quotation (see present edition, Vol. 28, p. 324). He analysed this definition once again in Notebook XIV of the manuscript of 1861-63 (see present edition, Vol. 32).—192

156 In the economic manuscript of 1857-58 Marx gave a description of Steuart's economic views in general and his ideas concerning the historical appearance of “free hands”, i.e. the separation of labour capacity from the conditions of production, in particular (see present edition, Vol. 28, p. 395 and Vol. 29, p. 164). When examining Steuart's views in Notebook VI of the manuscript of 1861-63, Marx stressed in particular his contribution to the scientific solution of this problem (see this volume, p. 352).—193, 290, 295, 357

157 Marx uses this quotation from Richard Jones on two other occasions: on p. VI—225 of the manuscript of 1861-63 (see this volume, p. 357), and when analysing the views of the English economist on p. XVIII—1122 of this manuscript (see present edition, Vol. 33).—193

158 A similar description is to be found in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 183, 395, 397, 426) and in the original version of Part One of *A Contribution to the Critique of Political Economy* (see present edition, Vol. 29, p. 481).—197

159 Marx reproduces these two quotations on p. XIV—852 of the manuscript of 1861-63, when examining the views of the author of *The Source and Remedy of the National Difficulties*. By the “value of capital” the author of the pamphlet implies the ratio of the quantity of surplus labour appropriated by the capitalist to the size of the capital he uses (see present edition, Vol. 32).—204

160 Marx erroneously named W. Jacob's *Consideration on the Protection Required by British Agriculture etc.*, London, 1814 as the source of the quotation. The
correction has been made in conformity with the London Notebook IV of excerpts, which contains this quotation from J. G. Büsch among excerpts copied out from Jacob's book.—204

161 Cf. Marx's remarks concerning Joseph Townsend and Giammaria Ortes in Capital, Vol. I, Ch. XXV (see present edition, Vol. 35). He reproduces there the quoted passage from Townsend's work and the excerpt from H. Fr. Storch quoted further in the text.—205

162 Cf. excerpts from the work by Symons at the end of the Chapter on Capital in the economic manuscript of 1857-58 (present edition, Vol. 29, pp. 206-07).—212

163 Marx goes back to examining Richard Jones' views on rent in Notebook XXII of this manuscript (see present edition, Vol. 33).—212

164 Marx borrowed the data on Wallachian and Moldavian peasants cited below from: É. Regnault, Histoire politique et sociale des principautés danubiennes, Paris, 1855, pp. 304-11.—214

165 The Règlement organique, the first constitution of the Danubian Principalities (Moldavia and Wallachia), was introduced in 1831 by P. D. Kiselev, head of the Russian administration there. The principalities had been occupied by the Russian troops after the Russo-Turkish War of 1828-29. Under the Règlement, the legislative power in each of the principalities was granted to the assembly, elected by big landowners, and executive power to the hospodars, representatives of the landed gentry, the clergy and the towns, elected for life. The Règlement consolidated the dominant position of the top stratum of the boyars and the clergy by perpetuating the feudal order, including the corvée.—214

166 A reference to the Factory Acts of 1850, which introduced the 10-hour working day. In the chapter "The Working-Day" (Volume I of Capital) Marx went into the history of this act (see present edition, Vol. 35).—216

167 Newmarch, "Address". In: Report of the Thirty-First Meeting of the British Association for the Advancement of Science; held at Manchester in September 1861, London, 1862, pp. 201-03. Between late August and mid-September 1861, Marx was staying with Engels in Manchester; while there, he attended sittings of the Economic Science and Statistics Section held as part of the Association's 31st annual meeting which took place on September 4-11, 1861.—216

168 Marx first gave a German translation from The Daily Telegraph and then quoted the original, preceding it with the words: "The original runs".—217

169 When recounting facts from the history of factory legislation, including the quotation from Blanqui given below, Marx used A. Redgrave's material from the Reports of the Inspectors of Factories ... for the Half Year ending 31st October 1855, London, 1856, pp. 77-81, 87.—220

170 L. Horner wrote on page 9 of his report of April 30, 1859 (which Marx quotes) that it would probably be his last one. He managed, however, to continue his work as Inspector of Factories and published one more report, covering the half year ending October 31, 1859. See Marx's letter to Engels of January 11, 1860 (present edition, Vol. 41, p. 5).—223

171 Marx inserted pages 124a-124h into Notebook III later. He wrote on page 124a: "To p. 124."—224
172 Page 196 of Notebook V of the manuscript of 1861-63 has been inserted here in conformity with Marx's note: "This quotation belongs to Notebook III, p. 'e' after p. 124."—228

173 Marx considered this problem in Notebook XVI of the manuscript of 1861-63 (see present edition, Vol. 33).—229


175 Marx is referring to a story about Leibniz which Hegel recounts in his *Science of Logic*: "The tenet that there are no two identical things is difficult to comprehend, and, according to an anecdote, was found puzzling at a certain court, where Leibniz voiced it, thereby prompting the ladies to search among leaves on the trees in the hope of finding two identical ones" (G.W.F. Hegel, "Wissenschaft der Logik", *Werke*, Bd. 4, Berlin, 1834, S. 45).—232

176 *Fluxions* and *fluents* are concepts of the calculus of fluxions, the earliest form of differential and integral calculus, developed by Newton. He used the term fluents to denote the values of a system which (the values) change simultaneously and constantly, depending on time, and the term fluxions to denote the velocities with which the fluents change. Thus, fluxions are time derivatives of fluents.—233

177 Marx returns to this question while analysing Ramsay's views on p. XVIII—1096 of the manuscript of 1861-63 (see present edition, Vol. 33).—236

178 Marx is probably referring to John Stuart Mill who, when considering the ratio of the rate of profit to wages in his *Essays on Some Unsettled Questions of Political Economy* (London, 1844), proceeds from the assumption that the "labourer is paid in the very article he produces". Marx cites this tenet when analysing Mill's views on p. VII—322 of the manuscript of 1861-63 (see present edition, Vol. 31).—238

179 The following discussion concerning the influence of the increase in labour productivity on the ratio of necessary to surplus labour time largely corresponds to the respective passage in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 259-66).—245

180 Marx began, by mistake, to number the pages of Notebook IV of the manuscript of 1861-63 from 138 (instead of 132).—245

181 In this instance Marx is in error, for the decrease in necessary labour time from $5/6$ to $5/6$ of the working day means that the value of labour capacity has decreased by 40% and made up 60% of the initial magnitude. Marx pointed out this mistake several pages later.—246, 247

182 Summing up his analysis of the effect increases in the productivity of labour have on the magnitude of surplus value, Marx notes, in the economic manuscript of 1857-58, that all this "really belongs in the doctrine of profit" (see present edition, Vol. 28, p. 266). He takes up this problem again in the manuscript of 1861-63, in the section on capital and profit, Notebook XVI (see present edition, Vol. 33).—247

183 Marx returns to this problem on pp. XX—1284-1294 of the manuscript of 1861-63 (see present edition, Vol. 34).—250

33-1098
The Standard, London, No. 11610, October 26, 1861 and The Evening Standard, London, No. 11610, October 26, 1861 do not mention the fact cited by Marx.—250

The text that follows was written on the inside cover of Notebook IV (which Marx marked 138a). It is a summary of the corresponding passage from the economic manuscript of 1857-58 dealing with the ratio of the increase in the productivity of labour to the magnitude of relative surplus value (see present edition, Vol. 28, pp. 264-66).—251

Cf. the pertinent passage on pp. XIV—808-809 of the manuscript of 1861-63, where Marx returns to his examination of Ricardo's views on this issue and the critique levelled at him by an anonymous author (see present edition, Vol. 32). Cf. also Note 78.—254

The remark about production under slavery and the mention of Cairnes were made later: Cairnes' book The Slave Power (London) did not appear before May 1862, when Notebook IV of the manuscript of 1861-63 was already complete. Marx refers to p. 47 of the book, a copy of which he had in his own library. This page contains Marx's markings.—255, 262

Marx bases this remark on the work by S. N. H. Linguet, Théorie des loix civiles, ou principes fondamentaux de la société, Vol. I, London, 1767.—256

Marx takes up this question again on pp. XVI—985-986 and XXI—1318-1320 of the manuscript of 1861-63 (see present edition, vols 33 and 34). He studied the question most thoroughly in Volume III of Capital, in the chapter "Economy in the Employment of Constant Capital" (see present edition, Vol. 37).—258, 270

On pp. XIX—1180 and XX—1250 of the manuscript of 1861-63, in the section dealing with machines, Marx merely points to the continuity of labour as a consequence of the introduction of machinery (see present edition, Vol. 33). He dealt with this question at greater length in Capital, Vol. II, Ch. XV (see present edition, Vol. 36).—259

Part of the text from the inside cover of Notebook IV, marked "138a", has been transferred here in conformity with Marx's note: "To p. 148."

When writing this section, notably the first part, Marx based himself on the work by D. Stewart, Lectures on Political Economy, Vol. 1, Edinburgh, 1855.—264

Marx is referring to the terminology D. Stewart used in his work Lectures on Political Economy, p. 310 et seq.—266

Marx quotes Garnier's translation of the work by Adam Smith: Recherches sur la nature et les causes de la richesse des nations, Paris, 1802. Marx made excerpts from this book in the spring of 1844, while living in Paris. In the present volume, all quotations from Recherches... are given according to the English original (A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations. By J. R. McCulloch. In four volumes. Edinburgh, London, 1828). The page numbers from the latter edition are given in square brackets. The French translation of Smith's work does not always coincide with the English original, which is disregarded here. Marx made extensive use of the 1828 English edition when working on the manuscript of 1861-63.—268, 376
Marx repeatedly stressed this idea, both in the economic manuscript of 1857-58 (see present edition, Vol. 28, pp. 40, 96, 107, 187) and in Part One of A Contribution to the Critique of Political Economy (Vol. 29, pp. 290-91).—274, 293

Marx is probably referring to C. F. Bergier, who translated Adam Ferguson’s book into French and wrote an introduction to it.—276


These two Latin proverbs and the quotation from Alcibiades II occur in the note supplied by editor W. Hamilton to p. 311 of Stewart’s book.—280

Marx provides the German translation of this quotation in ancient Greek.—281, 282, 283

Marx returns to this question in connection with a critical analysis of Ure’s The Philosophy of Manufactures, on pp. XX—1246-1247 of the manuscript of 1861-63 (see present edition, Vol. 33).—286


Cf. Marx’s assessment of P. E. Lementey’s views on the consequences of the division of labour in The Poverty of Philosophy (see present edition, Vol. 6, p. 180).—293

In the economic manuscript of 1857-58, Marx twice uses the pertinent quotation from page 166 of Steuart’s work An Inquiry into the Principles of Political Economy, Vol. I, Dublin, 1770 (see present edition, Vol. 29, pp. 163, 234). He uses it again on p. XV—949 of the manuscript of 1861-63 (see present edition, Vol. 33).—298

Part of the text from p. 179 has been transferred here in conformity with Marx’s note: “To the beginning of p. 175.”—299

On p. XX—1249 of the manuscript of 1861-63, Marx pointed out the discrepancy between the English original and the French translation of Ure’s book (see present edition, Vol. 33); the French text has “exploité” and the English original, “exploded”.—300

This reference to Quesnay was inserted by Marx later, probably on the basis of an excerpt from Quesnay’s Fermiers (published by Daire in 1846) which he made in Additional Notebook C (May 1863).—303

Part of the text from p. 179 has been transferred here in conformity with Marx’s note: “To p. 178.”—303

Marx wrote about this on pp. XX—1262-1263, 1278-1279 of the manuscript of 1861-63 (see present edition, Vol. 34).—304

Marx left a blank space here for the source. In the summer of 1862, Marx borrowed from Lassalle Wilhelm Roscher’s book, Die Grundlagen der Nationalökonomie, Stuttgart, Augsburg, 1858 (Roscher: System der Volkswirtschaft, Bd. 1). See Marx’s letter to Lassalle of June 16, 1862 (present edition, Vol. 41, pp. 377-78). On p. 47 of his book Roscher says about production: “As a rule, the more it [production] is perfected, the greater is—as effect and cause of efficient operation—the producer’s satisfaction in his production.” The reference is probably made to this particular passage.—306
210 Marx partially realised this plan in Notebook XX of this manuscript (see present edition, Vol. 34).—311

211 Marx wrote about the specifically historical character of economic categories within the framework of the capitalist mode of production in the Introduction to the manuscript of 1857-58 (see present edition, Vol. 28, pp. 41-42).—313

212 By Chapter 3 Marx might have meant either the section on relative surplus value (the third chapter of the first part of his investigation of capital), or the third part of the Chapter on Capital, "Capital and Profit" (see present edition, Vol. 29, p. 516). The first draft of Chapter 3 is to be found in the manuscript of 1857-58 (Vol. 29, pp. 129-251), where it is marked as Section Three of the Chapter on Capital. In the later sections of the manuscript of 1861-63, Marx refers to Section Three, or Part Three instead of Chapter 3 (see present edition, vols 31 and 33).

The question of a longer working day as a consequence of the introduction of machinery by capitalists was later considered by Marx in Chapter XV of Volume I and in Chapter V of Volume III of *Capital* (see present edition, vols 35 and 37).—319, 331

213 Part of the text from p. 196 has been transferred here in accordance with Marx's note: "To p. 190."—319

214 Marx takes up this issue once more on pp. XIX—1237-1238 of the manuscript of 1861-63 (see present edition, Vol. 33).—320

215 See Notebook XIX of the manuscript of 1861-63 (present edition, Vol. 33).—321

216 Marx cites this fact, drawing on data provided by the German scientist Johann Heinrich Moritz von Poppe. Marx copied relevant passages from the latter's work on p. XIX—1166 of the manuscript of 1861-63 (see present edition, Vol. 33).—322

217 The quotation from Rossi's work has been transferred here from p. 201 in accordance with Marx's note: "To the beginning of p. 194."—324

218 To designate constant capital Marx here uses Richard Jones' term "auxiliary capital". Cf. Marx's note concerning Richard Jones' use of the term on p. XVIII—1128 of the manuscript of 1861-63 (present edition, Vol. 33).—327

219 Here and below the figure XI stands for Marx's London Notebook XI of excerpts where the synopsis of Senior's work is to be found (pp. 4-5).—333

220 Senior operates not with the total sum of the capital advanced, equalling £100,000, but with the sum of £100 falling to each individual worker. This correction was made by Marx when making a synopsis of Senior's work in the London Notebook XI of excerpts.—334

221 The quotation from Torrens has been transferred here from p. 206 in conformity with Marx's note: "To p. 201."—334

222 A detailed analysis of this work, published anonymously (its author was John Cazenove, a follower of Malthus) was made by Marx in Notebook XIV of this manuscript (see present edition, Vol. 32).—337

223 A reference to the self-acting mule invented by the British engineer Richard Roberts in 1825. The workers nicknamed this loom the "Iron Man", because it automatically performed many of the operations in the spinning industry which had hitherto been performed manually.—342
The source of this English quotation has not been established. The figure "100" before the word "pounds" has been added on the strength of a similar passage in Chapter XV of Volume I of Capital, where Marx describes, in his own words, Eli Whitney's cotton gin (see present edition, Vol. 35).—343

In the economic manuscript of 1857-58, Marx had discussed Proudhon's thesis concerning the worker's inability to buy back his product (see present edition, Vol. 28, pp. 352-62). He does the same, in a more concise form, in Capital, Vol. III, Ch. XLIX (see present edition, Vol. 37).—345

This intention was not realised. In March 1862 Marx abandoned a systematic exposition of the problems pertaining to relative surplus value, and took up a detailed analysis of bourgeois theories of surplus value. Only in late 1862-early 1863 did he return to the problem of the capitalist use of machinery, as his letters to Engels of January 24 and 28, 1863 indicate (see present edition, Vol. 41, pp. 446, 449), filling in the empty pages of Notebook V, as well as notebooks XIX and XX. Accordingly, this part of Notebook V is included in Volume 33.—346

These notes were made on the inside covers of notebooks VI and VII respectively.—347

Theories of Surplus Value, on which Marx embarked in March 1862, is the fifth, concluding section of the first chapter of research into capital, "The Production Process of Capital". Originally, the fourth section was to consider the connection of relative and absolute surplus value. Theories of Surplus Value was to be an historical introduction to the chapter on surplus value, similar to the historical notes introducing the chapters on commodity and on money in A Contribution to the Critique of Political Economy.

In the course of Marx's work on the manuscript, Theories of Surplus Value underwent considerable changes. In both length and content it far surpassed the original plan. As well as considering the views of bourgeois economists, Marx put forward a number of major theoretical propositions in it. Theories of Surplus Value appeared in English for the first time in an abridged form in 1951: K. Marx, Theories of Surplus Value. A selection from the volumes published between 1905 and 1910 as Theorien über den Mehrwert, edited by Karl Kautsky, taken from Karl Marx's preliminary manuscript for the projected fourth volume of Capital. Transl. from the German by G. A. Bonner and Emile Burns, London, Lawrence & Wishart, 1951.


Marx is referring to part three of his work, "Third Chapter. Capital in General". In the Draft Plan of the Chapter on Capital drawn up in 1860, this part is entitled "III. Capital and Profit" (see present edition, Vol. 29, p. 516). The beginning of this work is to be found on pp. XVI—973-1021 and XVII—1022-1028 of the manuscript (see present edition, Vol. 33).—348

Marx is paraphrasing Steuart's ideas. Steuart says: "I. The first thing to be known of any manufacture when it comes to be sold, is, how much of it a person can perform in a day, a week, a month, according to the nature of the work, which may require more or less time to bring it to perfection. In making such estimates, regard is to be had only to what, upon an average only, a workman of the country in general may perform,... II. The second thing to be known, is the value of the
workman's subsistence and necessary expense, both for supplying his personal
wants, and providing the instruments belonging to his profession, which must be
taken upon an average as above:... III. The third and last thing to be known, is the
value of the materials...” (James Steuart, *An Inquiry into the Principles of Political
Economy.* In: Steuart, *The Works, Political, Metaphysical, and Chronological...,*

231 Marx is referring to the work by Adam Smith *An Inquiry into the Nature and
translation, which Marx owned and used (A. Smith, *Recherches...,* Vol. I, Paris,
1802) indicated, on page 1, that the first edition appeared in late 1775-early 1776.
That was probably why a mistake was made over the year of publication of Adam
Smith's work.—352

232 Marx is referring to the second part of his work. In the plan for the Chap-
ter on Capital drafted in 1860, this part is entitled “II. Circulation Process of
Capital”. Some of the notes pertaining to this chapter (concerning Quesnay's
economic table) are to be found on pp. X—422-437 of the manuscript of
1861-63 (see present edition, Vol. 31). Marx wrote more on the subject on
pp. XXIII—1433-1434 of the manuscript (see present edition, Vol. 34). The
questions of circulation were not developed further in this manuscript. Marx
returned to them only in the manuscript of 1865-66. They are studied in
Part III of Volume II of *Capital* (see present edition, Vol. 36).—353, 374

233 In the manuscript of 1861-63, Marx uses the terms “profit upon alienation”
and “profit upon expropriation” interchangeably. Steuart does not use the
latter term.—359, 370

234 Marx repeatedly pointed to this “conclusion” of Ricardian political economy,
as well as to the practical conclusions drawn from it by the radical Ricardians,
in the manuscript of 1861-63. See pp. X—458, XI—496-497, 516-517 (present
edition, Vol. 31); pp. XIV—791, XV—902-903 (Vol. 32); pp. XVIII—1120,
1139 (Vol. 33). See also K. Marx, *The Poverty of Philosophy* (present edition,
Vol. 6, p. 203).—361, 373

235 “Laissez-faire, laissez-aller” (also “laissez-faire, laissez-passer”), the formula of
economists who advocated Free Trade and non-intervention by the state in
economic affairs.—361

236 Colbert, a champion of Mercantilism, was Controller-General of Finances under
Louis XIV. The economic policy he pursued objectively promoted the primitive
accumulation of capital, even though it served the interests of the absolutist
state. Further development of capitalism required fulfilment of the new
economic and political tasks, as defined by the Physiocrats in the struggle
against Mercantilism.

At the same time, the advance of the Physiocratic doctrine was facilitated by
the fiasco of John Law's system. The latter tried to enhance the country's
wealth through a series of finance and credit projects and greater state
intervention. The issue of paper money not backed by gold and speculation in
bonds produced the first paper currency inflation and the bankruptcy of the
bank and joint-stock company he had set up. Under those conditions land
became the most stable property, which accounted for the Physiocrats' empha-
sis on agriculture. The nascent French bourgeoisie's rejection of Colbertism
and of Law's system, as well as the objective changes under way in material
production itself, contributed to the establishment of the Physiocratic doctrine.—
367, 373
In 1839 and 1843, the Société typographique Belge, Adolphe Wahlen et compagnie published two collections of economic works under the general title *Cours d'économie politique*. Both collections opened with J. A. Blanqui's *Histoire de l'économie politique en Europe*. Marx used the 1843 edition, which he had in his library and from which he quoted Rossi. It is probable that the 1843 edition reproduced the title page of the 1839 collection, which presumably explains Marx's reference to this source.—370

The *Economists* was the name given to the French Physiocrats in the second half of the 18th and the first half of the 19th century. By the 1850s the name acquired a more general meaning and ceased to denote exponents of a particular economic doctrine.—370, 373

Volume V of Adam Smith's *Recherches sur la nature...* (1802 edition) contains translator's (Germain Garnier's) notes, which Marx quotes here and below.—371

In his lifetime Mirabeau le père was nicknamed "L'Ami des hommes" (the "Friend of the People"), after the title of one of his works.—373

Epicurus believed that gods existed in the space between the worlds and were unconcerned with either the development of the Universe or human affairs.—373

The *Encyclopaedists* were the authors of the French *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers*, which appeared in 1751-72 and consisted of 28 volumes. Among them were the most prominent people of the Enlightenment. Most of the credit for the publication must go to Diderot, who supervised the work, as well as to D'Alembert, who wrote the famous Introduction to the *Encyclopédie*. Quesnay and Turgot, prominent Physiocrats, wrote a number of entries expounding the basic propositions of their doctrine. This work, reflecting as it did a diversity of views, made a substantial contribution to the ideological preparation for the French Revolution.

The collaboration between the Physiocrats and the Encyclopaedists can be explained by the fact that both trends helped spread bourgeois ideas, thus paving the way for bourgeois society.—374

The *demagogues* were members of an opposition movement among German intellectuals. The word gained currency in this sense after the Carlsbad Conference of Ministers of German States in August 1819, which adopted a special resolution against the "intrigues of demagogues".—374

Schmalz's book appeared in Berlin in 1818, under the title *Staatswirthschaftslehre in Briefen an einen teutschen Erbprinzen*, Parts One and Two.—375

Taken from Notebook VII of excerpts (1859-62), p. 210. On p. 188 this quotation from Adam Smith is in French. On p. 210 Marx wrote: "To p. 188. Here and further, Smith is quoted in English; edit. McCulloch. London. 1828."—376

Marx critically examines the Physiocratic part of Smith's doctrine in Notebook VI of the manuscript (see this volume, pp. 368-72), as well as on pp. XII—626-632 of the manuscript (see present edition, Vol. 31).—377

See pp. XII—650-651 of the manuscript of 1861-63 (present edition, Vol. 32), as well as D. Ricardo, *On the Principles...*, London, 1819, Chapter I, Section I.—378
248 See Note 247 and also pp. XII—652-654 of the manuscript of 1861-63 (present edition, Vol. 32).—380

249 A detailed analysis of Malthus' theory of value and surplus value is given in Marx's manuscript of 1861-63 on pp. XIII—753-767 (see present edition, Vol. 32).—380, 394

250 Marx is referring to Notebook VII of excerpts (1859-62), p. 173. In connection with the passage from Adam Smith quoted earlier, he ridicules the latter's attempts to derive profit from "the undertaker's hazard".

Marx planned to put the chapter on the apologetic accounts of profit in the third section of his work (see present edition, Vol. 33, p. XVIII—1139), but this chapter was never written. Some of the problems that were to constitute its subject-matter were considered in the manuscript of 1861-63. See, for instance, pp. X—425-427 (present edition, Vol. 31).—385

251 Marx examined the question of the "antediluvian forms" of capital on pp. XV—899-901 of the manuscript of 1861-63 (see present edition, Vol. 32). See also Capital, Vol. III, Part V, Ch. XXXVI (present edition, Vol. 37).—389

252 See Note 229, and pp. XIV—791-805 of the manuscript of 1861-63 (present edition, Vol. 32).—395

253 Later Marx specified the concept of the means of production. In Section 1, Chapter VII of Volume I of Capital, by the means of production he implies "both the instruments and the subject of labour" (see present edition, Vol. 35).—396

254 Here, Marx uses the term "average price" to denote the same concept as "price of production", i.e. the cost of production plus average profit. The correlation between the market price of commodities and their average price is examined in Notebook XII of this manuscript.

The very term "average price" indicates that Marx has in mind "the average market price over a long period, or the central point towards which the market price gravitates" (see p. XII—605 of the manuscript of 1861-63, present edition, Vol. 31).—400

255 Marx uses the term "cost price" ("Kostenpreiss" or "Kostpreiss") in three different meanings: 1) in the sense of the cost of production for the capitalist \((c+v)\); 2) in the sense of the "immanent cost of production" of the commodities \((c+v+s)\), which is identical to the value of the commodity, and 3) in the sense of the price of production \((c+v+\text{average profit})\). In the given passage, the term is used in its second sense. In notebooks X-XIII of the manuscript (see present edition, vols 31 and 32), it is used as the price of production, or the average price. There Marx identifies the two terms. Thus on p. XI—529 he writes about "average prices or, as we shall call them, cost prices which are different from the values themselves and are not directly determined by the values of the commodities but by the capital advanced for their production+the average profit" (see present edition, Vol. 31). On p. XII—624 Marx observes: "...The price which is required for the supply of the commodity, the price which is required for it to come into existence at all, to appear as a commodity on the market, is of course its price of production or cost price" (ibid.).

In notebooks XIV-XV of the manuscript (see present edition, vols 32 and 33), the term "Kostenpreiss" is used now in the sense of the price of production, and now in that of production costs for the capitalist.
The treble usage of the term "Kostenpreis" is explained by the fact that, in political economy, the word "Kosten" was used in three senses, as Marx noted in particular on pp. XIV—788-790 and XV—928 of the manuscript of 1861-63 (see present edition, Vol. 32).

Apart from these usages in the classical works of bourgeois political economy, a fourth one exists: the vulgar meaning of the term "production costs" as used by J. B. Say, who interpreted production costs as something paid for the "productive services" performed by labour, capital or land. Marx opposed this vulgar interpretation (see p. XI—506 of the manuscript of 1861-63, present edition, Vol. 31; pp. XIII—693-694 of the manuscript, present edition, Vol. 32).—401

256 Marx critically analysed Smith's theory of cost prices and its refutation by Ricardo on pp. XI—549-560 of the manuscript (see present edition, Vol. 31).—402

257 Here and up to the end of p. 267 of the manuscript there follows a passage that breaks up the previous narrative, so Marx precedes p. 268 of the manuscript with the words: "Adam Smith continues."—405

258 A critique of Say's views on this issue is also to be found on p. VII—300 of the manuscript of 1861-63 (see present edition, Vol. 31).—408

259 Storch's Considerations, put out in 1824 as a separate edition, was in 1852 published as Part V of Cours d'économie politique. Marx uses the 1824 edition.—409

260 Here Marx sets forth Ramsay's views. The exact quotation runs as follows: "Mr. Ricardo saw very well, that the question of profit was entirely one of proportion; but unfortunately, one seems always to consider the whole produce as divided between wages and profits, forgetting the part necessary for replacing fixed capital" (George Ramsay, An Essay on the Distribution of Wealth, Edinburgh, London, 1836, p. 174, note).—409

261 See pp. XVIII—1091-1098 of the manuscript of 1861-63 (present edition, Vol. 33) and also Note 229.—410

262 Marx repeatedly returned to these two aspects of simple reproduction in this manuscript (e.g. see this volume, pp. 411-51; pp. VIII—350-356 and IX—379 of the manuscript, present edition, Vol. 31). In the later notebooks of this manuscript Marx also discussed simple reproduction, and in Notebook XXII (Vol. 34) outlined the preliminary conclusions of his own theory of reproduction.—411

263 The paragraph that follows was probably added by Marx later, while working on Notebook VII, which is borne out by the use of inner margins.—412

264 The term "production costs" ("Produktionskosten") is used here in the sense of the "immanent costs of production", i.e. \(c + v + s\). Cf. Note 255.—413


266 Below, while preserving the numerical values cited here, Marx changed the letters designating the production spheres (with the exception of A). In place of
B and C, he uses $B^1-B^2$ (or $B^{1-2}$); in place of $D$, $E$, $F$, $G$, $H$, and $I$, he uses $C^1-C^6$ (or $C^{1-6}$); in place of $K^1-K^8$, $D^1-D^{18}$ (or $D^{1-18}$); in place of $L^1-L^{162}$, $F^1-F^{162}$ (or $F^{1-162}$); in place of $M^1-M^{486}$, $G^1-G^{486}$ (or $G^{1-486}$).—423

The points from 1) to 486) on pp. 423-24 of this volume designate the number of necessary working days in these production spheres.—423

The table that follows is based on the relevant calculations written down on the back cover of Notebook I of this manuscript.—426

Letters B and C designate the same production spheres as prior to p. 423 of this volume (see Note 266). Marx refers to two production spheres, in each of which newly-added labour makes up one working day. The sum total of the newly-added labour in spheres A, B and C amounts to three working days, i.e. to the labour objectified in the product of sphere A.—427

Here, B and C no longer signify the two production spheres; otherwise their product would have amounted to only 6 working days, whereas Marx refers to 18 working days. Marx does not use them, however, in the sense of $B^1-B^2$ and $C^1-C^6$ either ($B^1-B^2$ means a group of two production spheres; $C^1-C^6$ designates a group of six production spheres; the total product of these eight spheres makes up 24 working days). Here, Marx is referring to a group consisting of six production spheres. Their total product is 18 working days and, consequently, may be exchanged for the newly-added labour in $D^1-D^{18}$, also equalling 18 working days.—427

According to Marx's calculation, each subsequent group includes twice as many production spheres as all the preceding ones put together. Thus, group $D^{1-18}$, which covers 18 production spheres, consists of twice as many spheres as all preceding groups taken together (A—one sphere, $B^{1-2}$—two spheres, $C^{1-6}$—six spheres; nine spheres in all). That is why Marx wrote: $D^{1-18} (2 \times 9)$.—427

Marx goes back to this question on p. IX—390 of the manuscript of 1861-63 (see present edition, Vol. 31).—430

Further on, the manuscript originally contained the following passage, which Marx crossed out: "Spinner and loom maker, who we assume also makes spinning machinery, have added $1/3$ in labour, their constant capital amounting to $2/3$ of yarn and loom. Of the 8 yards of linen (or 24 hours) or 24s., which replace their total product, they can consequently consume $8/3$ [yards] = $22/3$ [yards] of linen or 8 hours' labour or 8s. Therefore $51/3$ yards or 16 hours' labour remain to be accounted for. Spinner's constant capital consists of flax and the spinning machinery (coal, etc., are not taken into account in this example), $1/3$ in the form of raw material $= \text{flax} = 16/3$ hours' labour $= 51/3$ hours' labour or $\frac{17/3}{3} : 17/9$ yards $= 18/9$ yards. All of them can be purchased by the flax-grower because he compensates his constant capital himself, at least when it comes to the seeds (setting aside, for the time being, the wear and tear of fixed capital, the instruments of labour), by deducting the necessary amount from his product. Thus we have to account only for $52/3 - 18/9$ yards (or $16 - 51/3$
hours' labour) $-\frac{52}{3}$ yards $= \frac{17}{3} = \frac{51}{9}$. Thus, $5\frac{1}{9} - 1\frac{7}{9} = \frac{37}{9}$ (or $10\frac{1}{3}$ hours' labour)."—432

By earlier calculations, $5\frac{1}{3}$ yards of linen represent the total constant capital of the spinner and of the loom maker. Therefore, to determine the flax-grower's share, one should proceed not from $5\frac{1}{3}$ yards of linen, but from a smaller figure. Marx eventually corrected this error and assumed that the spinner's constant capital was represented by only 4 yards of linen.—432

The untenability of the bourgeois doctrine stating that a part of the constant capital of one is transformed into revenue for the other, is demonstrated in *Capital*, Vol. II, chapters XIX-XX and Vol. III, Ch. XLIX (see present edition, vols 36 and 37).—450
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**Dale, David** (1739-1806)—founded a cotton mill in New Lanark, of which Robert Owen was later appointed manager.—230

**De Quincey, Thomas** (1785-1859)—English writer and economist; commented on Ricardo's works; his own
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Franklin, Benjamin (1706-1790)—American physicist, economist and politician; took part in the American War of Independence.—28, 30, 98

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Galvani, Ferdinando (1728-1787)—Italian economist, criticised the Physiocrats; maintained that the value of a commodity is determined by its usefulness; at the same time he made correct conjectures about the nature of the commodity and money.—23, 205, 344


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MacIntosh—member of a government commission in England.—228

MacLeod, Henry Dunning (1821-1902)—British lawyer and vulgar economist; elucidated the theory of capital-bearing credit.—13

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Ravenstone, Piercy (d. 1830)—English Ricardian economist; opposed Malthus; upheld the workers' interests.—252, 304

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Thompson, Benjamin, Count of Rumford (1753-1814)—English officer of American descent; was for a time in the service of the Bavarian government; organised workhouses for beggars and compiled recipes for paupers' broths made up of cheap substitutes.—46

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*The Bengal Hurkaru*—a daily published in Calcutta from 1795 to 1866.—343

*The Daily Telegraph*—an English liberal and, from the 1880s, conservative newspaper; it was published under this title in London from 1855 to 1937.—217

*Deutsch-Französische Jahrbücher*—a German-language yearly published in Paris under the editorship of Karl Marx and Arnold Ruge; only the first issue, a double one, appeared in February 1844. It carried a number of works by Marx and Engels.—30

*The Journal of the Society of Arts, and of the Institutions in Union.*—344

*The Manchester Guardian*—a daily founded in Manchester in 1821; organ of the Free Traders and from the mid-nineteenth century of the Liberal Party.—162

*Revue des Deux Mondes*—a literary and political fortnightly published in Paris since 1829.—345, 346

*The Standard*—a conservative daily founded in London in 1827.—250

*The Times*—a daily published in London since 1785.—169