**Angelo Segrillo**

# KARL MARX'S "CAPITAL" (VOLS. 1,2,3) ABRIDGED

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# Foreword

This is the seventh book published under the auspices of the *Laboratório de Estudos da Ásia* (LEA) of the University of São Paulo; the fourth one in English for an international audience.

We hope you enjoy the reading.

# *AN INTRODUCTION TO KARL MARX'S "CAPITAL" (VOLS. 1,2,3) ABRIDGED*

Angelo Segrillo[1]

The current book is an abridged version of volumes 1, 2 and 3 of *Capital* by Karl Marx. This simplified version aims to provide an introductory alternative for all those who "give up before they begin" or "give up on the way" or read only Volume 1 when confronted with the immensity and complexity of this fundamental work by the German thinker. Behind the technical details of *Capital*, there is an intelligible trail of some basic concepts which, if followed in essence, illuminates the reader with an essential aspect of Marxian theory: the demonstration of how labourers generate wealth and are nevertheless deprived of most of it within a system in which they are apparently free to seek alternatives. Herein lies Marx's great contribution: the development of the concept of *surplus value*, which demonstrates the mechanism of the economic exploitation of workers by the capitalists.

Marx, following classical economists such as Adam Smith and David Ricardo, postulated that the value of commodities is regulated by the (socially necessary) labour contained in them. But unlike them, he did not say that the worker sells his labour to the capitalist. In fact, the worker sells his *labour power* to the capitalist. And the labour power is a commodity like any other: its value is the labour time socially necessary for the production (and reproduction) of the labourer: clothing, food, etc. And Marx points out that the wage the capitalist pays is less than the value that the worker generates for him during the time he is in the factory. For example, let's say that in an 8-hour working day the worker produces in four hours the value of the production and reproduction of his work power: in the next four hours he will be producing extra value (*i.e*. surplus value) to the capitalist "for free". That is, the capitalist pays for the *labour power* of the worker, but appropriates the full value of his *labour*. This is because labour power is the only commodity that has the property of generating more value than the value contained in itself.

The reasoning above is clear in the reading of volume 1 of *Capital*,

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which deals with *production*. We also abridged volumes 2 (dealing with the *circulation* of commodities, or commerce) and 3 (dealing with the *capitalist process as a whole*) because they bring an important addition. At the end of volume 1, which theorizes on a level of high abstraction, assuming a simplified model of economy, the reader gets the impression that in a capitalist economy commodity prices depend on their respective values (quantity of socially necessary labour contained therein). However in Volumes 2 and especially 3, Marx investigates the capitalist economy in all its concreteness, with the complicating elements of real life. He then shows that in an "actually existing" capitalist economy, the prices of commodities will *necessarily* differ from their individual value according to a pattern he describes.[2] This caused great confusion and debate because Marx's critics said that he was contradicting himself and needed to decide: after all, do commodities exchange according to their values (= socially necessary labour contained in them) or not? As we shall see in volume 3, Marx will say that there is a pattern for these deviations of prices from their values, so the capitalist price system is indeed ultimately determined by the values of the commodities (socially necessary labour contained therein).

According to Marx, this "transformation problem" (of values into prices) has to do with the need to equalize the rate of profit among the various branches of the economy (even among those which use more labour, thus, in principle, producing more "value" according to the labour theory of value, and those who use less labour).

Read our abridged book for a better understanding of the matter. We believe that, using our shortcut, this will be possible without getting lost or giving up on the way. After all, the original 3 volumes of *Capital* (totalling about 4.5 million computer characters) were herein reduced to one volume totalling about 1 million characters (less than a quarter of the original size). We believe this to be the first such abridgement in the English language.

One last warning before starting this intellectual journey is in order. In an effort to reduce the three volumes of *Capital* to a smaller number of pages that could be attractive enough for the largest number of readers, we had to mainly focus on the most important technical Marxian concepts. That alone took up all the space that was allocated to us. As a consequence, it was

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[2] We must stress the word "necessarily" in the sentence, for Marx is not referring here to occasional price deviations from the value the commodities caused by oscillations in supply and demand, governmental protectionist policies or the like. The German thinker describes a mechanism of the developed capitalist economy which will *require* prices to deviate from values. As we shall see, this has to do with the need to equalize the rate of profit among the different branches of the economy.

not possible to reproduce the literary beauty of numerous passages (especially of volume 1) in which Marx describes, with almost artistic language, various aspects of social reality through the ages. Unfortunately, this "poetic prose" by Marx evaporated from the text, "melted into air". That's why we recommend that, after glimpsing the general overview provided here, the reader should also explore the original of this masterpiece titled *Capital*.[3]

[3] It is important to note that only Volume 1 of *Capital* was published during Marx's life. Volumes 2 and 3 were posthumously edited by Engels from the (unfinished) drafts left by his intellectual partner. We use the texts of the following English editions of *Capital*: 1887 (vol.1), 1893 (vol.2) and 1894 (vol.3). Note that words in brackets [] in this abridged version are interpolations by the current writer in Marx's original text. Likewise, for didactic purposes, we boldfaced some words that denote important Marxian concepts therein. Furthermore, foreign readers should note that the United Kingdom only decimalized its currency system in 1971. Thus, in *Capital*, 1 pound sterling = 20 shillings; 1 shilling = 12 pence; 1 penny (plural pence) = 4 farthings. The symbols for pound, shilling and penny are £, *s* and *d* respectively.

# CAPITAL

## BOOK 1:
## THE PROCESS OF PRODUCTION OF CAPITAL

# PART 1: COMMODITIES AND MONEY

## CHAPTER 1: COMMODITIES

### SECTION 1.— THE TWO FACTORS OF A COMMODITY: USE VALUE AND VALUE (THE SUBSTANCE OF VALUE AND THE MAGNITUDE OF VALUE)

The wealth of those societies in which the capitalist mode of production prevails, presents itself as “an immense accumulation of commodities”, its unit being a single commodity. Our investigation must therefore begin with the analysis of a commodity.

A commodity is, in the first place, an object outside us, a thing that by its properties satisfies human wants of some sort or another […] Every useful thing, as iron, paper, etc., may be looked at from the two points of view of quality and quantity […] The utility of a thing makes it a **use value** […] A commodity, such as iron, corn, or a diamond, is therefore, so far as it is a material thing, a use value, something useful. This property of a commodity is independent of the amount of labour required to appropriate its useful qualities […] Use values become a reality only by use or consumption: they also constitute the substance of all wealth, whatever may be the social form of that wealth. In the form of society we are about to consider, they are, in addition, the material depositories of exchange value […] **Exchange value**, at first sight, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort […] Let us take two commodities, e. g., corn and iron. The proportions in which they are exchangeable, whatever those proportions may be, can always be represented by an equation in which a given quantity of corn is equated to some quantity of iron: e. g., 1 quarter corn = x cwt. iron. What does this equation tell us? It tells us that in two different things — in 1 quarter of corn and x cwt. of iron, there exists in equal quantities something common to both […] As use values, commodities are, above all, of different qualities, but as exchange values they are merely different quantities […], If then we leave out of consideration the use value of commodities, they have only one common property left, that of being products of labour [… i.e.], **human labour in the abstract** […]

Let us now consider the residue of each of these products […] When looked at as crystals of this social substance, common to them all, they are —

**Values**. We have seen that when commodities are exchanged, their exchange value manifests itself as something totally independent of their use value. But if we abstract from their use value, there remains their Value as defined above […]

A use value, or useful article, therefore, has value only because human labour in the abstract has been embodied or materialised in it. How, then, is the magnitude of this value to be measured? Plainly, by the quantity of **the value-creating substance, the labour**, contained in the article […] Some people might think that if the value of a commodity is determined by the quantity of labour spent on it, the more idle and unskilful the labourer, the more valuable would his commodity be, because more time would be required in its production. The labour, however, that forms **the substance of value**, is **homogeneous human labour**, expenditure of one uniform labour power. The total labour power of society, which is embodied in the sum total of the values of all commodities produced by that society, counts here as one homogeneous mass of human labour power, composed though it be of innumerable individual units. Each of these units is the same as any other, so far as it has the character of the average labour power of society, and takes effect as such; that is, so far as it requires for producing a commodity, no more time than is needed on an average, no more than is socially necessary. The **labour time socially necessary** is that required to produce an article under the normal conditions of production, and with the average degree of skill and intensity prevalent at the time […]

We see then that that which determines the **magnitude of the value** of any article is the amount of labour socially necessary, or **the labour time socially necessary for its production**. Each individual commodity, in this connection, is to be considered as an average sample of its class. Commodities, therefore, in which equal quantities of labour are embodied, or which can be produced in the same time, have the same value […] The value of a commodity would therefore remain constant, if the labour time required for its production also remained constant. But the latter changes with every variation in the productiveness of labour. This productiveness is determined by various circumstances, amongst others, by the average amount of skill of the workmen, the state of science, and the degree of its practical application, the social organisation of production, the extent and capabilities of the means of production, and by physical conditions. For example, the same amount of labour in favourable seasons is embodied in 8 bushels of corn, and in unfavourable, only in four […] **In general, the greater the productiveness of labour, the less is the labour time required for the production of an article, the less is the amount of labour crystallised in that article, and the less is its value; and vice versa**, the less the productiveness of labour, the greater is the labour time required for the production of an article, and the

greater is its value. The value of a commodity, therefore, varies directly as the quantity, and inversely as the productiveness, of the labour incorporated in it.

**A thing can be a use value, without having value**. This is the case **whenever its utility to man is not due to labour. Such are air, virgin soil, natural meadows, etc**. A thing can be useful, and the product of human labour, without being a commodity. Whoever directly satisfies his wants with the produce of his own labour, creates, indeed, use values, but not commodities. In order to produce the latter, he must not only produce use values, but use values for others, social use values. Lastly nothing can have value, without being an object of utility. If the thing is useless, so is the labour contained in it; the labour does not count as labour, and therefore creates no value.

## SECTION 2.— THE TWOFOLD CHARACTER OF THE LABOUR EMBODIED IN COMMODITIES

At first sight a commodity presented itself to us as a complex of two things — use value and exchange value. Later on, we saw also that labour, too, possesses the same twofold nature […] The labour, whose utility is thus represented by the value in use of its product, or which manifests itself by making its product a use value, we call useful labour. In this connection we consider only its useful effect […] Let us now pass from the commodity considered as a use value to the value of commodities […] Productive activity, if we leave out of sight its special form, viz., the useful character of the labour, is nothing but the expenditure of human labour power. Tailoring and weaving, though qualitatively different productive activities, are each a productive expenditure of human brains, nerves, and muscles, and in this sense are human labour. They are but two different modes of expending human labour power [… The] value of a commodity represents human labour in the abstract, the expenditure of human labour in general […] It is the expenditure of simple labour power, i. e., of the labour power which, on an average, apart from any special development, exists in the organism of every ordinary individual. Simple average labour, it is true, varies in character in different countries and at different times, but in a particular society it is given. **Skilled labour counts** only as simple labour intensified, or rather, **as multiplied simple labour**, a given quantity of skilled being considered equal to a greater quantity of simple labour […A] coat is worth twice as much as the ten yards of linen. Whence this difference in their values? It is owing to the fact that the linen contains only half as much labour as the coat, and consequently, that in the production of the latter, labour power must have been expended during twice the time necessary for the production of the former.

[… Thus, on] the one hand, all labour is, speaking physiologically, an expenditure of human labour power, and in its character of identical **abstract human labour**, it creates and forms the value of commodities. On the other hand, all labour is the expenditure of human labour power in a special form and with a definite aim, and in this, its character of **concrete useful labour**, it produces use values.

## SECTION 3.—THE FORM OF VALUE OR EXCHANGE VALUE

Commodities come into the world in the shape of use values, articles, or goods, such as iron, linen, corn, etc. This is their plain, homely, bodily form. They are, however, commodities, only because they are something twofold, both objects of utility, and, at the same time, depositories of value. They manifest themselves therefore as commodities, or have the form of commodities, only in so far as they have two forms, a physical or natural form, and a value form […] If, however, we bear in mind that the value of commodities has a purely social reality, and that they acquire this reality only in so far as they are expressions or embodiments of one identical social substance, viz., human labour, it follows as a matter of course, that value can only manifest itself in the social relation of commodity to commodity. In fact we started from exchange value, or the exchange relation of commodities, in order to get at the value that lies hidden behind it […]

Every one knows, if he knows nothing else, that commodities have a value form common to them all, and presenting a marked contrast with the varied bodily forms of their use values. I mean their money form. Here, however, a task is set us, the performance of which has never yet even been attempted by bourgeois economy, the task of tracing the genesis of this money form, of developing the expression of value implied in the value relation of commodities, from its simplest, almost imperceptible outline, to the dazzling money form. By doing this we shall, at the same time, solve the riddle presented by money.

The simplest value relation is evidently that of one commodity to some one other commodity of a different kind. Hence the relation between the values of two commodities supplies us with the simplest expression of the value of a single commodity.

### A. Elementary or Accidental Form of Value

**x commodity A = y commodity B, or**
**x commodity A is worth y commodity B.**
**20 yards of linen = 1 coat, or**
**20 yards of linen are worth 1 coat.**

The whole mystery of the form of value lies hidden in this elementary form. Its analysis, therefore, is our real difficulty. Here two different kinds of commodities (in our example the linen and the coat), evidently play two different parts. The linen expresses its value in the coat; the coat serves as the material in which that value is expressed. The former plays an active, the latter a passive, part. The value of the linen is represented as relative value, or appears in **relative form**. The coat officiates as equivalent, or appears in **equivalent form** […] Human labour power in motion, or human labour, creates value, but is not itself value. It becomes value only in its congealed state, when embodied in the form of some object. In order to express the value of the linen as a congelation of human labour, that value must be expressed as having objective existence, as being a something materially different from the linen itself, and yet a something common to the linen and all other commodities […] When occupying the position of equivalent in the equation of value, the coat ranks qualitatively as the equal of the linen, as something of the same kind, because it is value. In this position it is a thing in which we see nothing but value, or whose palpable bodily form represents value. Yet the coat itself, the body of the commodity, coat, is a mere use value. A coat as such no more tells us it is value, than does the first piece of linen we take hold of. This shows that when placed in value relation to the linen, the coat signifies more than when out of that relation, just as many a man strutting about in a gorgeous uniform counts for more than when in mufti […]

When, at the beginning of this chapter, we said, in common parlance, that a commodity is both a use value and an exchange value, we were, accurately speaking, wrong. A commodity is a use value or object of utility, and a value. It manifests itself as this twofold thing, that it is, as soon as its value assumes an independent form — viz., the form of exchange value. It never assumes this form when isolated, but only when placed in a value or exchange relation with another commodity of a different kind. When once we know this, such a mode of expression does no harm; it simply serves as an abbreviation […]

### B. Total or Expanded form of value

**z Com. A = u Com. B or = v Com. C or = w Com. D or = x Com. E or = etc.**
**(20 yards of linen = 1 coat or = 10 lbs tea or = 40 lbs coffee or = 1 quarter corn or = 2 ounces gold or = Jr ton iron or = etc.)**

1. The Expanded Relative form of value

The value of a single commodity, the linen, for example, is now expressed in terms of numberless other elements of the world of commodities. Every other commodity now becomes a mirror of the linen's value. It is thus, that for the first time, this value shows itself in its true light as a congelation of undifferentiated human labour. For the labour that creates it, now stands expressly revealed, as labour that ranks equally with every other sort of human labour, no matter what its form, whether tailoring, ploughing, mining, etc., and no matter, therefore, whether it is realised in coats, corn, iron, or gold. The linen, by virtue of the form of its value, now stands in a social relation, no longer with only one other kind of commodity, but with the whole world of commodities […] The accidental relation between two individual commodity-owners disappears. It becomes plain, that it is not the exchange of commodities which regulates the magnitude of their value; but, on the contrary, that it is the magnitude of their value which controls their exchange proportions […]

## C. The General Form of Value

| | | |
|---|---|---|
| 1 | Coat | = 20 yards of linen |
| 10 | lbs of tea | |
| 40 | lbs of coffee | |
| 1 | quarter of corn | |
| 2 | ounces of gold | |
| ½ | a ton of iron | |
| X | Commodity A, etc. | |

[…] All commodities now express their value (1) in an elementary form, because in a single commodity; (2) with unity, because in one and the same commodity. This form of value is elementary and the same for all, therefore general […] The general form of relative value, embracing the whole world of commodities, converts the single commodity that is excluded from the rest, and made to play the part of equivalent — here the linen — into the universal equivalent […]

If, then, in form C we replace the linen by gold, we get,

**D. The Money Form**

| | | | |
|---|---|---|---|
| 20 | yards of linen | = | = 2 ounces of gold |
| 1 | Coat | = | |
| 10 | lbs of tea | = | |
| 40 | lbs of coffee | = | |
| 1 | quarter of corn | = | |
| 2 | ounces of gold | = | |
| ½ | a ton of iron | = | |
| x | Commodity A | = | |

[The particular commodity, with whose bodily form the equivalent form is thus socially identified, now becomes the money commodity, or serves as money. It becomes the special social function of that commodity, and consequently its social monopoly, to play within the world of commodities the part of the universal equivalent.] Gold is now money with reference to all other commodities only because it was previously, with reference to them, a simple commodity. Like all other commodities, it was also capable of serving as an equivalent, either as simple equivalent in isolated exchanges, or as particular equivalent by the side of others. Gradually it began to serve, within varying limits, as universal equivalent. So soon as it monopolises this position in the expression of value for the world of commodities, it becomes the money commodity, and then, and not till then, does form D become distinct from form C, and the general form of value become changed into the money form […]

The difficulty in forming a concept of the money form, consists in clearly comprehending the universal equivalent form, and as a necessary corollary, the general form of value, form C. The latter is deducible from form B, the expanded form of value, the essential component element of which, we saw, is form A, 20 yards of linen = 1 coat or x commodity A = y commodity B. The simple commodity form is therefore the germ of the money form […]

## SECTION 4.—THE FETISHISM OF COMMODITIES AND THE SECRET THEREOF

[…] A commodity is therefore a mysterious thing, simply because in it the social character of men's labour appears to them as an objective character stamped upon the product of that labour; because the relation of the producers to the sum total of their own labour is presented to them as a social relation, existing not between themselves, but between the products of their labour […] There it is a definite social relation between men, that assumes, in their eyes, the fantastic form of a relation between things. In order, therefore, to find an analogy, we must have recourse to the mist-enveloped regions of the religious world. In that world the productions of the human brain appear as independent beings endowed with life, and entering into relation both with one another and the human race. So it is in the world of commodities with the products of men's hands. This I call the Fetishism which attaches itself to the products of labour, so soon as they are produced as commodities, and which is therefore inseparable from the production of commodities. This Fetishism of commodities has its origin, as the foregoing analysis has already shown, in the peculiar social character of the labour that produces them […]

## CHAPTER 2: EXCHANGE

To the owner of a commodity, every other commodity is, in regard to his own, a particular equivalent, and consequently his own commodity is the universal equivalent for all the others. But since this applies to every owner, there is, in fact, no commodity acting as universal equivalent, and the relative value of commodities possesses no general form under which they can be equated as values and have the magnitude of their values compared […] They cannot bring their commodities into relation as values, and therefore as commodities, except by comparing them with some one other commodity as the universal equivalent. That we saw from the analysis of a commodity. But a particular commodity cannot become the universal equivalent except by a social act. The social action therefore of all other commodities, sets apart the particular commodity in which they all represent their values. Thereby the bodily form of this commodity becomes the form of the socially recognised universal equivalent. To be the universal equivalent, becomes, by this social process, the specific function of the commodity thus excluded by the rest. Thus it becomes – money […]

Money is a crystal formed of necessity in the course of the exchanges, whereby different products of labour are practically equated to one another and thus by practice converted into commodities. The historical progress and extension of exchanges develops the contrast, latent in commodities, between use value and value. The necessity for giving an external expression to this contrast for the purposes of commercial intercourse, urges on the establishment of an independent form of value, and finds no rest until it is

once for all satisfied by the differentiation of commodities into commodities and money. At the same rate, then, as the conversion of products into commodities is being accomplished, so also is the conversion of one special commodity into money.

The direct barter of products attains the elementary form of the relative expression of value in one respect, but not in another. That form is x Commodity A = y Commodity B. The form of direct barter is x use value A = y use value B. The articles A and B in this case are not as yet commodities, but become so only by the act of barter. The first step made by an object of utility towards acquiring exchange value is when it forms a non-use value for its owner, and that happens when it forms a superfluous portion of some article required for his immediate wants. Objects in themselves are external to man, and consequently alienable by him. In order that this alienation may be reciprocal, it is only necessary for men, by a tacit understanding, to treat each other as private owners of those alienable objects, and by implication as independent individuals. But such a state of reciprocal independence has no existence in a primitive society based on property in common, whether such a society takes the form of a patriarchal family, an ancient Indian community, or a Peruvian Inca State. **The exchange of commodities, therefore, first begins on the boundaries of such communities**, at their points of contact with other similar communities, or with members of the latter. So soon, however, as products once become commodities in the external relations of a community, they also, by reaction, become so in its internal intercourse. The proportions in which they are exchangeable are at first quite a matter of chance. What makes them exchangeable is the mutual desire of their owners to alienate them. Meantime the need for foreign objects of utility gradually establishes itself. The constant repetition of exchange makes it a normal social act. In the course of time, therefore, some portion at least of the products of labour must be produced with a special view to exchange. From that moment the distinction becomes firmly established between the utility of an object for the purposes of consumption, and its utility for the purposes of exchange. Its use value becomes distinguished from its exchange value. On the other hand, the quantitative proportion in which the articles are exchangeable, becomes dependent on their production itself. Custom stamps them as values with definite magnitudes.

In the direct barter of products, each commodity is directly a means of exchange to its owner, and to all other persons an equivalent, but that only in so far as it has use value for them. At this stage, therefore, the articles exchanged do not acquire a value form independent of their own use value, or of the individual needs of the exchangers. The necessity for a value form grows with the increasing number and variety of the commodities exchanged. The problem and the means of solution arise simultaneously. Commodity-

owners never equate their own commodities to those of others, and exchange them on a large scale, without different kinds of commodities belonging to different owners being exchangeable for, and equated as values to, one and the same special article. Such last-mentioned article, by becoming the equivalent of various other commodities, acquires at once, though within narrow limits, the character of a general social equivalent. This character comes and goes with the momentary social acts that called it into life. In turns and transiently it attaches itself first to this and then to that commodity. But with the development of exchange it fixes itself firmly and exclusively to particular sorts of commodities, and becomes crystallised by assuming the money form [...]

The use value of the money commodity becomes two-fold. In addition to its special use value as a commodity (gold, for instance, serving to stop teeth, to form the raw material of articles of luxury, etc.), it acquires a formal use value, originating in its specific social function […] We have seen that the money form is but the reflex, thrown upon one single commodity, of the value relations between all the rest. That money is a commodity is therefore a new discovery only for those who, when they analyse it, start from its fully developed shape. The act of exchange gives to the commodity converted into money, not its value, but its specific value form […] Money, like every other commodity, cannot express the magnitude of its value except relatively in other commodities. This value is determined by the labour time required for its production [e.g., extraction of gold from mines], and is expressed by the quantity of any other commodity that costs the same amount of labour time […] These objects, gold and silver, just as they come out of the bowels of the earth, are forthwith the direct incarnation of all human labour. Hence the magic of money. In the form of society now under consideration, the behaviour of men in the social process of production is purely atomic. Hence their relations to each other in production assume a material character independent of their control and conscious individual action. These facts manifest themselves at first by products as a general rule taking the form of commodities. We have seen how the progressive development of a society of commodity producers stamps one privileged commodity with the character of money. Hence the riddle presented by money is but the riddle presented by commodities; only it now strikes us in its most glaring form.

## CHAPTER 3: MONEY, OR THE CIRCULATION OF COMMODITIES

### SECTION 1.—THE MEASURE OF VALUES

Throughout this work, I assume, for the sake of simplicity, gold as the

money commodity […] It is not money that renders commodities commensurable. Just the contrary. It is because all commodities, as values, are realised human labour, and therefore commensurable, that their values can be measured by one and the same special commodity, and the latter be converted into the common measure of their values, i.e., into money […] Money as a measure of value, is the phenomenal form that must of necessity be assumed by that measure of value which is immanent in commodities, labour time […] But money itself has no price. In order to put it on an equal footing with all other commodities in this respect, we should be obliged to equate it to itself as its own equivalent. The price or money form of commodities is, like their form of value generally, a form quite distinct from their palpable bodily form; it is, therefore, a purely ideal or mental form […]

As *measure of Value*, and as *standard of price*, money has two entirely distinct functions to perform. It is the measure of value inasmuch as it is the socially recognised incarnation of human labour; it is the standard of price inasmuch as it is a fixed weight of metal. As the measure of value it serves to convert the values of all the manifold commodities into prices, into imaginary quantities of gold; as the standard of price it measures those quantities of gold. The measure of values measures commodities considered as values; the standard of price measures, on the contrary, quantities of gold by a unit quantity of gold, not the value of one quantity of gold by the weight of another. In order to make gold a standard of price, a certain weight must be fixed upon as the unit. In this case, as in all cases of measuring quantities of the same denomination, the establishment of an unvarying unit of measure is all-important. Hence, the less the unit is subject to variation, so much the better does the standard of price fulfil its office. But only in so far as it is itself a product of labour, and, therefore, potentially variable in value, can gold serve as a measure of value. It is, in the first place, quite clear that a change in the value of gold does not, in any way, affect its function as a standard of price. No matter how this value varies, the proportions between the values of different quantities of the metal remain constant. However great the fall in its value, 12 ounces of gold still have 12 times the value of 1 ounce; and in prices, the only thing considered is the relation between different quantities of gold. Since, on the other hand, no rise or fall in the value of an ounce of gold can alter its weight, no alteration can take place in the weight of its aliquot parts. Thus gold always renders the same service as an invariable standard of price, however much its value may vary. In the second place, a change in the value of gold does not interfere with its functions as a measure of value. The change affects all commodities simultaneously, and, therefore, *caeteris paribus*, leaves their relative values *inter se*, unaltered, although those values are now expressed in higher or lower gold-prices […] A general rise in the prices of commodities can result

only, either from a rise in their values — the value of money remaining constant — or from a fall in the value of money, the values of commodities remaining constant. On the other hand, a general fall in prices can result only, either from a fall in the values of commodities — the value of money remaining constant — or from a rise in the value of money, the values of commodities remaining constant […]

Let us now go back to the consideration of the price form. By degrees there arises a discrepancy between the current money-names of the various weights of the precious metal figuring as money, and the actual weights which those names originally represented […] The word pound, for instance, was the money-name given to an actual pound weight of silver. When gold replaced silver as a measure of value, the same name was applied according to the ratio between the values of silver and gold, to perhaps 1-15th of a pound of gold. The word pound, as a money name, thus becomes differentiated from the same word as a weight name. The debasing of money carried on for centuries by kings and princes to such an extent that, of the original weights of the coins, nothing in fact remained but the names […] These historical causes convert the separation of the money name from the weight name into an established habit with the community. Since the standard of money is on the one hand purely conventional, and must on the other hand find general acceptance, it is in the end regulated by law. A given weight of one of the precious metals, an ounce of gold, for instance, becomes officially divided into aliquot parts, with legally bestowed names, such as pound, dollar, etc. […] Hence, instead of saying: A quarter of wheat is worth an ounce of gold; we say, it is worth £3 17s. 10 1/2d. In this way commodities express by their prices how much they are worth, and money serves as money of account whenever it is a question of fixing the value of an article in its money form […]

Price is the money name of the labour realised in a commodity. Hence the expression of the equivalence of a commodity with the sum of money constituting its price, is a tautology, just as in general the expression of the relative value of a commodity is a statement of the equivalence of two commodities. But although price, being the exponent of the magnitude of a commodity’s value, is the exponent of its exchange ratio with money, it does not follow that the exponent of this exchange ratio is necessarily the exponent of the magnitude of the commodity’s value. Suppose two equal quantities of socially necessary labour to be respectively represented by 1 quarter of wheat and £2 (nearly 1/2 oz. of gold), £2 is the expression in money of the magnitude of the value of the quarter of wheat, or is its price. If now circumstances allow of this price being raised to £3, or compel it to be reduced to £1, then although £1 and £3 may be too small or too great properly to express the magnitude of the wheat’s value; nevertheless they are

its prices, for they are, in the first place, the form under which its value appears, i.e., money; and in the second place, the exponents of its exchange ratio with money. If the conditions of production, in other words, if the productive power of labour remain constant, the same amount of social labour time must, both before and after the change in price, be expended in the reproduction of a quarter of wheat […] Magnitude of value expresses a relation of social production, it expresses the connexion that necessarily exists between a certain article and the portion of the total labour time of society required to produce it. As soon as magnitude of value is converted into price, the above necessary relation takes the shape of a more or less accidental exchange ratio between a single commodity and another, the money commodity. But this exchange ratio may express either the real magnitude of that commodity's value, or the quantity of gold deviating from that value, for which, according to circumstances, it may be parted with. The possibility, therefore, of quantitative incongruity between price and magnitude of value, or the deviation of the former from the latter, is inherent in the price form itself. This is no defect, but, on the contrary, admirably adapts the price form to a mode of production whose inherent laws impose themselves only as the mean of apparently lawless irregularities that compensate one another.

The price form, however, is not only compatible with the possibility of a quantitative incongruity between magnitude of value and price, i.e., between the former and its expression in money, but it may also conceal a qualitative inconsistency, so much so, that, although money is nothing but the value form of commodities, price ceases altogether to express value. Objects that in themselves are no commodities, such as conscience, honour, etc., are capable of being offered for sale by their holders, and of thus acquiring, through their price, the form of commodities. Hence an object may have a price without having value. The price in that case is imaginary, like certain quantities in mathematics. On the other hand, the imaginary price form may sometimes conceal either a direct or indirect real value relation; for instance, the price of uncultivated land, which is without value, because no human labour has been incorporated in it […]

A price therefore implies both that a commodity is exchangeable for money, and also that it must be so exchanged. On the other hand, gold serves as an ideal measure of value, only because it has already, in the process of exchange, established itself as the money commodity. Under the ideal measure of values there lurks the hard cash.

## SECTION 2.—THE MEDIUM OF CIRCULATION

### **[***a. The Metamorphosis of Commodities***]**

Let us now accompany the owner of some commodity — say, our old friend the weaver of linen — to the scene of action, the market. His 20 yards of linen has a definite price, £2. He exchanges it for the £2, and then, like a man of the good old stamp that he is, he parts with the £2 for a family Bible of the same price. The linen, which in his eyes is a mere commodity, a depository of value, he alienates in exchange for gold, which is the linen's value form, and this form he again parts with for another commodity, the Bible, which is destined to enter his house as an object of utility and of edification to its inmates. The exchange becomes an accomplished fact by two metamorphoses of opposite yet supplementary character – the conversion of the commodity into money, and the re-conversion of the money into a commodity. The two phases of this metamorphosis are both of them distinct transactions of the weaver — selling, or the exchange of the commodity for money; buying, or the exchange of the money for a commodity; and, the unity of the two acts, selling in order to buy […]

The exchange of commodities is therefore accompanied by the following changes in their form.

Commodity – Money – Commodity.

C——— M ———C.

The result of the whole process is, so far as concerns the objects themselves, C – C, the exchange of one commodity for another, the circulation of materialised social labour. When this result is attained, the process is at an end.

C—M. *First metamorphosis, or sale*

[…] A commodity strips off its original commodity form on being alienated, i.e., on the instant its use value actually attracts the gold, that before existed only ideally in its price. The realisation of a commodity's price, or of its ideal value form, is therefore at the same time the realisation of the ideal use value of money; the conversion of a commodity into money, is the simultaneous conversion of money into a commodity. The apparently single process is in reality a double one. From the pole of the commodity-owner it is a sale, from the opposite pole of the money-owner, it is a purchase. In other words, a sale is a purchase, C–M is also M–C […] We will assume that the two gold pieces, in consideration of which our weaver has parted with his linen, are the metamorphosed shape of a quarter of wheat. The sale of the linen, C–M, is at the same time its purchase, M–C. But the sale is the first act of a process that ends with a transaction of an opposite nature, namely, the purchase of a Bible; the purchase of the linen, on the other hand, ends a movement that began with a transaction of an opposite nature, namely,

with the sale of the wheat. C–M (linen–money), which is the first phase of C–M–C (linen–money–Bible), is also M–C (money–linen), the last phase of another movement C–M–C (wheat–money–linen). The first metamorphosis of one commodity, its transformation from a commodity into money, is therefore also invariably the second metamorphosis of some other commodity, the retransformation of the latter from money into a commodity […]

### *M—C, or purchase. The second and concluding metamorphosis of a commodity*

[…] M–C, a purchase, is, at the same time, C–M, a sale; the concluding metamorphosis of one commodity is the first metamorphosis of another. With regard to our weaver, the life of his commodity ends with the Bible, into which he has reconverted his £2. But suppose the seller of the Bible turns the £2 set free by the weaver into brandy M–C, the concluding phase of C–M–C (linen–money–Bible), is also C–M, the first phase of C–M–C (Bible–money–brandy). The producer of a particular commodity has that one article alone to offer; this he sells very often in large quantities, but his many and various wants compel him to split up the price realised, the sum of money set free, into numerous purchases. Hence a sale leads to many purchases of various articles. The concluding metamorphosis of a commodity thus constitutes an aggregation of first metamorphoses of various other commodities.

[…] If we now consider the completed metamorphosis of a commodity, as a whole, it appears in the first place, that it is made up of two opposite and complementary movements, C–M and M–C. These two antithetical transmutations of a commodity are brought about by two antithetical social acts on the part of the owner, and these acts in their turn stamp the character of the economic parts played by him. As the person who makes a sale, he is a seller; as the person who makes a purchase, he is a buyer. But just as, upon every such transmutation of a commodity, its two forms, commodity form and money form, exist simultaneously but at opposite poles, so every seller has a buyer opposed to him, and every buyer a seller. While one particular commodity is going through its two transmutations in succession, from a commodity into money and from money into another commodity, the owner of the commodity changes in succession his part from that of seller to that of buyer […]

The two metamorphoses constituting the circuit are at the same time two inverse partial metamorphoses of two other commodities. One and the same commodity, the linen, opens the series of its own metamorphoses, and completes the metamorphosis of another (the wheat). In the first phase or

sale, the linen plays these two parts in its own person. But, then, changed into gold, it completes its own second and final metamorphosis, and helps at the same time to accomplish the first metamorphosis of a third commodity. Hence the circuit made by one commodity in the course of its metamorphoses is inextricably mixed up with the circuits of other commodities. The total of all the different circuits constitutes the *circulation of commodities*.

[…] It is only because the farmer has sold his wheat that the weaver is enabled to sell his linen, only because the weaver has sold his linen that our Hotspur is enabled to sell his Bible, and only because the latter has sold the water of everlasting life that the distiller is enabled to sell his *eau-de-vie*, and so on.

The process of circulation, therefore, does not, like direct barter of products, become extinguished upon the use values changing places and hands. The money does not vanish on dropping out of the circuit of the metamorphosis of a given commodity. It is constantly being precipitated into new places in the arena of circulation vacated by other commodities. In the complete metamorphosis of the linen, for example, linen – money – Bible, the linen first falls out of circulation, and money steps into its place. Then the Bible falls out of circulation, and again money takes its place. When one commodity replaces another, the money commodity always sticks to the hands of some third person. Circulation sweats money from every pore […] If the interval in time between the two complementary phases of the complete metamorphosis of a commodity become too great, if the split between the sale and the purchase become too pronounced, the intimate connexion between them, their oneness, asserts itself by producing — a crisis. The antithesis, use value and value; the contradictions that private labour is bound to manifest itself as direct social labour, that a particularised concrete kind of labour has to pass for abstract human labour; the contradiction between the personification of objects and the representation of persons by things; all these antitheses and contradictions, which are immanent in commodities, assert themselves, and develop their modes of motion, in the antithetical phases of the metamorphosis of a commodity. These modes therefore imply the possibility, and no more than the possibility, of crises. The conversion of this mere possibility into a reality is the result of a long series of relations, that, from our present standpoint of simple circulation, have as yet no existence […]

### [*b. The currency of money*]

The change of form, C–M–C, by which the circulation of the material products of labour is brought about, requires that a given value in the shape of a commodity shall begin the process, and shall, also in the shape of a

commodity, end it. The movement of the commodity is therefore a circuit. On the other hand, the form of this movement precludes a circuit from being made by the money. The result is not the return of the money, but its continued removal further and further away from its starting-point. So long as the seller sticks fast to his money, which is the transformed shape of his commodity, that commodity is still in the first phase of its metamorphosis, and has completed only half its course. But so soon as he completes the process, so soon as he supplements his sale by a purchase, the money again leaves the hands of its possessor […] Hence the movement directly imparted to money by the circulation of commodities takes the form of a constant motion away from its starting-point, of a course from the hands of one commodity owner into those of another. This course constitutes its currency (*cours de la monnaie*). The currency of money is the constant and monotonous repetition of the same process […]

Every commodity, when it first steps into circulation, and undergoes its first change of form, does so only to fall out of circulation again and to be replaced by other commodities. Money, on the contrary, as the medium of circulation, keeps continually within the sphere of circulation, and moves about in it. The question therefore arises, how much money this sphere constantly absorbs?

In a given country there take place every day at the same time, but in different localities, numerous one-sided metamorphoses of commodities, or, in other words, numerous sales and numerous purchases. The commodities are equated beforehand in imagination, by their prices, to definite quantities of money. And since, in the form of circulation now under consideration, money and commodities always come bodily face to face, one at the positive pole of purchase, the other at the negative pole of sale, it is clear that the amount of the means of circulation required, is determined beforehand by the sum of the prices of all these commodities. As a matter of fact, the money in reality represents the quantity or sum of gold ideally expressed beforehand by the sum of the prices of the commodities. The equality of these two sums is therefore self-evident. We know, however, that, the values of commodities remaining constant, their prices vary with the value of gold (the material of money), rising in proportion as it falls, and falling in proportion as it rises. Now if, in consequence of such a rise or fall in the value of gold, the sum of the prices of commodities fall or rise, the quantity of money in currency must fall or rise to the same extent […]

If the mass of commodities remain constant, the quantity of circulating money varies with the fluctuations in the prices of those commodities. It increases and diminishes because the sum of the prices increases or diminishes in consequence of the change of price […] Suppose the following articles to be sold or partially metamorphosed simultaneously

in different localities: say, one quarter of wheat, 20 yards of linen, one Bible, and 4 gallons of brandy. If the price of each article be £2, and the sum of the prices to be realised be consequently £8, it follows that £8 in money must go into circulation […] Hence the velocity of the currency of money is measured by the number of moves made by a given piece of money in a given time. Suppose the circulation of the 4 articles takes a day. The sum of the prices to be realised in the day is £8, the number of moves of the two pieces of money is four, and the quantity of money circulating is £2. Hence, for a given interval of time during the process of circulation, we have the following relation: the quantity of money functioning as the circulating medium is equal to the sum of the prices of the commodities divided by the number of moves made by coins of the same denomination […]

The total quantity of money functioning during a given period as the circulating medium, is determined, on the one hand, by the sum of the prices of the circulating commodities, and on the other hand, by the rapidity with which the antithetical phases of the metamorphoses follow one another. On this rapidity depends what proportion of the sum of the prices can, on the average, be realised by each single coin. But the sum of the prices of the circulating commodities depends on the quantity, as well as on the prices, of the commodities. These three factors, however, state of prices, quantity of circulating commodities, and velocity of money-currency, are all variable. Hence, the sum of the prices to be realised, and consequently the quantity of the circulating medium depending on that sum, will vary with the numerous variations of these three factors in combination […]

[*c. Coin and symbols of value*]

The only difference, therefore, between coin and bullion, is one of shape, and gold can at any time pass from one form to the other. But no sooner does coin leave the mint, than it immediately finds itself on the high-road to the melting pot. During their currency, coins wear away, some more, others less. Name and substance, nominal weight and real weight, begin their process of separation. Coins of the same denomination become different in value, because they are different in weight. The weight of gold fixed upon as the standard of prices, deviates from the weight that serves as the circulating medium, and the latter thereby ceases any longer to be a real equivalent of the commodities whose prices it realises. The history of coinage during the Middle Ages and down into the 18th century, records the ever renewed confusion arising from this cause. The natural tendency of circulation to convert coins into a mere semblance of what they profess to be, into a symbol of the weight of metal they are officially supposed to contain, is recognised by modern legislation, which fixes the loss of weight sufficient to demonetise

a gold coin, or to make it no longer legal tender.

The fact that the currency of coins itself effects a separation between their nominal and their real weight, creating a distinction between them as mere pieces of metal on the one hand, and as coins with a definite function on the other — this fact implies the latent possibility of replacing metallic coins by tokens of some other material, by symbols serving the same purposes as coins. The practical difficulties in the way of coining extremely minute quantities of gold or silver, and the circumstance that at first the less precious metal is used as a measure of value instead of the-more precious, copper instead of silver, silver instead of gold, and that the less precious circulates as money until dethroned by the more precious — all these facts explain the parts historically played by silver and copper tokens as substitutes for gold coins [...]

The weight of metal in the silver and copper tokens is arbitrarily fixed by law. When in currency, they wear away even more rapidly than gold coins. Hence their functions are totally independent of their weight, and consequently of all value. The function of gold as coin becomes completely independent of the metallic value of that gold. Therefore things that are relatively without value, such as paper notes, can serve as coins in its place. This purely symbolic character is to a certain extent masked in metal tokens. In paper money it stands out plainly […]

The State puts in circulation bits of paper on which their various denominations, say £1, £5, etc., are printed. In so far as they actually take the place of gold to the same amount, their movement is subject to the laws that regulate the currency of money itself. A law peculiar to the circulation of paper money can spring up only from the proportion in which that paper money represents gold. Such a law exists; stated simply, it is as follows: the issue of paper money must not exceed in amount the gold (or silver as the case may be) which would actually circulate if not replaced by symbols […] If the quantity of paper money issued be double what it ought to be, then, as a matter of fact, £1 would be the money name not of 1/4 of an ounce, but of 1/8 of an ounce of gold. The effect would be the same as if an alteration had taken place in the function of gold as a standard of prices. Those values that were previously expressed by the price of £1 would now be expressed by the price of £2.

## SECTION 3.—MONEY
### [*a. Hoarding*]

With the very earliest development of the circulation of commodities, there is also developed the necessity, and the passionate desire, to hold fast the product of the first metamorphosis. This product is the transformed shape

of the commodity, or its gold-chrysalis. Commodities are thus sold not for the purpose of buying others, but in order to replace their commodity form by their money form. From being the mere means of effecting the circulation of commodities, this change of form becomes the end and aim. The changed form of the commodity is thus prevented from functioning as its unconditionally alienable form, or as its merely transient money form. The money becomes petrified into a hoard, and the seller becomes a hoarder of money […]

As the production of commodities further develops, every producer of commodities is compelled to make sure of the *nexus rerum* or the social pledge. His wants are constantly making themselves felt, and necessitate the continual purchase of other people's commodities, while the production and sale of his own goods require time, and depend upon circumstances. In order then to be able to buy without selling, he must have sold previously without buying. This operation, conducted on a general scale, appears to imply a contradiction. But the precious metals at the sources of their production are directly exchanged for other commodities. And here we have sales (by the owners of commodities) without purchases (by the owners of gold or silver). And subsequent sales, by other producers, unfollowed by purchases, merely bring about the distribution of the newly produced precious metals among all the owners of commodities. In this way, all along the line of exchange, hoards of gold and silver of varied extent are accumulated. With the possibility of holding and storing up exchange value in the shape of a particular commodity, arises also the greed for gold. Along with the extension of circulation, increases the power of money, that absolutely social form of wealth ever ready for use […] It is true that the value of money varies, at one time in consequence of a variation in its own value, at another, in consequence of a change in the values of commodities. But this, on the one hand, does not prevent 200 ounces of gold from still containing more value than 100 ounces, nor, on the other hand, does it hinder the actual metallic form of this article from continuing to be the universal equivalent form of all other commodities, and the immediate social incarnation of all human labour. The desire after hoarding is in its very nature unsatiable […] In order that the mass of money, actually current, may constantly saturate the absorbing power of the circulation, it is necessary that the quantity of gold and silver in a country be greater than the quantity required to function as coin. This condition is fulfilled by money taking the form of hoards. These reserves serve as conduits for the supply or withdrawal of money to or from the circulation, which in this way never overflows its banks.

[*b. Means of Payment*]

In the simple form of the circulation of commodities hitherto considered, we found a given value always presented to us in a double shape, as a commodity at one pole, as money at the opposite pole. The owners of commodities came therefore into contact as the respective representatives of what were already equivalents. But with the development of circulation, conditions arise under which the alienation of commodities becomes separated, by an interval of time, from the realisation of their prices […] The vendor sells an existing commodity, the purchaser buys as the mere representative of money, or rather of future money. The vendor becomes a creditor, the purchaser becomes a debtor. Since the metamorphosis of commodities, or the development of their value form, appears here under a new aspect, money also acquires a fresh function; it becomes the means of payment […]

The character of creditor, or of debtor, results here from the simple circulation. The change in the form of that circulation stamps buyer and seller with this new die [at first …] The appearance of the two equivalents, commodities and money, at the two poles of the process of sale, has ceased to be simultaneous. The money functions now, first as a measure of value in the determination of the price of the commodity sold; the price fixed by the contract measures the obligation of the debtor, or the sum of money that he has to pay at a fixed date. Secondly, it serves as an ideal means of purchase […] The value form of commodities, money, is therefore now the end and aim of a sale, and that owing to a social necessity springing out of the process of circulation itself. The buyer converts money back into commodities before he has turned commodities into money: in other words, he achieves the second metamorphosis of commodities before the first […] The obligations falling due within a given period, represent the sum of the prices of the commodities, the sale of which gave rise to those obligations. The quantity of gold necessary to realise this sum, depends, in the first instance, on the rapidity of currency of the means of payment. That quantity is conditioned by two circumstances: first the relations between debtors and creditors form a sort of chain, in such a way that A, when he receives money from his debtor B, straightway hands it over to C his creditor, and so on; the second circumstance is the length of the intervals between the different due days of the obligations […] In proportion as payments are concentrated at one spot, special institutions and methods are developed for their liquidation. Such in the Middle Ages were the *virements* at Lyons. The debts due to A from B, to B from C, to C from A, and so on, have only to be confronted with each other, in order to annul each other to a certain extent like positive and negative quantities. There thus remains only a single balance to pay. The greater the amount of the payments concentrated, the less is this balance relatively to that amount, and the less is the mass of the means of payment in

circulation […]

If we now consider the sum total of the money current during a given period, we shall find that, given the rapidity of currency of the circulating medium and of the means of payment, it is equal to the sum of the prices to be realised, plus the sum of the payments falling due, minus the payments that balance each other, minus finally the number of circuits in which the same piece of coin serves in turn as means of circulation and of payment [… To] the same extent as the system of credit is extended, so is the function of money as a means of payment [… It] makes itself at home in the sphere of great commercial transactions. Gold and silver coin, on the other hand, are mostly relegated to the sphere of retail trade. When the production of commodities has sufficiently extended itself, money begins to serve as the means of payment beyond the sphere of the circulation of commodities. It becomes the commodity that is the universal subject-matter of all contracts. Rents, taxes, and such like payments are transformed from payments in kind into money payments. To what extent this transformation depends upon the general conditions of production, is shown, to take one example, by the fact that the Roman Empire twice failed in its attempt to levy all contributions in money […]

From the law of the rapidity of currency of the means of payment, it follows that the quantity of the means of payment required for all periodical payments, whatever their source, is in inverse proportion to the length of their periods. The development of money into a medium of payment makes it necessary to accumulate money against the dates fixed for the payment of the sums owing. While hoarding, as a distinct mode of acquiring riches, vanishes with the progress of civil society, the formation of reserves of the means of payment grows with that progress.

### [*c. Universal Money*]

[…] Within the sphere of home circulation, there can be but one commodity which, by serving as a measure of value, becomes money. In the markets of the world a double measure of value holds sway, gold and silver. Money of the world serves as the universal medium of payment, as the universal means of purchasing, and as the universally recognised embodiment of all wealth. Its function as a means of payment in the settling of international balances is its chief one […] Just as every country needs a reserve of money for its home circulation so, too, it requires one for external circulation in the markets of the world. The functions of hoards, therefore, arise in part out of the function of money, as the medium of the home circulation and home payments, and in part out of its function of money of the world […] Countries in which the bourgeois form of production is

developed to a certain extent, limit the hoards concentrated in the strong rooms of the banks to the minimum required for the proper performance of their peculiar functions. Whenever these hoards are strikingly above their average level, it is, with some exceptions, an indication of stagnation in the circulation of commodities, of an interruption in the even flow of their metamorphoses.

## PART 2: THE TRANSFORMATION OF MONEY INTO CAPITAL

### C h a p t e r 4: THE GENERAL FORMULA FOR CAPITAL

The circulation of commodities is the starting-point of capital. The production of commodities, their circulation, and that more developed form of their circulation called commerce, these form the historical ground-work from which it rises. The modern history of capital dates from the creation in the 16th century of a world-embracing commerce and a world-embracing market.

If we abstract from the material substance of the circulation of commodities, that is, from the exchange of the various use values, and consider only the economic forms produced by this process of circulation, we find its final result to be money: this final product of the circulation of commodities is the first form in which capital appears.

As a matter of history, capital, as opposed to landed property, invariably takes the form at first of money; it appears as moneyed wealth, as the capital of the merchant and of the usurer.1 But we have no need to refer to the origin of capital in order to discover that the first form of appearance of capital is money. We can see it daily under our very eyes. All new capital, to commence with, comes on the stage, that is, on the market, whether of commodities, labour, or money, even in our days, in the shape of money that by a definite process has to be transformed into capital.

The first distinction we notice between money that is money only, and money that is capital, is nothing more than a difference in their form of circulation.

The simplest form of the circulation of commodities is C-M-C, the transformation of commodities into money, and the change of the money back again into commodities; or selling in order to buy. But alongside of this form we find another specifically different form: M-C-M, the transformation of money into commodities, and the change of commodities back again into money; or buying in order to sell. Money that circulates in the latter manner is thereby transformed into, becomes capital, and is already potentially capital.

Now let us examine the circuit M-C-M a little closer. It consists, like

the other, of two antithetical phases. In the first phase, M-C, or the purchase, the money is changed into a commodity. In the second phase, C-M, or the sale, the commodity is changed back again into money. The combination of these two phases constitutes the single movement whereby money is exchanged for a commodity, and the same commodity is again exchanged for money; whereby a commodity is bought in order to be sold, or, neglecting the distinction in form between buying and selling, whereby a commodity is bought with money, and then money is bought with a commodity. The result, in which the phases of the process vanish, is the exchange of money for money, M-M. If I purchase 2,000 lbs. of cotton for £100, and resell the 2,000 lbs. of cotton for £110, I have, in fact, exchanged £100 for £110, money for money.

Now it is evident that the circuit M-C-M would be absurd and without meaning if the intention were to exchange by this means two equal sums of money, £100 for £100 […] quite different in kind from that which […] goes through in the hands of the peasant who sells corn, and with the money thus set free buys clothes. We have therefore to examine first the distinguishing characteristics of the forms of the circuits M-C-M and C-M-C, and in doing this the real difference that underlies the mere difference of form will reveal itself.

Both circuits are resolvable into the same two antithetical phases, C-M, a sale, and M-C, a purchase […] In the circulation C-M-C, the money is in the end converted into a commodity, that serves as a use value; it is spent once for all. In the inverted form, M-C-M, on the contrary, the buyer lays out money in order that, as a seller, he may recover money […] The money, therefore, is not spent, it is merely advanced […] The circuit C-M-C starts with one commodity, and finishes with another, which falls out of circulation and into consumption. Consumption, the satisfaction of wants, in one word, use value, is its end and aim. The circuit M-C-M, on the contrary, commences with money and ends with money. Its leading motive, and the goal that attracts it, is therefore mere exchange value […] To exchange £100 for cotton, and then this same cotton again for £100, is merely a roundabout way of exchanging money for money, the same for the same, and appears to be an operation just as purposeless as it is absurd. One sum of money is distinguishable from another only by its amount. The character and tendency of the process M-C-M, is therefore not due to any qualitative difference between its extremes, both being money, but solely to their quantitative difference. More money is withdrawn from circulation at the finish than was thrown into it at the start. The cotton that was bought for £100 is perhaps resold for £100 + £10 or £110. The exact form of this process is therefore M-C-M', where M' = M + ΔM = the original sum advanced, plus an increment. This increment or excess over the original value I call **“surplus value”.** The

value originally advanced, therefore, not only remains intact while in circulation, but adds to itself a surplus value or expands itself. It is this movement that converts it into capital.

The simple circulation of commodities — selling in order to buy — is a means of carrying out a purpose unconnected with circulation, namely, the appropriation of use values, the satisfaction of wants. The circulation of money as capital is, on the contrary, an end in itself, for the expansion of value takes place only within this constantly renewed movement. The circulation of capital has therefore no limits.

As the conscious representative of this movement, the possessor of money becomes a capitalist […] The expansion of value, which is the objective basis or mainspring of the circulation M-C-M, becomes his subjective aim, and it is only in so far as the appropriation of ever more and more wealth in the abstract becomes the sole motive of his operations, that he functions as a capitalist, that is, as capital personified and endowed with consciousness and a will. Use values must therefore never be looked upon as the real aim of the capitalist; neither must the profit on any single transaction. The restless never-ending process of profit-making alone is what he aims at. This boundless greed after riches, this passionate chase after exchange value, is common to the capitalist and the miser; but while the miser is merely a capitalist gone mad, the capitalist is a rational miser. The never-ending augmentation of exchange value, which the miser strives after, by seeking to save his money from circulation, is attained by the more acute capitalist, by constantly throwing it afresh into circulation.

The independent form, i.e., the money form, which the value of commodities assumes in the case of simple circulation, serves only one purpose, namely, their exchange, and vanishes in the final result of the movement. On the other hand, in the circulation M-C-M, both the money and the commodity represent only different modes of existence of value itself, the money its general mode, and the commodity its particular, or, so to say, disguised mode. It is constantly changing from one form to the other without thereby becoming lost, and thus assumes an automatically active character. If now we take in turn each of the two different forms which self-expanding value successively assumes in the course of its life, we then arrive at these two propositions: Capital is money: Capital is commodities. In truth, however, value is here the active factor in a process, in which, while constantly assuming the form in turn of money and commodities, it at the same time changes in magnitude, differentiates itself by throwing off surplus value from itself; the original value, in other words, expands spontaneously […]

Buying in order to sell, or, more accurately, buying in order to sell dearer, M-C-M', appears certainly to be a form peculiar to one kind of capital

alone, namely, merchants' capital. But industrial capital too is money, that is changed into commodities, and by the sale of these commodities, is re-converted into more money. The events that take place outside the sphere of circulation, in the interval between the buying and selling, do not affect the form of this movement. Lastly, in the case of interest-bearing capital, the circulation M-C-M' appears abridged. We have its result without the intermediate stage, in the form M-M', "*en style lapidaire*" so to say, money that is worth more money, value that is greater than itself.

**M-C-M' is therefore in reality the general formula of capital** as it appears *prima facie* within the sphere of circulation.

## C h a p t e r 5: CONTRADICTIONS IN THE GENERAL FORMULA OF CAPITAL

The form which circulation takes when money becomes capital, is opposed to all the laws we have hitherto investigated bearing on the nature of commodities, value and money, and even of circulation itself. What distinguishes this form from that of the simple circulation of commodities, is the inverted order of succession of the two antithetical processes, sale and purchase. How can this purely formal distinction between these processes change their character as it were by magic?

But that is not all. This inversion has no existence for two out of the three persons who transact business together. As capitalist, I buy commodities from A and sell them again to B, but as a simple owner of commodities, I sell them to B and then purchase fresh ones from A. A and B see no difference between the two sets of transactions. They are merely buyers or sellers. And I on each occasion meet them as a mere owner of either money or commodities, as a buyer or a seller, and, what is more, in both sets of transactions, I am opposed to A only as a buyer and to B only as a seller, to the one only as money, to the other only as commodities, and to neither of them as capital or a capitalist, or as representative of anything that is more than money or commodities, or that can produce any effect beyond what money and commodities can […]

Let us take the process of circulation in a form under which it presents itself as a simple and direct exchange of commodities. This is always the case when two owners of commodities buy from each other, and on the settling day the amounts mutually owing are equal and cancel each other. The money in this case is money of account and serves to express the value of the commodities by their prices, but is not, itself, in the shape of hard cash, confronted with them. So far as regards use values, it is clear that both parties may gain some advantage. Both part with goods that, as use values, are of no service to them, and receive others that they can make use of. And there may

also be a further gain. A, who sells wine and buys corn, possibly produces more wine, with given labour time, than farmer B could, and B on the other hand, more corn than wine-grower A could. A, therefore, may get, for the same exchange value, more corn, and B more wine, than each would respectively get without any exchange by producing his own corn and wine. With reference, therefore, to use value, there is good ground for saying that "exchange is a transaction by which both sides gain". It is otherwise with exchange value. "A man who has plenty of wine and no corn treats with a man who has plenty of corn and no wine; an exchange takes place between them of corn to the value of 50, for wine of the same value. This act produces no increase of exchange value either for the one or the other; for each of them already possessed, before the exchange, a value equal to that which he acquired by means of that operation" [...]

Suppose then, that by some inexplicable privilege, the seller is enabled to sell his commodities above their value, what is worth 100 for 110, in which case the price is nominally raised 10%. The seller therefore pockets a surplus value of 10. But after he has sold he becomes a buyer. A third owner of commodities comes to him now as seller, who in this capacity also enjoys the privilege of selling his commodities 10% too dear. Our friend gained 10 as a seller only to lose it again as a buyer. The net result is, that all owners of commodities sell their goods to one another at 10% above their value, which comes precisely to the same as if they sold them at their true value […] The creation of surplus value, and therefore the conversion of money into capital, can consequently be explained neither on the assumption that commodities are sold above their value, nor that they are bought below their value […] However, what if] A may be clever enough to get the advantage of B or C without their being able to retaliate. A sells wine worth £40 to B, and obtains from him in exchange corn to the value of £50. A has converted his £40 into £50, has made more money out of less, and has converted his commodities into capital. Let us examine this a little more closely. Before the exchange we had £40 worth of wine in the hands of A, and £50 worth of corn in those of B, a total value of £90. After the exchange we have still the same total value of £90. The value in circulation has not increased by one iota, it is only distributed differently between A and B […] Turn and twist then as we may, the fact remains unaltered. If equivalents are exchanged, no surplus value results, and if non-equivalents are exchanged, still no surplus value. Circulation, or the exchange of commodities, begets no value […]

We have shown that surplus value cannot be created by circulation, and, therefore, that in its formation, something must take place in the background, which is not apparent in the circulation itself. But can surplus value possibly originate anywhere else than in circulation, which is the sum total of all the mutual relations of commodity-owners, as far as they are

determined by their commodities? [… In production, the] commodity owner can, by his labour, create value, but not **self-expanding value**. He can increase the value of his commodity, by adding fresh labour, and therefore more value to the value in hand, by making, for instance, leather into boots. The same material has now more value, because it contains a greater quantity of labour. The boots have therefore more value than the leather, but the value of the leather remains what it was; it has not expanded itself, has not, during the making of the boots, annexed surplus value. It is therefore impossible that outside the sphere of circulation, a producer of commodities can, without coming into contact with other commodity-owners, expand value, and consequently convert money or commodities into capital.

It is therefore impossible for capital to be produced by circulation, and it is equally impossible for it to originate apart from circulation. It must have its origin both in circulation and yet not in circulation.

We have, therefore, got a double result.

The conversion of money into capital has to be explained on the basis of the laws that regulate the exchange of commodities, in such a way that the starting-point is the exchange of equivalents. Our friend, Moneybags, who as yet is only an embryo capitalist, must buy his commodities at their value, must sell them at their value, and yet at the end of the process must withdraw more value from circulation than he threw into it at starting. His development into a full-grown capitalist must take place, both within the sphere of circulation and without it. These are the conditions of the problem. *Hic Rhodus, hic salta*!

## C h a p t e r 6: THE BUYING AND SELLING OF LABOUR POWER

The change of value that occurs in the case of money intended to be converted into capital, cannot take place in the money itself, since in its function of means of purchase and of payment, it does no more than realise the price of the commodity it buys or pays for; and, as hard cash, it is value petrified, never varying. Just as little can it originate in the second act of circulation, the re-sale of the commodity, which does no more than transform the article from its bodily form back again into its money form. The change must, therefore, take place in the commodity bought by the first act, M-C, but not in its value, for equivalents are exchanged, and the commodity is paid for at its full value. We are, therefore, forced to the conclusion that the change originates in the use value, as such, of the commodity, i.e., in its consumption. In order to be able to extract value from the consumption of a commodity, our friend, Moneybags, must be so lucky as to find, within the sphere of circulation, in the market, a commodity, whose use value possesses the peculiar property of being a source of value, whose actual consumption,

therefore, is itself an embodiment of labour, and, consequently, a creation of value. The possessor of money does find on the market such a special commodity in capacity for labour or **labour power**.

**By labour power or capacity for labour is to be understood the aggregate of those mental and physical capabilities existing in a human being, which he exercises whenever he produces a use value of any description**.

But in order that our owner of money may be able to find labour power offered for sale as a commodity, various conditions must first be fulfilled. The exchange of commodities of itself implies no other relations of dependence than those which result from its own nature. On this assumption, labour power can appear upon the market as a commodity, only if, and so far as, its possessor, the individual whose labour power it is, offers it for sale, or sells it, as a commodity. In order that he may be able to do this, he must have it at his disposal, must be the untrammelled owner of his capacity for labour, i.e., of his person. He and the owner of money meet in the market, and deal with each other as on the basis of equal rights, with this difference alone, that one is buyer, the other seller; both, therefore, equal in the eyes of the law. The continuance of this relation demands that the owner of the labour power should sell it only for a definite period, for if he were to sell it rump and stump, once for all, he would be selling himself, converting himself from a free man into a slave, from an owner of a commodity into a commodity. He must constantly look upon his labour power as his own property, his own commodity, and this he can only do by placing it at the disposal of the buyer temporarily, for a definite period of time. By this means alone can he avoid renouncing his rights of ownership over it.

The second essential condition to the owner of money finding labour power in the market as a commodity is this — that the labourer instead of being in the position to sell commodities in which his labour is incorporated, must be obliged to offer for sale as a commodity that very labour power, which exists only in his living self.

In order that a man may be able to sell commodities other than labour power, he must of course have the means of production, as raw material, implements, etc. […] For the conversion of his money into capital, therefore, the owner of money must meet in the market with the free labourer, free in the double sense, that as a free man he can dispose of his labour power as his own commodity, and that on the other hand he has no other commodity for sale, is short of everything necessary for the realisation of his labour power […]

One thing, however, is clear — Nature does not produce on the one side owners of money or commodities, and on the other men possessing nothing but their own labour power. This relation has no natural basis, neither

is its social basis one that is common to all historical periods. It is clearly the result of a past historical development, the product of many economic revolutions, of the extinction of a whole series of older forms of social production.

So, too, the economic categories, already discussed by us, bear the stamp of history. Definite historical conditions are necessary that a product may become a commodity. It must not be produced as the immediate means of subsistence of the producer himself. Had we gone further, and inquired under what circumstances all, or even the majority of products take the form of commodities, we should have found that this can only happen with production of a very specific kind, capitalist production […] The appearance of products as commodities pre-supposes such a development of the social division of labour, that the separation of use value from exchange value, a separation which first begins with barter, must already have been completed. But such a degree of development is common to many forms of society, which in other respects present the most varying historical features. On the other hand, if we consider money, its existence implies a definite stage in the exchange of commodities. The particular functions of money which it performs, either as the mere equivalent of commodities, or as means of circulation, or means of payment, as hoard or as universal money, point, according to the extent and relative preponderance of the one function or the other, to very different stages in the process of social production. Yet we know by experience that a circulation of commodities relatively primitive, suffices for the production of all these forms. Otherwise with capital. The historical conditions of its existence are by no means given with the mere circulation of money and commodities. It can spring into life, only when the owner of the means of production and subsistence meets in the market with the free labourer selling his labour power. And this one historical condition comprises a world's history. Capital, therefore, announces from its first appearance a new epoch in the process of social production.

We must now examine more closely this peculiar commodity, labour power. Like all others it has a value. How is that value determined?

The value of labour power is determined, as in the case of every other commodity, by the labour time necessary for the production, and consequently also the reproduction, of this special article […] Labour power exists only as a capacity, or power of the living individual. Its production consequently pre-supposes his existence. Given the individual, the production of labour power consists in his reproduction of himself or his maintenance. For his maintenance he requires a given quantity of the means of subsistence. Therefore the labour time requisite for the production of labour power reduces itself to that necessary for the production of those means of subsistence; in other words, the value of labour power is the value of the

means of subsistence necessary for the maintenance of the labourer […] If the owner of labour power works to-day, to-morrow he must again be able to repeat the same process in the same conditions as regards health and strength. His means of subsistence must therefore be sufficient to maintain him in his normal state as a labouring individual. His natural wants, such as food, clothing, fuel, and housing, vary according to the climatic and other physical conditions of his country. On the other hand, the number and extent of his so-called necessary wants, as also the modes of satisfying them, are themselves the product of historical development […] In contradistinction therefore to the case of other commodities, there enters into the determination of the value of labour power a historical and moral element. Nevertheless, in a given country, at a given period, the average quantity of the means of subsistence necessary for the labourer is practically known.

The owner of labour power is mortal. If then his appearance in the market is to be continuous, and the continuous conversion of money into capital assumes this, the seller of labour power must perpetuate himself, "in the way that every living individual perpetuates himself, by procreation" [...] The labour power withdrawn from the market by wear and tear and death, must be continually replaced by, at the very least, an equal amount of fresh labour power. Hence the sum of the means of subsistence necessary for the production of labour power must include the means necessary for the labourer's substitutes, i.e., his children, in order that this race of peculiar commodity owners may perpetuate its appearance in the market.

In order to modify the human organism, so that it may acquire skill and handiness in a given branch of industry, and become labour power of a special kind, a special education or training is requisite, and this, on its part, costs an equivalent in commodities of a greater or less amount. This amount varies according to the more or less complicated character of the labour power. The expenses of this education (excessively small in the case of ordinary labour power), enter *pro tanto* into the total value spent in its production […]

Some of the means of subsistence, such as food and fuel, are consumed daily, and a fresh supply must be provided daily. Others such as clothes and furniture last for longer periods and require to be replaced only at longer intervals. One article must be bought or paid for daily, another weekly, another quarterly, and so on. But in whatever way the sum total of these outlays may be spread over the year, they must be covered by the average income, taking one day with another. If the total of the commodities required daily for the production of labour power = A, and those required weekly = B, and those required quarterly = C, and so on, the daily average of these commodities = (365A + 52B + 4C + etc) / 365. Suppose that in this mass of commodities requisite for the average day there are embodied 6 hours of

social labour, then there is incorporated daily in labour power half a day's average social labour, in other words, half a day's labour is requisite for the daily production of labour power. This quantity of labour forms the value of a day's labour power or the value of the labour power daily reproduced. If half a day's average social labour is incorporated in three shillings, then three shillings is the price corresponding to the value of a day's labour power […]

The minimum limit of the value of labour power is determined by the value of the commodities, without the daily supply of which the labourer cannot renew his vital energy, consequently by the value of those means of subsistence that are physically indispensable. If the price of labour power fall to this minimum, it falls below its value, since under such circumstances it can be maintained and developed only in a crippled state. But the value of every commodity is determined by the labour time requisite to turn it out so as to be of normal quality […]

When we speak of labour, or capacity for labour, we speak at the same time of the labourer and his means of subsistence, of labourer and wages. When we speak of capacity for labour, we do not speak of labour, any more than when we speak of capacity for digestion, we speak of digestion […]

One consequence of the peculiar nature of labour power as a commodity is, that its use value does not, on the conclusion of the contract between the buyer and seller, immediately pass into the hands of the former. Its value, like that of every other commodity, is already fixed before it goes into circulation, since a definite quantity of social labour has been spent upon it; but its use value consists in the subsequent exercise of its force. The alienation of labour power and its actual appropriation by the buyer, its employment as a use value, are separated by an interval of time. But in those cases in which the formal alienation by sale of the use value of a commodity, is not simultaneous with its actual delivery to the buyer, the money of the latter usually functions as means of payment. In every country in which the capitalist mode of production reigns, it is the custom not to pay for labour power before it has been exercised for the period fixed by the contract, as for example, the end of each week. In all cases, therefore, the use value of the labour power is advanced to the capitalist: the labourer allows the buyer to consume it before he receives payment of the price; he everywhere gives credit to the capitalist. That this credit is no mere fiction, is shown not only by the occasional loss of wages on the bankruptcy of the capitalist, but also by a series of more enduring consequences. Nevertheless, whether money serves as a means of purchase or as a means of payment, this makes no alteration in the nature of the exchange of commodities. The price of the labour power is fixed by the contract, although it is not realised till later, like the rent of a house […]

We now know how the value paid by the purchaser to the possessor of this peculiar commodity, labour power, is determined. The use value which the former gets in exchange, manifests itself only in the actual utilisation, in the consumption of the labour power. The money-owner buys everything necessary for this purpose, such as raw material, in the market, and pays for it at its full value. The consumption of labour power is at one and the same time the production of commodities and of surplus value. The consumption of labour power is completed, as in the case of every other commodity, outside the limits of the market or of the sphere of circulation. Accompanied by Mr. Moneybags and by the possessor of labour power, we therefore take leave for a time of this noisy sphere, where everything takes place on the surface and in view of all men, and follow them both into the hidden abode of production, on whose threshold there stares us in the face "No admittance except on business". Here we shall see, not only how capital produces, but how capital is produced. We shall at last force the secret of profit making […]

## P a r t 3: THE PRODUCTION OF ABSOLUTE SURPLUS VALUE

### C h a p t e r 7: THE LABOUR PROCESS AND THE PROCESS OF PRODUCING SURPLUS VALUE

[…] Our capitalist has two objects in view: in the first place, he wants to produce a use value that has a value in exchange, that is to say, an article destined to be sold, a commodity; and secondly, he desires to produce a commodity whose value shall be greater than the sum of the values of the commodities used in its production, that is, of the means of production and the labour power, that he purchased with his good money in the open market. His aim is to produce not only a use value, but a commodity also; not only use value, but value; not only value, but at the same time surplus value.

It must be borne in mind, that we are now dealing with the production of commodities, and that, up to this point, we have only considered one aspect of the process. Just as commodities are, at the same time, use values and values, so the process of producing them must be a labour process, and at the same time, a process of creating value.

Let us now examine production as a creation of value. We know that the value of each commodity is determined by the quantity of labour expended on and materialised in it, by the working time necessary, under given social conditions, for its production […] Assuming this product to be 10 lbs. of yarn, our first step is to calculate the quantity of labour realised in it. For spinning the yarn, raw material is required; suppose in this case 10 lbs. of cotton [… We] will assume, bought it at its full value, say of ten shillings […] We will further assume that the wear and tear of the spindle,

which, for our present purpose, may represent all other instruments of labour employed, amounts to the value of 2s. If, then, twenty-four hours' labour, or two working days, are required to produce the quantity of gold represented by twelve shillings, we have here, to begin with, two days' labour already incorporated in the yarn.

We must not let ourselves be misled by the circumstance that the cotton has taken a new shape while the substance of the spindle has to a certain extent been used up. By the general law of value, if the value of 40 lbs. of yarn = the value of 40 lbs. of cotton + the value of a whole spindle, i. e., if the same working time is required to produce the commodities on either side of this equation, then 10 lbs. of yarn are an equivalent for 10 lbs. of cotton, together with one-fourth of a spindle […] The labour required for the production of the cotton, the raw material of the yarn, is part of the labour necessary to produce the yarn, and is therefore contained in the yarn. The same applies to the labour embodied in the spindle, without whose wear and tear the cotton could not be spun […] The values of the means of production, i. e., the cotton and the spindle, which values are expressed in the price of twelve shillings, are therefore constituent parts of the value of the yarn, or, in other words, of the value of the product.

Two conditions must nevertheless be fulfilled. First, the cotton and spindle must concur in the production of a use value; they must in the present case become yarn. Value is independent of the particular use value by which it is borne, but it must be embodied in a use value of some kind. Secondly, the time occupied in the labour of production must not exceed the time really necessary under the given social conditions of the case […]

We now know what portion of the value of the yarn is owing to the cotton and the spindle. It amounts to twelve shillings or the value of two days' work. The next point for our consideration is, what portion of the value of the yarn is added to the cotton by the labour of the spinner.

We have now to consider this labour under a very different aspect from that which it had during the labour process; there, we viewed it solely as that particular kind of human activity which changes cotton into yarn; there, the more the labour was suited to the work, the better the yarn, other circumstances remaining the same […] Here, on the contrary, where we consider the labour of the spinner only so far as it is value-creating, i.e., a source of value, his labour differs in no respect from the labour of the man who bores cannon, or (what here more nearly concerns us), from the labour of the cotton-planter and spindle-maker incorporated in the means of production […] Here, we have nothing more to do with the quality, the nature and the specific character of the labour, but merely with its quantity. And this simply requires to be calculated. We proceed upon the assumption that spinning is simple, unskilled labour, the average labour of a given state of

society […]

While the labourer is at work, his labour constantly undergoes a transformation: from being motion, it becomes an object without motion; from being the labourer working, it becomes the thing produced. At the end of one hour's spinning, that act is represented by a definite quantity of yarn; in other words, a definite quantity of labour, namely that of one hour, has become embodied in the cotton. We say labour, i.e., the expenditure of his vital force by the spinner, and not spinning labour, because the special work of spinning counts here, only so far as it is the expenditure of labour power in general, and not in so far as it is the specific work of the spinner [… The] yarn, is now nothing more than a measure of the labour absorbed by the cotton. If in one hour 1 2/3 lbs. of cotton can be spun into 1 2/3 lbs. of yarn, then 10 lbs. of yarn indicate the absorption of 6 hours' labour […]

We assumed, on the occasion of its sale, that the value of a day's labour power is three shillings, and that six hours' labour is incorporated in that sum; and consequently that this amount of labour is requisite to produce the necessaries of life daily required on an average by the labourer. If now our spinner by working for one hour, can convert 1 2/3 lbs. of cotton into 1 2/3 lbs. of yarn, it follows that in six hours he will convert 10 lbs. of cotton into 10 lbs. of yarn. Hence, during the spinning process, the cotton absorbs six hours' labour. The same quantity of labour is also embodied in a piece of gold of the value of three shillings. Consequently by the mere labour of spinning, a value of three shillings is added to the cotton.

Let us now consider the total value of the product, the 10 lbs. of yarn. Two and a half days' labour has been embodied in it, of which two days were contained in the cotton and in the substance of the spindle worn away, and half a day was absorbed during the process of spinning. This two and a half days' labour is also represented by a piece of gold of the value of fifteen shillings. Hence, fifteen shillings is an adequate price for the 10 lbs. of yarn […] The value of the product is exactly equal to the value of the capital advanced. The value so advanced has not expanded, no surplus value has been created, and consequently money has not been converted into capital. The price of the yarn is fifteen shillings, and fifteen shillings were spent in the open market upon the constituent elements of the product, or, what amounts to the same thing, upon the factors of the labour process; ten shillings were paid for the cotton, two shillings for the substance of the spindle worn away, and three shillings for the labour power […]

Let us examine the matter more closely. The value of a day's labour power amounts to 3 shillings, because on our assumption half a day's labour is embodied in that quantity of labour power, i.e., because the means of subsistence that are daily required for the production of labour power, cost half a day's labour. But the past labour that is embodied in the labour power,

and the living labour that it can call into action; the daily cost of maintaining it, and its daily expenditure in work, are two totally different things. The former determines the exchange value of the labour power, the latter is its use value. The fact that half a day's labour is necessary to keep the labourer alive during 24 hours, does not in any way prevent him from working a whole day. Therefore, the value of labour power, and the value which that labour power creates in the labour process, are two entirely different magnitudes; and this difference of the two values was what the capitalist had in view, when he was purchasing the labour power […] What really influenced him was the specific use value which this commodity possesses of being *a source not only of value, but of more value than it has itself*. This is the special service that the capitalist expects from labour power […]

The use value of labour power, or in other words, labour, belongs just as little to its seller, as the use value of oil after it has been sold belongs to the dealer who has sold it. The owner of the money has paid the value of a day's labour power; his, therefore, is the use of it for a day; a day's labour belongs to him. The circumstance, that on the one hand the daily sustenance of labour power costs only half a day's labour, while on the other hand the very same labour power can work during a whole day, that consequently the value which its use during one day creates, is double what he pays for that use, this circumstance is, without doubt, a piece of good luck for the buyer, but by no means an injury to the seller.

Our capitalist foresaw this state of things, and that was the cause of his laughter. The labourer therefore finds, in the workshop, the means of production necessary for working, not only during six, but during twelve hours. Just as during the six hours' process our 10 lbs. of cotton absorbed six hours' labour, and became 10 lbs. of yarn, so now, 20 lbs. of cotton will absorb 12 hours' labour and be changed into 20 lbs. of yarn. Let us now examine the product of this prolonged process. There is now materialised in this 20 lbs. of yarn the labour of five days, of which four days are due to the cotton and the lost steel of the spindle, the remaining day having been absorbed by the cotton during the spinning process. Expressed in gold, the labour of five days is thirty shillings. This is therefore the price of the 20 lbs. of yarn, giving, as before, eighteenpence as the price of a pound. But the sum of the values of the commodities that entered into the process amounts to 27 shillings. The value of the yarn is 30 shillings. Therefore the value of the product is 1/9 greater than the value advanced for its production; 27 shillings have been transformed into 30 shillings; a surplus value of 3 shillings has been created. The trick has at last succeeded; money has been converted into capital.

Every condition of the problem is satisfied, while the laws that regulate the exchange of commodities, have been in no way violated.

Equivalent has been exchanged for equivalent. For the capitalist as buyer paid for each commodity, for the cotton, the spindle and the labour power, its full value. He then did what is done by every purchaser of commodities; he consumed their use value. The consumption of the labour power, which was also the process of producing commodities, resulted in 20 lbs. of yarn, having a value of 30 shillings. The capitalist, formerly a buyer, now returns to market as a seller, of commodities. He sells his yarn at eighteenpence a pound, which is its exact value. Yet for all that he withdraws 3 shillings more from circulation than he originally threw into it. **This metamorphosis, this conversion of money into capital, takes place both within the sphere of circulation and also outside it; within the circulation, because conditioned by the purchase of the labour power in the market; outside the circulation, because what is done within it is only a stepping-stone to the production of surplus value, a process which is entirely confined to the sphere of production** […]

The process of production, considered on the one hand as the unity of the labour process and the process of creating value, is production of commodities; considered on the other hand as the unity of the labour process and the process of producing surplus value, it is the capitalist process of production, or capitalist production of commodities.

[… In] the creation of surplus value it does not in the least matter, whether the labour appropriated by the capitalist be simple unskilled labour of average quality or more complicated skilled labour[,] labour that creates in equal times proportionally higher values than unskilled labour does [, for] in every process of creating value, the reduction of skilled labour to average social labour, e.g., one day of skilled to six days of unskilled labour, is unavoidable […]

## C h a p t e r 8: CONSTANT CAPITAL AND VARIABLE CAPITAL

[…] That part of capital then, which is represented by the means of production, by the raw material, auxiliary material and the instruments of labour does not, in the process of production, undergo any quantitative alteration of value. I therefore call it the constant part of capital, or, more shortly, **constant capital**. On the other hand, that part of capital, represented by labour power, does, in the process of production, undergo an alteration of value. It both reproduces the equivalent of its own value, and also produces an excess, a surplus value, which may itself vary, may be more or less according to circumstances. This part of capital is continually being transformed from a constant into a variable magnitude. I therefore call it the variable part of capital, or, shortly, **variable capital**. The same elements of capital which, from the point of view of the labour process, present

themselves respectively as the objective and subjective factors, as means of production and labour power, present themselves, from the point of view of the process of creating surplus value, as constant and variable capital […]

## C h a p t e r 9: THE RATE OF SURPLUS VALUE

### SECTION 1.— THE DEGREE OF EXPLOITATION OF LABOUR POWER

The surplus value generated in the process of production by C, the capital advanced, or in other words, the self-expansion of the value of the capital C, presents itself for our consideration, in the first place, as a surplus, as the amount by which the value of the product exceeds the value of its constituent elements.

The capital C is made up of two components, one, the sum of money c laid out upon the means of production, and the other, the sum of money v expended upon the labour power; c represents the portion that has become constant capital, and v the portion that has become variable capital. At first then, C = c + v: for example, if £500 is the capital advanced, its components may be such that the £500 = £410 const. + £90 var. When the process of production is finished, we get a commodity whose value = (c + v) + s, where s is the surplus value; or taking our former figures, the value of this commodity may be (£410 const. + £90 var.) + £90 surpl. The original capital has now changed from C to C', from £500 to £590. The difference is s or a surplus value of £90 […] The surplus value generated in the process of production by C, the capital advanced, or in other words, the self-expansion of the value of the capital C, presents itself for our consideration, in the first place, as a surplus, as the amount by which the value of the product exceeds the value of its constituent elements [...]

The relative quantity produced, or the increase per cent of the variable capital, is determined, it is plain, by the ratio of the surplus value to the variable capital, or is expressed by **s/v**. In our example this ratio is 90/90, which gives an increase of 100%. This relative increase in the value of the variable capital, or the relative magnitude of the surplus value, I call, "**The rate of surplus value**" […]

[During] that portion of his day's labour in which [the labourer] produces the value of his labour power, say three shillings, he produces only an equivalent for the value of his labour power already advanced by the capitalist; the new value created only replaces the variable capital advanced. It is owing to this fact, that the production of the new value of three shillings takes the semblance of a mere reproduction. That portion of the working day, then, during which this reproduction takes place, I call **"necessary" labour**

**time**, and the labour expended during that time I call **“necessary” labour** […]

During the second period of the labour process, that in which his labour is no longer necessary labour, the workman, it is true, labours, expends labour power; but his labour, being no longer necessary labour, he creates no value for himself. He creates surplus value which, for the capitalist, has all the charms of a creation out of nothing. This portion of the working day, I name **surplus labour time**, and to the labour expended during that time, I give the name of **surplus labour**. It is every bit as important, for a correct understanding of surplus value, to conceive it as a mere congelation of surplus labour time, as nothing but materialised surplus labour, as it is, for a proper comprehension of value, to conceive it as a mere congelation of so many hours of labour, as nothing but materialised labour […]

Since, on the one hand, the values of the variable capital and of the labour power purchased by that capital are equal, and the value of this labour power determines the necessary portion of the working day; and since, on the other hand, the surplus value is determined by the surplus portion of the working day, it follows that surplus value bears the same ratio to variable capital, that surplus labour does to necessary labour, or in other words, the rate of surplus value, s/v = (surplus labour)/(necessary labour). Both ratios, s/v and (surplus labour)/(necessary labour), express the same thing in different ways; in the one case by reference to materialised, incorporated labour, in the other by reference to living, fluent labour.

The **rate of surplus value** is therefore an exact expression for the **degree of exploitation** of labour power by capital, or of the labourer by the capitalist.

We assumed in our example, that the value of the product = £410 const. + £90 var. + £90 surpl., and that the capital advanced = £500. Since the surplus value = £90, and the advanced capital = £500, we [get, as the **rate of profit, or s/(c+v)**,] 18% […] But in truth, the **rate of surplus value** is not equal to […] s/(c+v), but to s/v: thus it is not 90/500 but 90/90 or 100% […]

## [SECTION 4.—SURPLUS PRODUCE]

The portion of the product that represents the surplus value […] we call **“surplus produce”**. Just as the rate of surplus value is determined by its relation, not to the sum total of the capital, but to its variable part; in like manner, the relative quantity of surplus produce is determined by the ratio that this produce bears, not to the remaining part of the total product, but to that part of it in which is incorporated the necessary labour. Since the production of surplus value is the chief end and aim of capitalist production, it is clear, that the greatness of a man’s or a nation’s wealth should be

measured, not by the absolute quantity produced, but by the relative magnitude of the surplus produce.

The sum of the necessary labour and the surplus labour, i.e., of the periods of time during which the workman replaces the value of his labour power, and produces the surplus value, this sum constitutes the actual time during which he works, i.e., the working day.

## C h a p t e r 10: THE WORKING DAY

### SECTION 1.—THE LIMITS OF THE WORKING DAY

We started with the supposition that labour power is bought and sold at its value. Its value, like that of all other commodities, is determined by the working time necessary to its production. If the production of the average daily means of subsistence of the labourer takes up 6 hours, he must work, on the average, 6 hours every day, to produce his daily labour power, or to reproduce the value received as the result of its sale. The necessary part of his working day amounts to 6 hours, and is, therefore, *caeteris paribus*, a given quantity. But with this, the extent of the working day itself is not yet given.

Let us assume that the line A——B represents the length of the necessary working time, say 6 hours. If the labour be prolonged 1, 3, or 6 hours beyond A—B, we have 3 other lines:

| Working day I. | Working day II. | Working day III. |
|---|---|---|
| A——B–C. | A——B—C. | A——B——C. |

representing 3 different working days of 7, 9, and 12 hours. The extension B––C of the line A—B represents the length of the surplus labour. As the working day is A—B + B—C or A—C, it varies with the variable quantity B—C. Since A—B is constant, the ratio of B—C to A—B can always be calculated. In working day I, it is 1/6, in working day II, 3/6, in working day III 6/6 of A—B. Since further the ratio (surplus working time)/(necessary working time), determines the rate of the surplus value, the latter is given by the ratio of B–-C to A–-B. It amounts in the 3 different working days respectively to 16 2/3, 50 and 100 per cent. On the other hand, the rate of surplus value alone would not give us the extent of the working day. If this rate, e.g., were 100 per cent., the working day might be of 8, 10, 12, or more hours. It would indicate that the 2 constituent parts of the working day, necessary-labour and surplus labour time, were equal in extent, but not how long each of these two constituent parts was.

The working day is thus not a constant, but a variable quantity. One of its parts, certainly, is determined by the working time required for the

reproduction of the labour power of the labourer himself. But its total amount varies with the duration of the surplus labour. The working day is, therefore, determinable, but is, *per se*, indeterminate.

Although the working day is not a fixed, but a fluent quantity, it can, on the other hand, only vary within certain limits. The minimum limit is, however, not determinable; of course, if we make the extension line B– C or the surplus labour = 0, we have a minimum limit, i.e., the part of the day which the labourer must necessarily work for his own maintenance. On the basis of capitalist production, however, this necessary labour can form a part only of the working day; the working day itself can never be reduced to this minimum. On the other hand, the working day has a maximum limit. It cannot be prolonged beyond a certain point. This maximum limit is conditioned by two things. First, by the physical bounds of labour power. Within the 24 hours of the natural day a man can expend only a definite quantity of his vital force. A horse, in like manner, can only work from day to day, 8 hours. During part of the day this force must rest, sleep; during another part the man has to satisfy other physical needs, to feed, wash, and clothe himself. Besides these purely physical limitations, the extension of the working day encounters moral ones. The labourer needs time for satisfying his intellectual and social wants, the extent and number of which are conditioned by the general state of social advancement. The variation of the working day fluctuates, therefore, within physical and social bounds. But both these limiting conditions are of a very elastic nature, and allow the greatest latitude. So we find working days of 8, 10, 12, 14, 16, 18 hours, i.e., of the most different lengths […]

We see then, that, apart from extremely elastic bounds, the nature of the exchange of commodities itself imposes no limit to the working day, no limit to surplus labour. The capitalist maintains his rights as a purchaser when he tries to make the working day as long as possible, and to make, whenever possible, two working days out of one. On the other hand, the peculiar nature of the commodity sold implies a limit to its consumption by the purchaser, and the labourer maintains his right as seller when he wishes to reduce the working day to one of definite normal duration. There is here, therefore, an antinomy, right against right, both equally bearing the seal of the law of exchanges. Between equal rights force decides. Hence is it that in the history of capitalist production, the determination of what is a working day, presents itself as the result of a struggle, a struggle between collective capital, i.e., the class of capitalists, and collective labour, i.e., the working class […]

## C h a p t e r 11: RATE AND MASS OF SURPLUS VALUE

In this chapter, as hitherto, the value of labour power, and therefore

the part of the working day necessary for the reproduction or maintenance of that labour power, are supposed to be given, constant magnitudes.

This premised, with the rate, the mass is at the same time given of the surplus value that the individual labourer furnishes to the capitalist in a definite period of time. If, e.g., the necessary labour amounts to 6 hours daily, expressed in a quantum of gold = 3 shillings, then 3s. is the daily value of one labour power or the value of the capital advanced in the buying of one labour power. If, further, the rate of surplus value be = 100%, this variable capital of 3s. produces a mass of surplus value of 3s., or the labourer supplies daily a mass of surplus labour equal to 6 hours.

But the variable capital of a capitalist is the expression in money of the total value of all the labour powers that he employs simultaneously. Its value is, therefore, equal to the average value of one labour power, multiplied by the number of labour powers employed. With a given value of labour power, therefore, the magnitude of the variable capital varies directly as the number of labourers employed simultaneously. If the daily value of one labour power = 3s., then a capital of 300s. must be advanced in order to exploit daily 100 labour powers, of n times 3s., in order to exploit daily n labour powers.

In the same way, if a variable capital of 3s., being the daily value of one labour power, produce a daily surplus value of 3s., a variable capital of 300s. will produce a daily surplus value of 300s., and one of n times 3s. a daily surplus value of n × 3s. The mass of the surplus value produced is therefore equal to the surplus value which the working day of one labourer supplies multiplied by the number of labourers employed. But as further the mass of surplus value which a single labourer produces, the value of labour power being given, is determined by the rate of the surplus value, this law follows: the mass of the surplus value produced is equal to the amount of the variable capital advanced, multiplied by the rate of surplus value, in other words: it is determined by the compound ratio between the number of labour powers exploited simultaneously by the same capitalist and the degree of exploitation of each individual labour power.

Let the mass of the surplus value be S, the surplus value supplied by the individual labourer in the average day s the variable capital daily advanced in the purchase of one individual labour power v, the sum total of the variable capital V, the value of an average labour power P, its degree of exploitation (a'/a) (surplus labour/necessary-labour) and the number of labourers employed n; we would have:

$$S = \begin{cases} (s/v) \times V \\ P \times (a'/a) \times n \end{cases}$$

It is always supposed, not only that the value of an average labour power is constant, but that the labourers employed by a capitalist are reduced to average labourers. There are exceptional cases in which the surplus value produced does not increase in proportion to the number of labourers exploited, but then the value of the labour power does not remain constant.

In the production of a definite mass of surplus value, therefore, the decrease of one factor may be compensated by the increase of the other. If the variable capital diminishes, and at the same time the rate of surplus value increases in the same ratio, the mass of surplus value produced remains unaltered. If on our earlier assumption the capitalist must advance 300s., in order to exploit 100 labourers a day, and if the rate of surplus value amounts to 50%, this variable capital of 300s. yields a surplus value of 150s. or of 100 × 3 working hours. If the rate of surplus value doubles, or the working day, instead of being extended from 6 to 9, is extended from 6 to 12 hours and at the same time variable capital is lessened by half, and reduced to 150s., it yields also a surplus value of 150s. or 50 × 6 working hours. Diminution of the variable capital may therefore be compensated by a proportionate rise in the degree of exploitation of labour power, or the decrease in the number of the labourers employed by a proportionate extension of the working day. Within certain limits therefore the supply of labour exploitable by capital is independent of the supply of labourers. On the contrary, a fall in the rate of surplus value leaves unaltered the mass of the surplus value produced, if the amount of the variable capital, or number of the labourers employed, increases in the same proportion.

Nevertheless, the compensation of a decrease in the number of labourers employed, or of the amount of variable capital advanced by a rise in the rate of surplus value, or by the lengthening of the working day, has impassable limits. Whatever the value of labour power may be, whether the working time necessary for the maintenance of the labourer is 2 or 10 hours, the total value that a labourer can produce, day in, day out, is always less than the value in which 24 hours of labour are embodied, less than 12s., if 12s. is the money expression for 24 hours of realised labour […] The absolute limit of the average working day — this being by nature always less than 24 hours — sets an absolute limit to the compensation of a reduction of variable capital by a higher rate of surplus value, or of the decrease of the number of labourers exploited by a higher degree of exploitation of labour power. This palpable law is of importance for the clearing up of many phenomena, arising from a tendency (to be worked out later on) of capital to reduce as much as possible the number of labourers employed by it, or its variable constituent transformed into labour power, in contradiction to its other tendency to produce the greatest possible mass of surplus value […]

A third law results from the determination, of the mass of the surplus value produced, by the two factors: rate of surplus value and amount of variable capital advanced […] The law […] takes this form: the masses of value and of surplus value produced by different capitals — the value of labour power being given and its degree of exploitation being equal — vary directly as the amounts of the variable constituents of these capitals, i.e., as their constituents transformed into living labour power.

This law clearly contradicts all experience based on appearance. Everyone knows that a cotton spinner, who, reckoning the percentage on the whole of his applied capital, employs much constant and little variable capital, does not, on account of this, pocket less profit or surplus value than a baker, who relatively sets in motion much variable and little constant capital. For the solution of this apparent contradiction, many intermediate terms are as yet wanted, as from the standpoint of elementary algebra many intermediate terms are wanted to understand that 0/0 may represent an actual magnitude […]

## P a r t 4: PRODUCTION OF RELATIVE SURPLUS VALUE

### C h a p t e r 12: THE CONCEPT OF RELATIVE SURPLUS VALUE

[…] Hitherto in treating of surplus value, arising from a simple prolongation of the working day, we have assumed the mode of production to be given and invariable. But when surplus value has to be produced by the conversion of necessary labour into surplus labour, it by no means suffices for capital to take over the labour process in the form under which it has been historically handed down, and then simply to prolong the duration of that process. The technical and social conditions of the process, and consequently the very mode of production must be revolutionised, before the productiveness of labour can be increased. By that means alone can the value of labour power be made to sink, and the portion of the working day necessary for the reproduction of that value, be shortened.

The surplus value produced by prolongation of the working day, I call **absolute surplus value**. On the other hand, the surplus value arising from the curtailment of the necessary labour time, and from the corresponding alteration in the respective lengths of the two components of the working day, I call **relative surplus value**.

In order to effect a fall in the value of labour power, the increase in the productiveness of labour must seize upon those branches of industry whose products determine the value of labour power, and consequently either belong to the class of customary means of subsistence, or are capable of supplying the place of those means. But the value of a commodity is

determined, not only by the quantity of labour which the labourer directly bestows upon that commodity, but also by the labour contained in the means of production. For instance, the value of a pair of boots depends not only on the cobbler's labour, but also on the value of the leather, wax, thread, etc. Hence, a fall in the value of labour power is also brought about by an increase in the productiveness of labour, and by a corresponding cheapening of commodities in those industries which supply the instruments of labour and the raw material, that form the material elements of the constant capital required for producing the necessaries of life. But an increase in the productiveness of labour in those branches of industry which supply neither the necessaries of life, nor the means of production for such necessaries, leaves the value of labour power undisturbed.

The cheapened commodity, of course, causes only a *pro tanto* fall in the value of labour power, a fall proportional to the extent of that commodity's employment in the reproduction of labour power. Shirts, for instance, are a necessary means of subsistence, but are only one out of many. The totality of the necessaries of life consists, however, of various commodities, each the product of a distinct industry; and the value of each of those commodities enters as a component part into the value of labour power. This latter value decreases with the decrease of the labour time necessary for its reproduction; the total decrease being the sum of all the different curtailments of labour time effected in those various and distinct industries. This general result is treated, here, as if it were the immediate result directly aimed at in each individual case. Whenever an individual capitalist cheapens shirts, for instance, by increasing the productiveness of labour he by no means necessarily aims at reducing the value of labour power and shortening, *pro tanto* the necessary labour time. But it is only in so far as he ultimately contributes to this result, that he assists in raising the general rate of surplus value […]

It is not our intention to consider, here, the way in which the laws, immanent in capitalist production, manifest themselves in the movements of individual masses of capital, where they assert themselves as coercive laws of competition, and are brought home to the mind and consciousness of the individual capitalist as the directing motives of his operations […] Nevertheless, for the better comprehension of the production of relative surplus value, we may add the following remarks, in which we assume nothing more than the results we have already obtained.

If one hour's labour is embodied in sixpence, a value of six shillings will be produced in a working day of 12 hours. Suppose, that with the prevailing productiveness of labour, 12 articles are produced in these 12 hours. Let the value of the means of production used up in each article be sixpence. Under these circumstances, each article costs one shilling: sixpence

for the value of the means of production, and sixpence for the value newly added in working with those means. Now let some one capitalist contrive to double the productiveness of labour, and to produce in the working day of 12 hours, 24 instead of 12 such articles. The value of the means of production remaining the same, the value of each article will fall to ninepence, made up of sixpence for the value of the means of production and threepence for the value newly added by the labour. Despite the doubled productiveness of labour, the day's labour creates, as before, a new value of six shillings and no more, which, however, is now spread over twice as many articles. Of this value each article now has embodied in it 1/24th, instead of 1/12th, threepence instead of sixpence; or, what amounts to the same thing, only half an hour's instead of a whole hour's labour time, is now added to the means of production while they are being transformed into each article. The individual value of these articles is now below their social value; in other words, they have cost less labour time than the great bulk of the same article produced under the average social conditions. Each article costs, on an average, one shilling, and represents 2 hours of social labour; but under the altered mode of production it costs only ninepence, or contains only 1½ hours' labour. The real value of a commodity is, however, not its individual value, but its social value; that is to say, the real value is not measured by the labour time that the article in each individual case costs the producer, but by the labour time socially required for its production. If therefore, the capitalist who applies the new method, sells his commodity at its social value of one shilling, he sells it for threepence above its individual value, and thus realises an extra surplus value of threepence. On the other hand, the working day of 12 hours is, as regards him, now represented by 24 articles instead of 12. Hence, in order to get rid of the product of one working day, the demand must be double what it was, i.e., the market must become twice as extensive. Other things being equal, his commodities can command a more extended market only by a diminution of their prices. He will therefore sell them above their individual but under their social value, say at tenpence each. By this means he still squeezes an extra surplus value of one penny out of each. This augmentation of surplus value is pocketed by him, whether his commodities belong or not to the class of necessary means of subsistence that participate in determining the general value of labour power. Hence, independently of this latter circumstance, there is a motive for each individual capitalist to cheapen his commodities, by increasing the productiveness of labour.

Nevertheless, even in this case, the increased production of surplus value arises from the curtailment of the necessary labour time, and from the corresponding prolongation of the surplus labour. Let the necessary labour time amount to 10 hours, the value of a day's labour power to five shillings, the surplus labour time to 2 hours, and the daily surplus value to one shilling.

But the capitalist now produces 24 articles, which he sells at tenpence a-piece, making twenty shillings in all. Since the value of the means of production is twelve shillings, 14 2/5 of these articles merely replace the constant capital advanced. The labour of the 12 hours' working day is represented by the remaining 9 3/5 articles. Since the price of the labour power is five shillings, 6 articles represent the necessary labour time, and 3 3/5 articles the surplus labour. The ratio of the necessary labour to the surplus labour, which under average social conditions was 5:1, is now only 5:3. The same result may be arrived at in the following way. The value of the product of the working day of 12 hours is twenty shillings. Of this sum, twelve shillings belong to the value of the means of production, a value that merely re-appears. There remain eight shillings, which are the expression in money, of the value newly created during the working day. This sum is greater than the sum in which average social labour of the same kind is expressed: twelve hours of the latter labour are expressed by six shillings only. The exceptionally productive labour operates as intensified labour; it creates in equal periods of time greater values than average social labour of the same kind. But our capitalist still continues to pay as before only five shillings as the value of a day's labour power. Hence, instead of 10 hours, the labourer need now work only 7½ hours, in order to reproduce this value. His surplus labour is, therefore, increased by 2½ hours, and the surplus value he produces grows from one, into three shillings. Hence, the capitalist who applies the improved method of production, appropriates to surplus labour a greater portion of the working day, than the other capitalists in the same trade. He does individually, what the whole body of capitalists engaged in producing relative surplus value, do collectively. On the other hand, however, this extra surplus value vanishes, so soon as the new method of production has become general, and has consequently caused the difference between the individual value of the cheapened commodity and its social value to vanish. The law of the determination of value by labour time, a law which brings under its sway the individual capitalist who applies the new method of production, by compelling him to sell his goods under their social value, this same law, acting as a coercive law of competition, forces his competitors to adopt the new method. The general rate of surplus value is, therefore, ultimately affected by the whole process, only when the increase in the productiveness of labour, has seized upon those branches of production that are connected with, and has cheapened those commodities that form part of, the necessary means of subsistence, and are therefore elements of the value of labour power.

The value of commodities is in inverse ratio to the productiveness of labour. And so, too, is the value of labour power, because it depends on the values of commodities. Relative surplus value is, on the contrary, directly

proportional to that productiveness. It rises with rising and falls with falling productiveness. The value of money being assumed to be constant, an average social working day of 12 hours always produces the same new value, six shillings, no matter how this sum may be apportioned between surplus value and wages. But if, in consequence of increased productiveness, the value of the necessaries of life fall, and the value of a day's labour power be thereby reduced from five shillings to three, the surplus value increases from one shilling to three. Ten hours were necessary for the reproduction of the value of the labour power; now only six are required. Four hours have been set free, and can be annexed to the domain of surplus labour. Hence there is immanent in capital an inclination and constant tendency, to heighten the productiveness of labour, in order to cheapen commodities, and by such cheapening to cheapen the labourer himself.

**The value of a commodity is, in itself, of no interest to the capitalist. What alone interests him, is the surplus value that dwells in it, and is realisable by sale.** Realisation of the surplus value necessarily carries with it the refunding of the value that was advanced. Now, since relative surplus value increases in direct proportion to the development of the productiveness of labour, while, on the other hand, the value of commodities diminishes in the same proportion; since one and the same process cheapens commodities, and augments the surplus value contained in them; we have mhere the solution of the riddle: why does the capitalist, whose sole concern is the production of exchange value, continually strive to depress the exchange value of commodities? […]

The shortening of the working day is, therefore, by no means what is aimed at, in capitalist production, when labour is economised by increasing its productiveness. It is only the shortening of the labour time, necessary for the production of a definite quantity of commodities, that is aimed at. The fact that the workman, when the productiveness of his labour has been increased, produces, say 10 times as many commodities as before, and thus spends one-tenth as much labour time on each, by no means prevents him from continuing to work 12 hours as before, nor from producing in those 12 hours 1,200 articles instead of 120. Nay, more, his working day may be prolonged at the same time, so as to make him produce, say 1,400 articles in 14 hours. In the treatises, therefore, of economists of the stamp of MacCulloch, Ure, Senior, and *tutti quanti*, we may read upon one page, that the labourer owes a debt of gratitude to capital for developing his productiveness, because the necessary labour time is thereby shortened, and on the next page, that he must prove his gratitude by working in future for 15 hours instead of 10. The object of all development of the productiveness of labour, within the limits of capitalist production, is to shorten that part of the working day, during which the workman must labour for his own benefit, and

by that very shortening, to lengthen the other part of the day, during which he is at liberty to work gratis for the capitalist. How far this result is also attainable, without cheapening commodities, will appear from an examination of the particular modes of producing relative surplus value, to which examination we now proceed.

## C h a p t e r 13: CO-OPERATION

Capitalist production only then really begins, as we have already seen, when each individual capital employs simultaneously a comparatively large number of labourers; when consequently the labour process is carried on on an extensive scale and yields, relatively, large quantities of products. A greater number of labourers working together, at the same time, in one place (or, if you will, in the same field of labour), in order to produce the same sort of commodity under the mastership of one capitalist, constitutes, both historically and logically, the starting-point of capitalist production. With regard to the mode of production itself, manufacture, in its strict meaning, is hardly to be distinguished, in its earliest stages, from the handicraft trades of the guilds, otherwise than by the greater number of workmen simultaneously employed by one and the same individual capital. The workshop of the medieval master handicraftsman is simply enlarged.

At first, therefore, the difference is purely quantitative. We have shown that the surplus value produced by a given capital is equal to the surplus value produced by each workman multiplied by the number of workmen simultaneously employed. The number of workmen in itself does not affect, either the rate of surplus value, or the degree of exploitation of labour power. If a working day of 12 hours be embodied in six shillings, 1,200 such days will be embodied in 1,200 times 6 shillings. In one case 12 × 1,200 working hours, and in the other 12 such hours are incorporated in the product. In the production of value a number of workmen rank merely as so many individual workmen; and it therefore makes no difference in the value produced whether the 1,200 men work separately, or united under the control of one capitalist.

Nevertheless, within certain limits, a modification takes place. The labour realised in value, is labour of an average social quality; is consequently the expenditure of average labour power. Any average magnitude, however, is merely the average of a number of separate magnitudes all of one kind, but differing as to quantity. In every industry, each individual labourer, be he Peter or Paul, differs from the average labourer. These individual differences, or “errors” as they are called in mathematics, compensate one another, and vanish, whenever a certain minimum number of workmen are employed together [… It] is clear, that the

collective working day of a large number of workmen simultaneously employed, divided by the number of these workmen, gives one day of average social labour. For example, let the working day of each individual be 12 hours. Then the collective working day of 12 men simultaneously employed, consists of 144 hours; and although the labour of each of the dozen men may deviate more or less from average social labour, each of them requiring a different time for the same operation, yet since the working day of each is one-twelfth of the collective working day of 144 hours, it possesses the qualities of an average social working day […]

Even without an alteration in the system of working, the simultaneous employment of a large number of labourers effects a revolution in the material conditions of the labour process. The buildings in which they work, the store-houses for the raw material, the implements and utensils used simultaneously or in turns by the workmen; in short, a portion of the means of production, are now consumed in common. On the one hand, the exchange value of these means of production is not increased; for the exchange value of a commodity is not raised by its use value being consumed more thoroughly and to greater advantage. On the other hand, they are used in common, and therefore on a larger scale than before. A room where twenty weavers work at twenty looms must be larger than the room of a single weaver with two assistants. But it costs less labour to build one workshop for twenty persons than to build ten to accommodate two weavers each; thus the value of the means of production that are concentrated for use in common on a large scale does not increase in direct proportion to the expansion and to the increased useful effect of those means. When consumed in common, they give up a smaller part of their value to each single product; partly because the total value they part with is spread over a greater quantity of products, and partly because their value, though absolutely greater, is, having regard to their sphere of action in the process, relatively less than the value of isolated means of production. Owing to this, the value of a part of the constant capital falls, and in proportion to the magnitude of the fall, the total value of the commodity also falls. The effect is the same as if the means of production had cost less. The economy in their application is entirely owing to their being consumed in common by a large number of workmen […]

Economy in the use of the means of production has to be considered under two aspects. First, as cheapening commodities, and thereby bringing about a fall in the value of labour power. Secondly, as altering the ratio of the surplus value to the total capital advanced, i.e., to the sum of the values of the constant and variable capital. The latter aspect will not be considered until we come to the third book, to which, with the object of treating them in their proper connexion, we also relegate many other points that relate to the present question […]

When numerous labourers work together side by side, whether in one and the same process, or in different but connected processes, they are said to co-operate, or to work in co-operation.

Just as the offensive power of a squadron of cavalry, or the defensive power of a regiment of infantry is essentially different from the sum of the offensive or defensive powers of the individual cavalry or infantry soldiers taken separately, so the sum total of the mechanical forces exerted by isolated workmen differs from the social force that is developed, when many hands take part simultaneously in one and the same undivided operation, such as raising a heavy weight, turning a winch, or removing an obstacle […]

Apart from the new power that arises from the fusion of many forces into one single force, mere social contact begets in most industries an emulation and a stimulation of the animal spirits that heighten the efficiency of each individual workman […]

The combined working day produces, relatively to an equal sum of isolated working days, a greater quantity of use values, and, consequently, diminishes the labour time necessary for the production of a given useful effect. Whether the combined working day, in a given case, acquires this increased productive power, because it heightens the mechanical force of labour, or extends its sphere of action over a greater space, or contracts the field of production relatively to the scale of production, or at the critical moment sets large masses of labour to work, or excites emulation between individuals and raises their animal spirits, or impresses on the similar operations carried on by a number of men the stamp of continuity and many-sidedness, or performs simultaneously different operations, or economises the means of production by use in common, or lends to individual labour the character of average social labour whichever of these be the cause of the increase, the special productive power of the combined working day is, under all circumstances, the social productive power of labour, or the productive power of social labour. This power is due to co-operation itself. When the labourer co-operates systematically with others, he strips off the fetters of his individuality, and develops the capabilities of his species […]

[Concentration] of large masses of the means of production in the hands of individual capitalists, is a material condition for the co-operation of wage labourers, and the extent of the co-operation or the scale of production, depends on the extent of this concentration.

We saw in a former chapter, that a certain minimum amount of capital was necessary, in order that the number of labourers simultaneously employed, and, consequently, the amount of surplus value produced, might suffice to liberate the employer himself from manual labour, to convert him from a small master into a capitalist, and thus formally to establish capitalist production. We now see that a certain minimum amount is a necessary

condition for the conversion of numerous isolated and independent processes into one combined social process.

We also saw that at first, the subjection of labour to capital was only a formal result of the fact, that the labourer, instead of working for himself, works for and consequently under the capitalist. By the co-operation of numerous wage labourers, the sway of capital develops into a requisite for carrying on the labour process itself, into a real requisite of production. That a capitalist should command on the field of production, is now as indispensable as that a general should command on the field of battle.

All combined labour on a large scale requires, more or less, a directing authority, in order to secure the harmonious working of the individual activities […] A single violin player is his own conductor; an orchestra requires a separate one. The work of directing, superintending, and adjusting, becomes one of the functions of capital, from the moment that the labour under the control of capital, becomes co-operative. Once a function of capital, it acquires special characteristics.

The directing motive, the end and aim of capitalist production, is to extract the greatest possible amount of surplus value, and consequently to exploit labour power to the greatest possible extent. As the number of the co-operating labourers increases, so too does their resistance to the domination of capital, and with it, the necessity for capital to overcome this resistance by counterpressure […] Just as at first the capitalist is relieved from actual labour so soon as his capital has reached that minimum amount with which capitalist production, as such, begins, so now, he hands over the work of direct and constant supervision of the individual workmen, and groups of workmen, to a special kind of wage labourer. An industrial army of workmen, under the command of a capitalist, requires, like a real army, officers (managers), and sergeants (foremen, overlookers), who, while the work is being done, command in the name of the capitalist. The work of supervision becomes their established and exclusive function […]

The labourer is the owner of his labour power until he has done bargaining for its sale with the capitalist; and he can sell no more than what he has — i.e., his individual, isolated labour power. This state of things is in no way altered by the fact that the capitalist, instead of buying the labour power of one man, buys that of 100, and enters into separate contracts with 100 unconnected men instead of with one. He is at liberty to set the 100 men to work, without letting them co-operate. He pays them the value of 100 independent labour powers, but he does not pay for the combined labour power of the hundred. Being independent of each other, the labourers are isolated persons, who enter into relations with the capitalist, but not with one another. This co-operation begins only with the labour process, but they have then ceased to belong to themselves. On entering that process, they become

incorporated with capital. As co-operators, as members of a working organism, they are but special modes of existence of capital. Hence, the productive power developed by the labourer when working in co-operation, is the productive power of capital. This power is developed gratuitously, whenever the workmen are placed under given conditions, and it is capital that places them under such conditions. Because this power costs capital nothing, and because, on the other hand, the labourer himself does not develop it before his labour belongs to capital, it appears as a power with which capital is endowed by Nature — a productive power that is immanent in capital […]

Co-operation, such as we find it at the dawn of human development, among races who live by the chase, or, say, in the agriculture of Indian communities, is based, on the one hand, on ownership in common of the means of production, and on the other hand, on the fact, that in those cases, each individual has no more torn himself off from the navel-string of his tribe or community, than each bee has freed itself from connexion with the hive. Such co-operation is distinguished from capitalistic co-operation by both of the above characteristics. The sporadic application of co-operation on a large scale in ancient times, in the Middle Ages, and in modern colonies, reposes on relations of dominion and servitude, principally on slavery. The capitalistic form, on the contrary, pre-supposes from first to last, the free wage labourer, who sells his labour power to capital […]

Just as the social productive power of labour that is developed by co-operation, appears to be the productive power of capital, so co-operation itself, contrasted with the process of production carried on by isolated independent labourers, or even by small employers, appears to be a specific form of the capitalist process of production. It is the first change experienced by the actual labour process, when subjected to capital. This change takes place spontaneously. The simultaneous employment of a large number of wage labourers, in one and the same process, which is a necessary condition of this change, also forms the starting-point of capitalist production. This point coincides with the birth of capital itself. If then, on the one hand, the capitalist mode of production presents itself to us historically, as a necessary condition to the transformation of the labour process into a social process, so, on the other hand, this social form of the labour process presents itself, as a method employed by capital for the more profitable exploitation of labour, by increasing that labour’s productiveness.

In the elementary form, under which we have hitherto viewed it, co-operation is a necessary concomitant of all production on a large scale, but it does not, in itself, represent a fixed form characteristic of a particular epoch in the development of the capitalist mode of production. At the most it appears to do so, and that only approximately, in the handicraft-like

beginnings of manufacture, and in that kind of agriculture on a large scale, which corresponds to the epoch of manufacture, and is distinguished from peasant agriculture, mainly by the number of the labourers simultaneously employed, and by the mass of the means of production concentrated for their use. Simple co-operation is always the prevailing form, in those branches of production in which capital operates on a large scale, and division of labour and machinery play but a subordinate part.

Co-operation ever constitutes the fundamental form of the capitalist mode of production, nevertheless the elementary form of co-operation continues to subsist as a particular form of capitalist production side by side with the more developed forms of that mode of production.

## C h a p t e r 14: DIVISION OF LABOUR AND MANUFACTURE

### SECTION 1.— TWOFOLD ORIGIN OF MANUFACTURE

That co-operation which is based on division of labour, assumes its typical form in manufacture, and is the prevalent characteristic form of the capitalist process of production throughout the manufacturing period properly so called. That period, roughly speaking, extends from the middle of the 16th to the last third of the 18th century.

Manufacture takes its rise in two ways:

(1.) By the assemblage, in one workshop under the control of a single capitalist, of labourers belonging to various independent handicrafts, but through whose hands a given article must pass on its way to completion. A carriage, for example, was formerly the product of the labour of a great number of independent artificers, such as wheelwrights, harness-makers, tailors, locksmiths, upholsterers, turners, fringe-makers, glaziers, painters, polishers, gilders, etc. In the manufacture of carriages, however, all these different artificers are assembled in one building where they work into one another’s hands [… Soon] an important change takes place. The tailor, the locksmith, and the other artificers, being now exclusively occupied in carriage-making, each gradually loses, through want of practice, the ability to carry on, to its full extent, his old handicraft. But, on the other hand, his activity now confined in one groove, assumes the form best adapted to the narrowed sphere of action. At first, carriage manufacture is a combination of various independent handicrafts. By degrees, it becomes the splitting up of carriage-making into its various detail processes, each of which crystallises into the exclusive function of a particular workman, the manufacture, as a whole, being carried on by the men in conjunction. In the same way, cloth manufacture, as also a whole series of other manufactures, arose by combining different handicrafts together under the control of a single

capitalist.

(2.) Manufacture also arises in a way exactly the reverse of this — namely, by one capitalist employing simultaneously in one workshop a number of artificers, who all do the same, or the same kind of work, such as making paper, type, or needles. This is co-operation in its most elementary form. Each of these artificers (with the help, perhaps, of one or two apprentices), makes the entire commodity, and he consequently performs in succession all the operations necessary for its production. He still works in his old handicraft-like way. But very soon external circumstances cause a different use to be made of the concentration of the workmen on one spot, and of the simultaneousness of their work. An increased quantity of the article has perhaps to be delivered within a given time. The work is therefore re-distributed. Instead of each man being allowed to perform all the various operations in succession, these operations are changed into disconnected, isolated ones, carried on side by side; each is assigned to a different artificer, and the whole of them together are performed simultaneously by the co-operating workmen. This accidental repartition gets repeated, develops advantages of its own, and gradually ossifies into a systematic division of labour. The commodity, from being the individual product of an independent artificer, becomes the social product of a union of artificers, each of whom performs one, and only one, of the constituent partial operations […]

The mode in which manufacture arises, its growth out of handicrafts, is therefore two-fold. On the one hand, it arises from the union of various independent handicrafts, which become stripped of their independence and specialised to such an extent as to be reduced to mere supplementary partial processes in the production of one particular commodity. On the other hand, it arises from the co-operation of artificers of one handicraft; it splits up that particular handicraft into its various detail operations, isolating, and making these operations independent of one another up to the point where each becomes the exclusive function of a particular labourer. On the one hand, therefore, manufacture either introduces division of labour into a process of production, or further develops that division; on the other hand, it unites together handicrafts that were formerly separate […]

For a proper understanding of the division of labour in manufacture, it is essential that the following points be firmly grasped. First, the decomposition of a process of production into its various successive steps coincides, here, strictly with the resolution of a handicraft into its successive manual operations. Whether complex or simple, each operation has to be done by hand, retains the character of a handicraft, and is therefore dependent on the strength, skill, quickness, and sureness, of the individual workman in handling his tools. The handicraft continues to be the basis. This narrow technical basis excludes a really scientific analysis of any definite process of

industrial production […]

## SECTION 2.—THE DETAIL LABOURER AND HIS IMPLEMENTS

If we now go more into detail, it is, in the first place, clear that a labourer who all his life performs one and the same simple operation, converts his whole body into the automatic, specialised implement of that operation. Consequently, he takes less time in doing it, than the artificer who performs a whole series of operations in succession […]

An artificer, who performs one after another the various fractional operations in the production of a finished article, must at one time change his place, at another his tools. The transition from one operation to another interrupts the flow of his labour, and creates, so to say, gaps in his working day. These gaps close up so soon as he is tied to one and the same operation all day long; they vanish in proportion as the changes in his work diminish. The resulting increased productive power is owing either to an increased expenditure of labour power in a given time i.e., to increased intensity of labour or to a decrease in the amount of labour power unproductively consumed. The extra expenditure of power, demanded by every transition from rest to motion, is made up for by prolonging the duration of the normal velocity when once acquired. On the other hand, constant labour of one uniform kind disturbs the intensity and flow of a man's animal spirits, which find recreation and delight in mere change of activity.

The productiveness of labour depends not only on the proficiency of the workman, but on the perfection of his tools […] Manufacture is characterised by the differentiation of the instruments of labour — a differentiation whereby implements of a given sort acquire fixed shapes, adapted to each particular application, and by the specialisation of those instruments, giving to each special implement its full play only in the hands of a specific detail labourer […] The manufacturing period simplifies, improves, and multiplies the implements of labour, by adapting them to the exclusively special functions of each detail labourer. It thus creates at the same time one of the material conditions for the existence of machinery, which consists of a combination of simple instruments.

The detail labourer and his implements are the simplest elements of manufacture. Let us now turn to its aspect as a whole.

## SECTION 3.—THE TWO FUNDAMENTAL FORMS OF MANUFACTURE: HETEROGENEOUS MANUFACTURE, SERIAL MANUFACTURE

The organisation of manufacture has two fundamental forms which,

in spite of occasional blending, are essentially different in kind, and, moreover, play very distinct parts in the subsequent transformation of manufacture into modern industry carried on by machinery. **This double character arises from the nature of the article produced. This article either results from the mere mechanical fitting together of partial products made independently, or owes its completed shape to a series of connected processes and manipulations.**

A locomotive, for instance, consists of more than 5,000 independent parts. It cannot, however, serve as an example of the **first kind of genuine manufacture**, for it is a structure produced by modern mechanical industry. But a watch can; and William Petty used it to illustrate the division of labour in manufacture. Formerly the individual work of a Nuremberg artificer, the watch has been transformed into the social product of an immense number of detail labourers […]

**The second kind of manufacture**, its perfected form, produces articles that go through connected phases of development, through a series of processes step by step, like the wire in the manufacture of needles, which passes through the hands of 72 and sometimes even 92 different detail workmen.

In so far as such a manufacture, when first started, combines scattered handicrafts, it lessens the space by which the various phases of production are separated from each other. The time taken in passing from one stage to another is shortened, so is the labour that effectuates this passage. In comparison with a handicraft, productive power is gained, and this gain is owing to the general co-operative character of manufacture. On the other hand, division of labour, which is the distinguishing principle of manufacture, requires the isolation of the various stages of production and their independence of each other. The establishment and maintenance of a connexion between the isolated functions necessitates the incessant transport of the article from one hand to another, and from one process to another. From the standpoint of modern mechanical industry, this necessity stands forth as a characteristic and costly disadvantage, and one that is immanent in the principle of manufacture.

If we confine our attention to some particular lot of raw materials, of rags, for instance, in paper manufacture, or of wire in needle manufacture, we perceive that it passes in succession through a series of stages in the hands of the various detail workmen until completion. On the other hand, if we look at the workshop as a whole, we see the raw material in all the stages of its production at the same time. The collective labourer, with one set of his many hands armed with one kind of tools, draws the wire, with another set, armed with different tools, he, at the same time, straightens it, with another, he cuts it, with another, points it, and so on. The different detail processes, which

were successive in time, have become simultaneous, go on side by side in space. Hence, production of a greater quantum of finished commodities in a given time […] It is clear that this direct dependence of the operations, and therefore of the labourers, on each other, compels each one of them to spend on his work no more than the necessary time, and thus a continuity, uniformity, regularity, order, and even intensity of labour, of quite a different kind, is begotten than is to be found in an independent handicraft or even in simple co-operation […]

Different operations take, however, unequal periods, and yield therefore, in equal times unequal quantities of fractional products. If, therefore, the same labourer has, day after day, to perform the same operation, there must be a different number of labourers for each operation; for instance, in type manufacture, there are four founders and two breakers to one rubber: the founder casts 2,000 type an hour, the breaker breaks up 4,000, and the rubber polishes 8,000. Here we have again the principle of co-operation in its simplest form, the simultaneous employment of many doing the same thing; only now, this principle is the expression of an organic relation […]

Finally, just as manufacture arises in part from the combination of various handicrafts, so, too, it develops into a combination of various manufactures. The larger English glass manufacturers, for instance, make their own earthenware melting-pots, because, on the quality of these depends, to a great extent, the success or failure of the process. The manufacture of one of the means of production is here united with that of the product […] The various manufactures so combined form more or less separate departments of a larger manufacture, but are at the same time independent processes, each with its own division of labour. In spite of the many advantages offered by this combination of manufactures, it never grows into a complete technical system on its own foundation. That happens only on its transformation into an industry carried on by machinery.

Early in the manufacturing period, the principle of lessening the necessary labour time in the production of commodities, was accepted and formulated: and the use of machines, especially for certain simple first processes that have to be conducted on a very large scale, and with the application of great force, sprang up here and there […] The Roman Empire had handed down the elementary form of all machinery in the water-wheel.

The handicraft period bequeathed to us the great inventions of the compass, of gunpowder, of type-printing, and of the automatic clock. But, on the whole, machinery played that subordinate part which Adam Smith assigns to it in comparison with division of labour. The sporadic use of machinery in the 17th century was of the greatest importance, because it supplied the great mathematicians of that time with a practical basis and stimulant to the

creation of the science of mechanics.

The collective labourer, formed by the combination of a number of detail labourers, is the machinery specially characteristic of the manufacturing period […] After manufacture has once separated, made independent, and isolated the various operations, the labourers are divided, classified, and grouped according to their predominating qualities. If their natural endowments are, on the one hand, the foundation on which the division of labour is built up, on the other hand, manufacture, once introduced, develops in them new powers that are by nature fitted only for limited and special functions. The collective labourer now possesses, in an equal degree of excellence, all the qualities requisite for production, and expends them in the most economical manner, by exclusively employing all his organs, consisting of particular labourers, or groups of labourers, in performing their special functions. The one-sidedness and the deficiencies of the detail labourer become perfections when he is a part of the collective labourer. The habit of doing only one thing converts him into a never failing instrument, while his connexion with the whole mechanism compels him to work with the regularity of the parts of a machine.

Since the collective labourer has functions, both simple and complex, both high and low, his members, the individual labour powers, require different degrees of training, and must therefore have different values. manufacture, therefore, develops a hierarchy of labour powers, to which there corresponds a scale of wages […] Hence, manufacture begets, in every handicraft that it seizes upon, a class of so-called unskilled labourers, a class which handicraft industry strictly excluded. If it develops a one-sided speciality into a perfection, at the expense of the whole of a man’s working capacity, it also begins to make a speciality of the absence of all development. Alongside of the hierarchic gradation there steps the simple separation of the labourers into skilled and unskilled […]

## SECTION 4.—DIVISION OF LABOUR IN MANUFACTURE, AND DIVISION OF LABOUR IN SOCIETY

We first considered the origin of manufacture, then its simple elements, then the detail labourer and his implements, and finally, the totality of the mechanism. We shall now lightly touch upon the relation between the division of labour in manufacture, and the social division of labour, which forms the foundation of all production of commodities.

If we keep labour alone in view, we may designate the separation of social production into its main divisions or *genera* — viz., agriculture, industries, etc., as division of labour in general, and the splitting up of these families into species and sub-species, as division of labour in particular, and

the division of labour within the workshop as division of labour in singular or in detail.

Division of labour in a society, and the corresponding tying down of individuals to a particular calling, develops itself, just as does the division of labour in manufacture, from opposite starting-points. Within a family, and after further development within a tribe, there springs up naturally a division of labour, caused by differences of sex and age, a division that is consequently based on a purely physiological foundation, which division enlarges its materials by the expansion of the community, by the increase of population, and more especially, by the conflicts between different tribes, and the subjugation of one tribe by another. **On the other hand, as I have before remarked, the exchange of products springs up at the points where different families, tribes, communities, come in contact; for, in the beginning of civilisation, it is not private individuals but families, tribes, etc., that meet on an independent footing.** Different communities find different means of production, and different means of subsistence in their natural environment. Hence, their modes of production, and of living, and their products are different. It is this spontaneously developed difference which, when different communities come in contact, calls forth the mutual exchange of products, and the consequent gradual conversion of those products into commodities. Exchange does not create the differences between the spheres of production, but brings what are already different into relation, and thus converts them into more or less inter-dependent branches of the collective production of an enlarged society […]

The foundation of every division of labour that is well developed, and brought about by the exchange of commodities, is the separation between town and country. It may be said, that the whole economic history of society is summed up in the movement of this antithesis. We pass it over, however, for the present […]

The territorial division of labour, which confines special branches of production to special districts of a country, acquires fresh stimulus from the manufacturing system, which exploits every special advantage. The colonial system and the opening out of the markets of the world, both of which are included in the general conditions of existence of the manufacturing period, furnish rich material for developing the division of labour in society. It is not the place, here, to go on to show how division of labour seizes upon, not only the economic, but every other sphere of society, and everywhere lays the foundation of that all engrossing system of specialising and sorting men, that development in a man of one single faculty at the expense of all other faculties […]

[In] spite of the numerous analogies and links connecting them, division of labour in the interior of a society, and that in the interior of a

workshop, differ not only in degree, but also in kind [… What] is it that forms the bond between the independent labours of the cattle-breeder, the tanner, and the shoemaker? It is the fact that their respective products are commodities. What, on the other hand, characterises division of labour in manufactures? The fact that the detail labourer produces no commodities. It is only the common product of all the detail labourers that becomes a commodity. Division of labour in society is brought about by the purchase and sale of the products of different branches of industry, while the connexion between the detail operations in a workshop, is due to the sale of the labour power of several workmen to one capitalist, who applies it as combined labour power. The division of labour in the workshop implies concentration of the means of production in the hands of one capitalist; the division of labour in society implies their dispersion among many independent producers of commodities […] The *a priori* system on which the division of labour, within the workshop, is regularly carried out, becomes in the division of labour within the society, an *a posteriori*, nature-imposed necessity, controlling the lawless caprice of the producers, and perceptible in the barometrical fluctuations of the market prices. Division of labour within the workshop implies the undisputed authority of the capitalist over men, that are but parts of a mechanism that belongs to him. The division of labour within the society brings into contact independent commodity producers, who acknowledge no other authority but that of competition […] The same bourgeois mind which praises division of labour in the workshop, life-long annexation of the labourer to a partial operation, and his complete subjection to capital, as being an organisation of labour that increases its productiveness — that same bourgeois mind denounces with equal vigour every conscious attempt to socially control and regulate the process of production, as an inroad upon such sacred things as the rights of property, freedom and unrestricted play for the bent of the individual capitalist. It is very characteristic that the enthusiastic apologists of the factory system have nothing more damning to urge against a general organisation of the labour of society, than that it would turn all society into one immense factory […]

The rules of the [Middle Ages] guilds, as I have said before, by limiting most strictly the number of apprentices and journeymen that a single master could employ, prevented him from becoming a capitalist. Moreover, he could not employ his journeymen in many other handicrafts than the one in which he was a master. The guilds zealously repelled every encroachment by the capital of merchants, the only form of free capital with which they came in contact. A merchant could buy every kind of commodity, but labour as a commodity he could not buy […] Hence, the guild organisation, however much it may have contributed by separating, isolating, and perfecting the handicrafts, to create the material conditions for the existence of

manufacture, excluded division of labour in the workshop. On the whole, the labourer and his means of production remained closely united, like the snail with its shell, and thus there was wanting the principal basis of manufacture, the separation of the labourer from his means of production, and the conversion of these means into capital.

While division of labour in society at large, whether such division be brought about or not by exchange of commodities, is common to economic formations of society the most diverse, division of labour in the workshop, as practised by manufacture, is a special creation of the capitalist mode of production alone.

## SECTION 5.—THE CAPITALISTIC CHARACTER OF MANUFACTURE

An increased number of labourers under the control of one capitalist is the natural starting-point, as well of co-operation generally, as of manufacture in particular. But the division of labour in manufacture makes this increase in the number of workmen a technical necessity. The minimum number that any given capitalist is bound to employ is here prescribed by the previously established division of labour. On the other hand, the advantages of further division are obtainable only by adding to the number of workmen, and this can be done only by adding multiples of the various detail groups. But an increase in the variable component of the capital employed necessitates an increase in its constant component, too, in the workshops, implements, etc., and, in particular, in the raw material, the call for which grows quicker than the number of workmen. The quantity of it consumed in a given time, by a given amount of labour, increases in the same ratio as does the productive power of that labour in consequence of its division. Hence, it is a law, based on the very nature of manufacture, that the minimum amount of capital, which is bound to be in the hands of each capitalist, must keep increasing; in other words, that the transformation into capital of the social means of production and subsistence must keep extending […]

Manufacture proper not only subjects the previously independent workman to the discipline and command of capital, but, in addition, creates a hierarchic gradation of the workmen themselves. While simple co-operation leaves the mode of working by the individual for the most part unchanged, manufacture thoroughly revolutionises it […] It converts the labourer into a crippled monstrosity […] Not only is the detail work distributed to the different individuals, but the individual himself is made the automatic motor of a fractional operation […] If, at first, the workman sells his labour power to capital, because the material means of producing a commodity fail him, now his very labour power refuses its services unless it has been sold to

capital. Its functions can be exercised only in an environment that exists in the workshop of the capitalist after the sale. By nature unfitted to make anything independently, the manufacturing labourer develops productive activity as a mere appendage of the capitalist's workshop […] This separation begins in simple co-operation, where the capitalist represents to the single workman, the oneness and the will of the associated labour. It is developed in manufacture which cuts down the labourer into a detail labourer. It is completed in modern industry, which makes science a productive force distinct from labour and presses it into the service of capital […] In manufacture, in order to make the collective labourer, and through him capital, rich in social productive power, each labourer must be made poor in individual productive powers […]

By decomposition of handicrafts, by specialisation of the instruments of labour, by the formation of detail labourers, and by grouping and combining the latter into a single mechanism, division of labour in manufacture creates a qualitative gradation, and a quantitative proportion in the social process of production; it consequently creates a definite organisation of the labour of society, and thereby develops at the same time new productive forces in the society. In its specific capitalist form — and under the given conditions, it could take no other form than a capitalistic one — manufacture is but a particular method of begetting relative surplus value, or of augmenting at the expense of the labourer the self-expansion of capital usually called social wealth, "Wealth of Nations," etc. It increases the social productive power of labour, not only for the benefit of the capitalist instead of for that of the labourer, but it does this by crippling the individual labourers. It creates new conditions for the lordship of capital over labour. If, therefore, on the one hand, it presents itself historically as a progress and as a necessary phase in the economic development of society, on the other hand, it is a refined and civilised method of exploitation.

Political Economy, which as an independent science, first sprang into being during the period of manufacture, views the social division of labour only from the standpoint of manufacture, and sees in it only the means of producing more commodities with a given quantity of labour, and, consequently, of cheapening commodities and hurrying on the accumulation of capital. In most striking contrast with this accentuation of quantity and exchange value, is the attitude of the writers of classical antiquity, who hold exclusively by quality and use value […]

During the manufacturing period proper, i.e., the period during which manufacture is the predominant form taken by capitalist production, many obstacles are opposed to the full development of the peculiar tendencies of manufacture. Although manufacture creates, as we have already seen, a simple separation of the labourers into skilled and unskilled, simultaneously

with their hierarchic arrangement in classes, yet the number of the unskilled labourers, owing to the preponderating influence of the skilled, remains very limited. Although it adapts the detail operations to the various degrees of maturity, strength, and development of the living instruments of labour, thus conducing to exploitation of women and children, yet this tendency as a whole is wrecked on the habits and the resistance of the male labourers. Although the splitting up of handicrafts lowers the cost of forming the workman, and thereby lowers his value, yet for the more difficult detail work, a longer apprenticeship is necessary, and, even where it would be superfluous, is jealously insisted upon by the workmen. In England, for instance, we find the laws of apprenticeship, with their seven years' probation, in full force down to the end of the manufacturing period; and they are not thrown on one side till the advent of modern industry. Since handicraft skill is the foundation of manufacture, and since the mechanism of manufacture as a whole possesses no framework, apart from the labourers themselves, capital is constantly compelled to wrestle with the insubordination of the workmen […]

At the same time manufacture was unable, either to seize upon the production of society to its full extent, or to revolutionise that production to its very core. It towered up as an economic work of art, on the broad foundation of the town handicrafts, and of the rural domestic industries. At a given stage in its development, the narrow technical basis on which manufacture rested, came into conflict with requirements of production that were created by manufacture itself […]

## C h a p t e r 15: MACHINERY AND MODERN INDUSTRY

### SECTION 1.—THE DEVELOPMENT OF MACHINERY

John Stuart Mill says in his *Principles of Political Economy*: "It is questionable if all the mechanical inventions yet made have lightened the day's toil of any human being".

That is, however, by no means the aim of the capitalistic application of machinery. Like every other increase in the productiveness of labour, machinery is intended to cheapen commodities, and, by shortening that portion of the working day, in which the labourer works for himself, to lengthen the other portion that he gives, without an equivalent, to the capitalist. In short, it is a means for producing surplus value.

In manufacture, the revolution in the mode of production begins with the labour power, in modern industry it begins with the instruments of labour. Our first inquiry then is, how the instruments of labour are converted from tools into machines, or what is the difference between a machine and the

implements of a handicraft? We are only concerned here with striking and general characteristics; for epochs in the history of society are no more separated from each other by hard and fast lines of demarcation, than are geological epochs.

Mathematicians and mechanicians, and in this they are followed by a few English economists, call a tool a simple machine, and a machine a complex tool. They see no essential difference between them, and even give the name of machine to the simple mechanical powers, the lever, the inclined plane, the screw, the wedge, etc. As a matter of fact, every machine is a combination of those simple powers, no matter how they may be disguised. From the economic standpoint this explanation is worth nothing, because the historical element is wanting. Another explanation of the difference between tool and machine is that in the case of a tool, man is the motive power, while the motive power of a machine is something different from man, as, for instance, an animal, water, wind, and so on. According to this, a plough drawn by oxen, which is a contrivance common to the most different epochs, would be a machine, while Claussen's circular loom, which, worked by a single labourer, weaves 96,000 picks per minute, would be a mere tool. Nay, this very loom, though a tool when worked by hand, would, if worked by steam, be a machine. And since the application of animal power is one of man's earliest inventions, production by machinery would have preceded production by handicrafts […]

All fully developed machinery consists of **three** essentially different parts, the **motor mechanism**, the **transmitting mechanism**, and finally the **tool or working machine**. The motor mechanism is that which puts the whole in motion. It either generates its own motive power, like the steam-engine, the caloric engine, the electromagnetic machine, etc., or it receives its impulse from some already existing natural force, like the water-wheel from a head of water, the wind-mill from wind, etc. The transmitting mechanism, composed of fly-wheels, shafting, toothed wheels, pullies, straps, ropes, bands, pinions, and gearing of the most varied kinds, regulates the motion, changes its form where necessary, as for instance, from linear to circular, and divides and distributes it among the working machines. These two first parts of the whole mechanism are there, solely for putting the working machines in motion, by means of which motion the subject of labour is seized upon and modified as desired. The tool or working machine is that part of the machinery with which the industrial revolution of the 18th century started. And to this day it constantly serves as such a starting-point, whenever a handicraft, or a manufacture, is turned into an industry carried on by machinery.

On a closer examination of the working machine proper, we find in it, as a general rule, though often, no doubt, under very altered forms, the

apparatus and tools used by the handicraftsman or manufacturing workman; with this difference, that instead of being human implements, they are the implements of a mechanism, or mechanical implements. Either the entire machine is only a more or less altered mechanical edition of the old handicraft tool, as, for instance, the power-loom, or the working parts fitted in the frame of the machine are old acquaintances, as spindles are in a mule, needles in a stocking-loom, saws in a sawing-machine, and knives in a chopping machine. The distinction between these tools and the body proper of the machine, exists from their very birth; for they continue for the most part to be produced by handicraft, or by manufacture, and are afterwards fitted into the body of the machine, which is the product of machinery. The machine proper is therefore a mechanism that, after being set in motion, performs with its tools the same operations that were formerly done by the workman with similar tools. Whether the motive power is derived from man, or from some other machine, makes no difference in this respect. From the moment that the tool proper is taken from man, and fitted into a mechanism, a machine takes the place of a mere implement. The difference strikes one at once, even in those cases where man himself continues to be the prime mover. The number of implements that he himself can use simultaneously, is limited by the number of his own natural instruments of production, by the number of his bodily organs […] The Jenny, on the other hand, even at its very birth, spun with 12-18 spindles, and the stocking-loom knits with many thousand needles at once. The number of tools that a machine can bring into play simultaneously, is from the very first emancipated from the organic limits that hedge in the tools of a handicraftsman.

In many manual implements the distinction between man as mere motive power, and man as the workman or operator properly so called, is brought into striking contrast. For instance, the foot is merely the prime mover of the spinning-wheel, while the hand, working with the spindle, and drawing and twisting, performs the real operation of spinning. It is this last part of the handicraftsman’s implement that is first seized upon by the industrial revolution, leaving to the workman, in addition to his new labour of watching the machine with his eyes and correcting its mistakes with his hands, the merely mechanical part of being the moving power. On the other hand, implements, in regard to which man has always acted as a simple motive power, as, for instance, by turning the crank of a mill, by pumping, by moving up and down the arm of a bellows, by pounding with a mortar, etc., such implements soon call for the application of animals, water and wind as motive powers […]

The steam-engine itself, such as it was at its invention, during the manufacturing period at the close of the 17th century, and such as it continued to be down to 1780, did not give rise to any industrial revolution. It

was, on the contrary, the invention of machines that made a revolution in the form of steam-engines necessary. As soon as man, instead of working with an implement on the subject of his labour, becomes merely the motive power of an implement-machine, it is a mere accident that motive power takes the disguise of human muscle; and it may equally well take the form of wind, water or steam […] The machine, which is the starting-point of the industrial revolution, supersedes the workman, who handles a single tool, by a mechanism operating with a number of similar tools, and set in motion by a single motive power, whatever the form of that power may be. Here we have the machine, but only as an elementary factor of production by machinery. Increase in the size of the machine, and in the number of its working tools, calls for a more massive mechanism to drive it; and this mechanism requires, in order to overcome its resistance, a mightier moving power than that of man, apart from the fact that man is a very imperfect instrument for producing uniform continued motion […] Wind was too inconstant and uncontrollable, and besides, in England, the birthplace of modern industry, the use of water power preponderated even during the manufacturing period. In the 17th century attempts had already been made to turn two pairs of millstones with a single water-wheel. But the increased size of the gearing was too much for the water power, which had now become insufficient, and this was one of the circumstances that led to a more accurate investigation of the laws of friction. In the same way the irregularity caused by the motive power in mills that were put in motion by pushing and pulling a lever, led to the theory, and the application, of the fly-wheel, which afterwards plays so important a part in modern industry. In this way, during the manufacturing period, were developed the first scientific and technical elements of modern mechanical industry […]

As soon as tools had been converted from being manual implements of man into implements of a mechanical apparatus, of a machine, the motive mechanism also acquired an independent form, entirely emancipated from the restraints of human strength. Thereupon the individual machine, that we have hitherto been considering, sinks into a mere factor in production by machinery. One motive mechanism was now able to drive many machines at once […]

We now proceed to distinguish the co-operation of a number of machines of one kind from a complex system of machinery.

In the one case, the product is entirely made by a single machine, which performs all the various operations previously done by one handicraftsman with his tool; as, for instance, by a weaver with his loom; or by several handicraftsman successively, either separately or as members of a system of manufacture. For example, in the manufacture of envelopes, one man folded the paper with the folder, another laid on the gum, a third turned

the flap over, on which the device is impressed, a fourth embossed the device, and so on; and for each of these operations the envelope had to change hands. One single envelope machine now performs all these operations at once, and makes more than 3,000 envelopes in an hour. In the London exhibition of 1862, there was an American machine for making paper cornets. It cut the paper, pasted, folded, and finished 300 in a minute. Here, the whole process, which, when carried on as manufacture, was split up into, and carried out by, a series of operations, is completed by a single machine, working a combination of various tools. Now, whether such a machine be merely a reproduction of a complicated manual implement, or a combination of various simple implements specialised by manufacture, in either case, in the factory, i.e., in the workshop in which machinery alone is used, we meet again with simple co-operation; and, leaving the workman out of consideration for the moment, this co-operation presents itself to us, in the first instance, as the conglomeration in one place of similar and simultaneously acting machines. Thus, a weaving factory is constituted of a number of power-looms, working side by side, and a sewing factory of a number of sewing-machines all in the same building […]

A real machinery system, however, does not take the place of these independent machines, until the subject of labour goes through a connected series of detail processes, that are carried out by a chain of machines of various kinds, the one supplementing the other. Here we have again the co-operation by division of labour that characterises manufacture; only now, it is a combination of detail machines. The special tools of the various detail workmen, such as those of the beaters, cambers, spinners, etc., in the woollen manufacture, are now transformed into the tools of specialised machines, each machine constituting a special organ, with a special function, in the system. In those branches of industry in which the machinery system is first introduced, manufacture itself furnishes, in a general way, the natural basis for the division, and consequent organisation, of the process of production. Nevertheless an essential difference at once manifests itself. In manufacture it is the workmen who, with their manual implements, must, either singly or in groups, carry on each particular detail process. If, on the one hand, the workman becomes adapted to the process, on the other, the process was previously made suitable to the workman. This subjective principle of the division of labour no longer exists in production by machinery. Here, the process as a whole is examined objectively, in itself, that is to say, without regard to the question of its execution by human hands, it is analysed into its constituent phases; and the problem, how to execute each detail process, and bind them all into a whole, is solved by the aid of machines, chemistry, etc. […]

Just as in manufacture, the direct co-operation of the detail labourers

establishes a numerical proportion between the special groups, so in an organised system of machinery, where one detail machine is constantly kept employed by another, a fixed relation is established between their numbers, their size, and their speed. The collective machine, now an organised system of various kinds of single machines, and of groups of single machines, becomes more and more perfect, the more the process as a whole becomes a continuous one, i.e., the less the raw material is interrupted in its passage from its first phase to its last; in other words, the more its passage from one phase to another is effected, not by the hand of man, but by the machinery itself […] A system of machinery, whether it reposes on the mere co-operation of similar machines, as in weaving, or on a combination of different machines, as in spinning, constitutes in itself a huge automaton, whenever it is driven by a self-acting prime mover […] As soon as a machine executes, without man's help, all the movements requisite to elaborate the raw material, needing only attendance from him, we have an automatic system of machinery, and one that is susceptible of constant improvement in its details […]

There were mules and steam-engines before there were any labourers, whose exclusive occupation it was to make mules and steam-engines; just as men wore clothes before there were such people as tailors. The inventions of Vaucanson, Arkwright, Watt, and others, were, however, practicable, only because those inventors found, ready to hand, a considerable number of skilled mechanical workmen, placed at their disposal by the manufacturing period. Some of these workmen were independent handicraftsman of various trades, others were grouped together in manufactures, in which, as before-mentioned, division of labour was strictly carried out. As inventions increased in number, and the demand for the newly discovered machines grew larger, the machine-making industry split up, more and more, into numerous independent branches, and division of labour in these manufactures was more and more developed. Here, then, we see in manufacture the immediate technical foundation of modern industry. Manufacture produced the machinery, by means of which modern industry abolished the handicraft and manufacturing systems in those spheres of production that it first seized upon. The factory system was therefore raised, in the natural course of things, on an inadequate foundation. When the system attained to a certain degree of development, it had to root up this ready-made foundation, which in the meantime had been elaborated on the old lines, and to build up for itself a basis that should correspond to its methods of production. Just as the individual machine retains a dwarfish character, so long as it is worked by the power of man alone, and just as no system of machinery could be properly developed before the steam-engine took the place of the earlier motive powers, animals, wind, and even water; so, too, modern industry was crippled

in its complete development, so long as its characteristic instrument of production, the machine, owed its existence to personal strength and personal skill […]

[At] a certain stage of its development, modern industry became technologically incompatible with the basis furnished for it by handicraft and manufacture. The increasing size of the prime movers, of the transmitting mechanism, and of the machines proper, the greater complication, multiformity and regularity of the details of these machines, as they more and more departed from the model of those originally made by manual labour, and acquired a form, untrammelled except by the conditions under which they worked, the perfecting of the automatic system, and the use, every day more unavoidable, of a more refractory material, such as iron instead of wood the solution of all these problems, which sprang up by the force of circumstances, everywhere met with a stumbling-block in the personal restrictions, which even the collective labourer of manufacture could not break through, except to a limited extent. Such machines as the modern hydraulic press, the modern power-loom, and the modern carding engine, could never have been furnished by manufacture […] at a certain stage of its development, modern industry became technologically incompatible with the basis furnished for it by handicraft and manufacture. The increasing size of the prime movers, of the transmitting mechanism, and of the machines proper, the greater complication, multiformity and regularity of the details of these machines, as they more and more departed from the model of those originally made by manual labour, and acquired a form, untrammelled except by the conditions under which they worked, the perfecting of the automatic system, and the use, every day more unavoidable, of a more refractory material, such as iron instead of wood — the solution of all these problems, which sprang up by the force of circumstances, everywhere met with a stumbling-block in the personal restrictions, which even the collective labourer of manufacture could not break through, except to a limited extent. Such machines as the modern hydraulic press, the modern power-loom, and the modern carding engine, could never have been furnished by manufacture […]

Modern industry had therefore itself to take in hand the machine, its characteristic instrument of production, and to construct machines by machines. It was not till it did this, that it built up for itself a fitting technical foundation, and stood on its own feet. Machinery, simultaneously with the increasing use of it, in the first decades of this century, appropriated, by degrees, the fabrication of machines proper. But it was only during the decade preceding 1866, that the construction of railways and ocean steamers on a stupendous scale called into existence the cyclopean machines now employed in the construction of prime movers.

The most essential condition to the production of machines by machines was a prime mover capable of exerting any amount of force, and yet under perfect control. Such a condition was already supplied by the steam-engine. But at the same time it was necessary to produce the geometrically accurate straight lines, planes, circles, cylinders, cones, and spheres, required in the detail parts of the machines. This problem Henry Maudsley solved in the first decade of this century by the invention of the slide rest, a tool that was soon made automatic, and in a modified form was applied to other constructive machines besides the lathe, for which it was originally intended. This mechanical appliance replaces, not some particular tool, but the hand itself, which produces a given form by holding and guiding the cutting tool along the iron or other material operated upon. Thus it became possible to produce the forms of the individual parts of machinery […]

If we now fix our attention on that portion of the machinery employed in the construction of machines, which constitutes the operating tool, we find the manual implements re-appearing, but on a cyclopean scale. The operating part of the boring machine is an immense drill driven by a steam-engine; without this machine, on the other hand, the cylinders of large steam-engines and of hydraulic presses could not be made. The mechanical lathe is only a cyclopean reproduction of the ordinary foot-lathe […]

The implements of labour, in the form of machinery, necessitate the substitution of natural forces for human force, and the conscious application of science, instead of rule of thumb. In manufacture, the organisation of the social labour process is purely subjective; it is a combination of detail labourers; in its machinery system, modern industry has a productive organism that is purely objective, in which the labourer becomes a mere appendage to an already existing material condition of production. In simple co-operation, and even in that founded on division of labour, the suppression of the isolated, by the collective, workman still appears to be more or less accidental. Machinery, with a few exceptions to be mentioned later, operates only by means of associated labour, or labour in common. Hence the co-operative character of the labour process is, in the latter case, a technical necessity dictated by the instrument of labour itself.

## SECTION 2.—THE VALUE TRANSFERRED BY MACHINERY TO THE PRODUCT

Although, therefore, it is clear at the first glance that, by incorporating both stupendous physical forces, and the natural sciences, with the process of production, modern industry raises the productiveness of labour to an extraordinary degree, it is by no means equally clear, that this increased

productive force is not, on the other hand, purchased by an increased expenditure of labour. Machinery, like every other component of constant capital, creates no new value, but yields up its own value to the product that it serves to beget. In so far as the machine has value, and, in consequence, parts with value to the product, it forms an element in the value of that product. Instead of being cheapened, the product is made dearer in proportion to the value of the machine […] In the first place, it must be observed that the machinery, while always entering as a whole into the labour process, enters into the value-begetting process only by bits. It never adds more value than it loses, on an average, by wear and tear. Hence there is a great difference between the value of a machine, and the value transferred in a given time by that machine to the product. The longer the life of the machine in the labour process, the greater is that difference. It is true, no doubt, as we have already seen, that every instrument of labour enters as a whole into the labour process, and only piece-meal, proportionally to its average daily loss by wear and tear, into the value-begetting process. But this difference between the instrument as a whole and its daily wear and tear, is much greater in a machine than in a tool, because the machine, being made from more durable material, has a longer life […] Given the difference between the value of the machinery, and the value transferred by it in a day to the product, the extent to which this latter value makes the product dearer, depends in the first instance, upon the [dimensions] of the product […] Given a machine's capacity for work, that is, the number of its operating tools, or, where it is a question of force, their mass, the amount of its product will depend on the velocity of its working parts, on the speed, for instance, of the spindles, or on the number of blows given by the hammer in a minute […] Given the rate at which machinery transfers its value to the product, the amount of value so transferred depends on the total value of the machinery. The less labour it contains, the less value it imparts to the product. The less value it gives up, so much the more productive it is, and so much the more its services approximate to those of natural forces. But the production of machinery by machinery lessens its value relatively to its extension and efficacy […]

It is evident that whenever it costs as much labour to produce a machine as is saved by the employment of that machine, there is nothing but a transposition of labour; consequently the total labour required to produce a commodity is not lessened or the productiveness of labour is not increased. It is clear, however, that the difference between the labour a machine costs, and the labour it saves, in other words, that the degree of its productiveness does not depend on the difference between its own value and the value of the implement it replaces. As long as the labour spent on a machine, and consequently the portion of its value added to the product, remains smaller than the value added by the workman to the product with his tool, there is

always a difference of labour saved in favour of the machine. The productiveness of a machine is therefore measured by the human labour power it replaces […] Where blockprinting, the old method of printing calico by hand, has been superseded by machine printing, a single machine prints, with the aid of one man or boy, as much calico of four colours in one hour, as it formerly took 200 men to do […]

As already stated, a steam-plough does as much work in one hour at a cost of three-pence, as 66 men at a cost of 15 shillings. I return to this example in order to clear up an erroneous notion. The 15 shillings are by no means the expression in money of all the labour expended in one hour by the 66 men. If the ratio of surplus labour to necessary labour were 100%, these 66 men would produce in one hour a value of 30 shillings, although their wages, 15 shillings, represent only their labour for half an hour. Suppose, then, a machine cost as much as the wages for a year of the 150 men it displaces, say £3,000; this £3,000 is by no means the expression in money of the labour added to the object produced by these 150 men before the introduction of the machine, but only of that portion of their year's labour which was expended for themselves and represented by their wages. On the other hand, the £3,000, the money value of the machine, expresses all the labour expended on its production, no matter in what proportion this labour constitutes wages for the workman, and surplus value for the capitalist. Therefore, though a machine cost as much as the labour power displaced by it costs, yet the labour materialised in it is even then much less than the living labour it replaces.

The use of machinery for the exclusive purpose of cheapening the product, is limited in this way, that less labour must be expended in producing the machinery than is displaced by the employment of that machinery, For the capitalist, however, this use is still more limited. Instead of paying for the labour, he only pays the value of the labour power employed; therefore, the limit to his using a machine is fixed by the difference between the value of the machine and the value of the labour power replaced by it. Since the division of the day's work into necessary and surplus labour differs in different countries, and even in the same country at different periods, or in different branches of industry; and further, since the actual wage of the labourer at one time sinks below the value of his labour power, at another rises above it, it is possible for the difference between the price of the machinery and the price of the labour power replaced by that machinery to vary very much, although the difference between the quantity of labour requisite to produce the machine and the total quantity replaced by it, remain constant […]

## SECTION 3.—THE PROXIMATE EFFECTS OF MACHINERY ON THE WORKMAN

[…]

### a. Appropriation of Supplementary Labour Power by Capital. The Employment of Women and Children

In so far as machinery dispenses with muscular power, it becomes a means of employing labourers of slight muscular strength, and those whose bodily development is incomplete, but whose limbs are all the more supple. The labour of women and children was, therefore, the first thing sought for by capitalists who used machinery. That mighty substitute for labour and labourers was forthwith changed into a means for increasing the number of wage labourers by enrolling, under the direct sway of capital, every member of the workman's family, without distinction of age or sex. Compulsory work for the capitalist usurped the place, not only of the children's play, but also of free labour at home within moderate limits for the support of the family.

The value of labour power was determined, not only by the labour time necessary to maintain the individual adult labourer, but also by that necessary to maintain his family. Machinery, by throwing every member of that family on to the labour market, spreads the value of the man's labour power over his whole family. It thus depreciates his labour power. To purchase the labour power of a family of four workers may, perhaps, cost more than it formerly did to purchase the labour power of the head of the family, but, in return, four days' labour takes the place of one, and their price falls in proportion to the excess of the surplus labour of four over the surplus labour of one. In order that the family may live, four people must now, not only labour, but expend surplus labour for the capitalist. Thus we see, that machinery, while augmenting the human material that forms the principal object of capital's exploiting power, at the same time raises the degree of exploitation […]

### b. Prolongation of the Working Day

If machinery be the most powerful means for increasing the productiveness of labour — i.e., for shortening the working time required in the production of a commodity, it becomes in the hands of capital the most powerful means, in those industries first invaded by it, for lengthening the working day beyond all bounds set by human nature. It creates, on the one hand, new conditions by which capital is enabled to give free scope to this its constant tendency, and on the other hand, new motives with which to whet capital's appetite for the labour of others.

In the first place, in the form of machinery, the implements of labour

become automatic, things moving and working independent of the workman. They are thenceforth an industrial *perpetuum mobile*, that would go on producing forever, did it not meet with certain natural obstructions in the weak bodies and the strong wills of its human attendants. The automaton, as capital, and because it is capital, is endowed, in the person of the capitalist, with intelligence and will; it is therefore animated by the longing to reduce to a minimum the resistance offered by that repellent yet elastic natural barrier, man […]

The productiveness of machinery is, as we saw, inversely proportional to the value transferred by it to the product. The longer the life of the machine, the greater is the mass of the products over which the value transmitted by the machine is spread, and the less is the portion of that value added to each single commodity. The active lifetime of a machine is, however, clearly dependent on the length of the working day, or on the duration of the daily labour process multiplied by the number of days for which the process is carried on.

The wear and tear of a machine is not exactly proportional to its working time. And even if it were so, a machine working 16 hours daily for 7½ years, covers as long a working period as, and transmits to the total product no more value than, the same machine would if it worked only 8 hours daily for 15 years. But in the first case the value of the machine would be reproduced twice as quickly as in the latter, and the capitalist would, by this use of the machine, absorb in 7½ years as much surplus value as in the second case he would in 15 […]

[In] addition to the material wear and tear, a machine also undergoes, what we may call a **moral depreciation**. It loses exchange value, either by machines of the same sort being produced cheaper than it, or by better machines entering into competition with it. In both cases, be the machine ever so young and full of life, its value is no longer determined by the labour actually materialised in it, but by the labour time requisite to reproduce either it or the better machine. It has, therefore, lost value more or less. The shorter the period taken to reproduce its total value, the less is the danger of moral depreciation; and the longer the working day, the shorter is that period […]

Given the length of the working day, all other circumstances remaining the same, the exploitation of double the number of workmen demands, not only a doubling of that part of constant capital which is invested in machinery and buildings, but also of that part which is laid out in raw material and auxiliary substances. The lengthening of the working day, on the other hand, allows of production on an extended scale without any alteration in the amount of capital laid out on machinery and buildings. Not only is there, therefore, an increase of surplus value, but the outlay necessary to obtain it diminishes. It is true that this takes place, more or less, with every

lengthening of the working day; but in the case under consideration, the change is more marked, because the capital converted into the instruments of labour preponderates to a greater degree […]

Machinery produces relative surplus value; not only by directly depreciating the value of labour power, and by indirectly cheapening the same through cheapening the commodities that enter into its reproduction, but also, when it is first introduced sporadically into an industry, by converting the labour employed by the owner of that machinery, into labour of a higher degree and greater efficacy, by raising the social value of the article produced above its individual value, and thus enabling the capitalist to replace the value of a day's labour power by a smaller portion of the value of a day's product. During this transition period, when the use of machinery is a sort of monopoly, the profits are therefore exceptional, and the capitalist endeavours to exploit thoroughly "the sunny time of this his first love", by prolonging the working day as much as possible. The magnitude of the profit whets his appetite for more profit.

As the use of machinery becomes more general in a particular industry, the social value of the product sinks down to its individual value, and the law that surplus value does not arise from the labour power that has been replaced by the machinery, but from the labour power actually employed in working with the machinery, asserts itself. Surplus value arises from variable capital alone, and we saw that the amount of surplus value depends on two factors, viz., the rate of surplus value and the number of the workmen simultaneously employed. Given the length of the working day, the rate of surplus value is determined by the relative duration of the necessary labour and of the surplus labour in a day. The number of the labourers simultaneously employed depends, on its side, on the ratio of the variable to the constant capital. Now, however much the use of machinery may increase the surplus labour at the expense of the necessary labour by heightening the productiveness of labour, it is clear that it attains this result, only by diminishing the number of workmen employed by a given amount of capital. It converts what was formerly variable capital, invested in labour power, into machinery which, being constant capital, does not produce surplus value. It is impossible, for instance, to squeeze as much surplus value out of 2 as out of 24 labourers. If each of these 24 men gives only one hour of surplus labour in 12, the 24 men give together 24 hours of surplus labour, while 24 hours is the total labour of the two men. Hence, the application of machinery to the production of surplus value implies a contradiction which is immanent in it, since of the two factors of the surplus value created by a given amount of capital, one, the rate of surplus value, cannot be increased, except by diminishing the other, the number of workmen. This contradiction comes to light, as soon as by the general employment of machinery in a given industry,

the value of the machine-produced commodity regulates the value of all commodities of the same sort; and it is this contradiction, that in its turn, drives the capitalist, without his being conscious of the fact, to excessive lengthening of the working day, in order that he may compensate the decrease in the relative number of labourers exploited, by an increase not only of the relative, but of the absolute surplus labour […] Hence, too, the economic paradox, that the most powerful instrument for shortening labour time, becomes the most unfailing means for placing every moment of the labourer's time and that of his family, at the disposal of the capitalist for the purpose of expanding the value of his capital […]

### c. Intensification of Labour

The immoderate lengthening of the working day, produced by machinery in the hands of capital, leads to a reaction on the part of society, the very sources of whose life are menaced; and, thence, to a normal working day whose length is fixed by law. Thenceforth a phenomenon that we have already met with, namely, the intensification of labour, develops into great importance. Our analysis of absolute surplus value had reference primarily to the extension or duration of the labour, its intensity being assumed as given. We now proceed to consider the substitution of a more intensified labour for labour of more extensive duration, and the degree of the former.

It is self-evident, that in proportion as the use of machinery spreads, and the experience of a special class of workmen habituated to machinery accumulates, the rapidity and intensity of labour increase as a natural consequence. Thus in England, during half a century, lengthening of the working day went hand in hand with increasing intensity of factory labour. Nevertheless the reader will clearly see, that where we have labour, not carried on by fits and starts, but repeated day after day with unvarying uniformity, a point must inevitably be reached, where extension of the working day and intensity of the labour mutually exclude one another, in such a way that lengthening of the working day becomes compatible only with a lower degree of intensity, and a higher degree of intensity, only with a shortening of the working day. So soon as the gradually surging revolt of the working class compelled Parliament to shorten compulsorily the hours of labour, and to begin by imposing a normal working day on factories proper, so soon consequently as an increased production of surplus value by the prolongation of the working day was once for all put a stop to, from that moment capital threw itself with all its might into the production of relative surplus value, by hastening on the further improvement of machinery. At the same time a change took place in the nature of relative surplus value. Generally speaking, the mode of producing relative surplus value consists in

raising the productive power of the workman, so as to enable him to produce more in a given time with the same expenditure of labour. Labour time continues to transmit as before the same value to the total product, but this unchanged amount of exchange value is spread over more use value; hence the value of each single commodity sinks. Otherwise, however, so soon as the compulsory shortening of the hours of labour takes place. The immense impetus it gives the development of productive power, and to economy in the means of production, imposes on the workman increased expenditure of labour in a given time, heightened tension of labour power, and closer filling up of the pores of the working day, or condensation of labour to a degree that is attainable only within the limits of the shortened working day. This condensation of a greater mass of labour into a given period thenceforward counts for what it really is, a greater quantity of labour. In addition to a measure of its extension, i.e., duration, labour now acquires a measure of its intensity or of the degree of its condensation or density. The denser hour of the ten hours' working day contains more labour, i.e., expended labour power than the more porous hour of the twelve hours' working day. The product therefore of one of the former hours has as much or more value than has the product of 1 1/5 of the latter hours. Apart from the increased yield of relative surplus value through the heightened productiveness of labour, the same mass of value is now produced for the capitalist say by 3 1/3 hours of surplus labour, and 6 2/3 hours of necessary labour, as was previously produced by four hours of surplus labour and eight hours of necessary labour […]. So soon as that shortening [of the working day] becomes compulsory, machinery becomes in the hands of capital the objective means, systematically employed for squeezing out more labour in a given time. This is effected in two ways: by increasing the speed of the machinery, and by giving the workman more machinery to tent […]

## SECTION 4. -THE FACTORY

At the commencement of this chapter we considered that which we may call the body of the factory, i.e., machinery organised into a system. We there saw how machinery, by annexing the labour of women and children, augments the number of human beings who form the material for capitalistic exploitation, how it confiscates the whole of the workman's disposable time, by immoderate extension of the hours of labour, and how finally its progress, which allows of enormous increase of production in shorter and shorter periods, serves as a means of systematically getting more work done in a shorter time, or of exploiting labour power more intensely. We now turn to the factory as a whole, and that in its most perfect form.

Dr. Ure, the Pindar of the automatic factory, describes it, on the one

hand, as

"Combined co-operation of many orders of workpeople, adult and young, in tending with assiduous skill, a system of productive machines, continuously impelled by a central power" (the prime mover); on the other hand, as "a vast automaton, composed of various mechanical and intellectual organs, acting in uninterrupted concert for the production of a common object, all of them being subordinate to a self-regulated moving force".

These two descriptions are far from being identical. In one, the collective labourer, or social body of labour, appears as the dominant subject, and the mechanical automaton as the object; in the other, the automaton itself is the subject, and the workmen are merely conscious organs, co-ordinate with the unconscious organs of the automaton, and together with them, subordinated to the central moving-power. The first description is applicable to every possible employment of machinery on a large scale, the second is characteristic of its use by capital, and therefore of the modern factory system […]

Along with the tool, the skill of the workman in handling it passes over to the machine. The capabilities of the tool are emancipated from the restraints that are inseparable from human labour power. Thereby the technical foundation on which is based the division of labour in manufacture, is swept away. Hence, in the place of the hierarchy of specialised workmen that characterises manufacture, there steps, in the automatic factory, a tendency to equalise and reduce to one and the same level every kind of work that has to be done by the minders of the machines; in the place of the artificially produced differentiations of the detail workmen, step the natural differences of age and sex.

So far as division of labour re-appears in the factory, it is primarily a distribution of the workmen among the specialised machines; and of masses of workmen, not however organised into groups, among the various departments of the factory, in each of which they work at a number of similar machines placed together; their co-operation, therefore, is only simple. The organised group, peculiar to manufacture, is replaced by the connexion between the head workman and his few assistants. The essential division is, into workmen who are actually employed on the machines (among whom are included a few who look after the engine), and into mere attendants (almost exclusively children) of these workmen. Among the attendants are reckoned more or less all "Feeders" who supply the machines with the material to be worked. In addition to these two principal classes, there is a numerically unimportant class of persons, whose occupation it is to look after the whole of the machinery and repair it from time to time; such as engineers, mechanics, joiners, etc. This is a superior class of workmen, some of them scientifically educated, others brought up to a trade; it is distinct from the

factory operative class, and merely aggregated to it. This division of labour is purely technical.

To work at a machine, the workman should be taught from childhood, in order that he may learn to adapt his own movements to the uniform and unceasing motion of an automaton. When the machinery, as a whole, forms a system of manifold machines, working simultaneously and in concert, the co-operation based upon it, requires the distribution of various groups of workmen among the different kinds of machines. But the employment of machinery does away with the necessity of crystallising this distribution after the manner of manufacture, by the constant annexation of a particular man to a particular function. Since the motion of the whole system does not proceed from the workman, but from the machinery, a change of persons can take place at any time without an interruption of the work. The most striking proof of this is afforded by the relays system, put into operation by the manufacturers during their revolt from 1848-1850. Lastly, the quickness with which machine work is learnt by young people, does away with the necessity of bringing up for exclusive employment by machinery, a special class of operatives […]

Although then, technically speaking, the old system of division of labour is thrown overboard by machinery, it hangs on in the factory, as a traditional habit handed down from manufacture, and is afterwards systematically re-moulded and established in a more hideous form by capital, as a means of exploiting labour power. The life-long speciality of handling one and the same tool, now becomes the life-long speciality of serving one and the same machine. Machinery is put to a wrong use, with the object of transforming the workman, from his very childhood, into a part of a detail-machine. In this way, not only are the expenses of his reproduction considerably lessened, but at the same time his helpless dependence upon the factory as a whole, and therefore upon the capitalist, is rendered complete […] In handicrafts and manufacture, the workman makes use of a tool, in the factory, the machine makes use of him. There the movements of the instrument of labour proceed from him, here it is the movements of the machine that he must follow. In manufacture the workmen are parts of a living mechanism. In the factory we have a lifeless mechanism independent of the workman, who becomes its mere living appendage […]

At the same time that factory work exhausts the nervous system to the uttermost, it does away with the many-sided play of the muscles, and confiscates every atom of freedom, both in bodily and intellectual activity […] Every kind of capitalist production, in so far as it is not only a labour process, but also a process of creating surplus value, has this in common, that it is not the workman that employs the instruments of labour, but the instruments of labour that employ the workman. But it is only in the factory

system that this inversion for the first time acquires technical and palpable reality. By means of its conversion into an automaton, the instrument of labour confronts the labourer, during the labour process, in the shape of capital, of dead labour, that dominates, and pumps dry, living labour power […] The special skill of each individual insignificant factory operative vanishes as an infinitesimal quantity before the science, the gigantic physical forces, and the mass of labour that are embodied in the factory mechanism and, together with that mechanism, constitute the power of the "master" […]

The technical subordination of the workman to the uniform motion of the instruments of labour, and the peculiar composition of the body of workpeople, consisting as it does of individuals of both sexes and of all ages, give rise to a barrack discipline, which is elabourated into a complete system in the factory, and which fully develops the before mentioned labour of overlooking, thereby dividing the workpeople into operatives and overlookers, into private soldiers and sergeants of an industrial army [… The] main difficulty [in the automatic factory lay] above all in training human beings to renounce their desultory habits of work, and to identify themselves with the unvarying regularity of the complex automaton […] The place of the slave-driver's lash is taken by the overlooker's book of penalties. All punishments naturally resolve themselves into fines and deductions from wages […]

## SECTION 5.—THE STRIFE BETWEEN WORKMAN AND MACHINE

The contest between the capitalist and the wage labourer dates back to the very origin of capital. It raged on throughout the whole manufacturing period. But only since the introduction of machinery has the workman fought against the instrument of labour itself, the material embodiment of capital. He revolts against this particular form of the means of production, as being the material basis of the capitalist mode of production […]

The contests about wages in manufacture, pre-suppose manufacture, and are in no sense directed against its existence. The opposition against the establishment of new manufactures, proceeds from the guilds and privileged towns, not from the workpeople. Hence the writers of the manufacturing period treat the division of labour chiefly as a means of virtually supplying a deficiency of labourers, and not as a means of actually displacing those in work […]

The instrument of labour, when it takes the form of a machine, immediately becomes a competitor of the workman himself. The self-expansion of capital by means of machinery is thenceforward directly proportional to the number of the workpeople, whose means of livelihood

have been destroyed by that machinery. The whole system of capitalist production is based on the fact that the workman sells his labour power as a commodity. Division of labour specialises this labour power, by reducing it to skill in handling a particular tool. So soon as the handling of this tool becomes the work of a machine, then, with the use value, the exchange value too, of the workman's labour power vanishes; the workman becomes unsaleable, like paper money thrown out of currency by legal enactment. That portion of the working class, thus by machinery rendered superfluous, i.e., no longer immediately necessary for the self-expansion of capital, either goes to the wall in the unequal contest of the old handicrafts and manufactures with machinery, or else floods all the more easily accessible branches of industry, swamps the labour market, and sinks the price of labour power below its value […]

But machinery not only acts as a competitor who gets the better of the workman, and is constantly on the point of making him superfluous. It is also a power inimical to him, and as such capital proclaims it from the roof tops and as such makes use of it. It is the most powerful weapon for repressing strikes, those periodical revolts of the working class against the autocracy of capital […]

## P a r t 5: THE PRODUCTION OF ABSOLUTE AND OF RELATIVE SURPLUS VALUE

### C h a p t e r 16: ABSOLUTE AND RELATIVE SURPLUS VALUE

**Capitalist production is not merely the production of commodities, it is essentially the production of surplus value.** The labourer produces, not for himself, but for capital. It no longer suffices, therefore, that he should simply produce. He must produce surplus value. **That labourer alone is productive, who produces surplus value for the capitalist**, **and thus works for the self-expansion of capital**. If we may take an example from outside the sphere of production of material objects, a schoolmaster is a productive labourer when, in addition to belabouring the heads of his scholars, he works like a horse to enrich the school proprietor. That the latter has laid out his capital in a teaching factory, instead of in a sausage factory, does not alter the relation. Hence the notion of a productive labourer implies not merely a relation between work and useful effect, between labourer and product of labour, but also a specific, social relation of production, a relation that has sprung up historically and stamps the labourer as the direct means of creating surplus value. To be a productive labourer is, therefore, not a piece of luck, but a misfortune […]

The prolongation of the working day beyond the point at which the

labourer would have produced just an equivalent for the value of his labour power, and the appropriation of that surplus labour by capital, this is production of absolute surplus value. It forms the general groundwork of the capitalist system, and the starting-point for the production of relative surplus value. The latter pre-supposes that the working day is already divided into two parts, necessary labour, and surplus labour. In order to prolong the surplus labour, the necessary labour is shortened by methods whereby the equivalent for the wages is produced in less time. The production of **absolute surplus value** turns exclusively upon the **length of the working day**; the production of **relative surplus value**, revolutionises out and out the **technical processes of labour**, and the composition of society. It therefore pre-supposes a specific mode, the capitalist mode of production, a mode which, along with its methods, means, and conditions, arises and develops itself spontaneously on the foundation afforded by the **formal subjection of labour to capital**. In the course of this development, the formal subjection is replaced by the **real subjection of labour to capital** […]

## C h a p t e r 17: CHANGES OF MAGNITUDE IN THE PRICE OF LABOUR POWER AND IN SURPLUS VALUE

**The value of labour power is determined by the value of the necessaries of life habitually required by the average labourer.** The quantity of these necessaries is known at any given epoch of a given society, and can therefore be treated as a constant magnitude. What changes, is the value of this quantity. There are, besides, two other factors that enter into the determination of the value of labour power. One, the expenses of developing that power, which expenses vary with the mode of production; the other, its natural diversity, the difference between the labour power of men and women, of children and adults. The employment of these different sorts of labour power, an employment which is, in its turn, made necessary by the mode of production, makes a great difference in the cost of maintaining the family of the labourer, and in the value of the labour power of the adult male. Both these factors, however, are excluded in the following investigation.

I assume (1) that commodities are sold at their value; (2) that the price of labour power rises occasionally above its value, but never sinks below it.

On this assumption we have seen that the relative magnitudes of surplus value and of price of labour power are determined by three circumstances; (1) the length of the working day, or the extensive magnitude of labour; (2) the normal intensity of labour, its intensive magnitude, whereby a given quantity of labour is expended in a given time; (3) the productiveness of labour, whereby the same quantum of labour yields, in a given time, a

greater or less quantum of product, dependent on the degree of development in the conditions of production. Very different combinations are clearly possible, according as one of the three factors is constant and two variable, or two constant and one variable, or lastly, all three simultaneously variable. And the number of these combinations is augmented by the fact that, when these factors simultaneously vary, the amount and direction of their respective variations may differ. In what follows the chief combinations alone are considered.

## SECTION 1.— LENGTH OF THE WORKING DAY AND INTENSITY OF LABOUR CONSTANT. PRODUCTIVENESS OF LABOUR VARIABLE

On these assumptions the value of labour power, and the magnitude of surplus value, are determined by three laws.

(1.) A working day of given length always creates the same amount of value, no matter how the productiveness of labour, and, with it, the mass of the product, and the price of each single commodity produced, may vary.

If the value created by a working day of 12 hours be, say, six shillings, then, although the mass of the articles produced varies with the productiveness of labour, the only result is that the value represented by six shillings is spread over a greater or less number of articles.

(2.) Surplus value and the value of labour power vary in opposite directions. A variation in the productiveness of labour, its increase or diminution, causes a variation in the opposite direction in the value of labour power, and in the same direction in surplus value.

The value created by a working day of 12 hours is a constant quantity, say, six shillings. This constant quantity is the sum of the surplus value plus the value of the labour power, which latter value the labourer replaces by an equivalent. It is self-evident, that if a constant quantity consists of two parts, neither of them can increase without the other diminishing. Let the two parts at starting be equal; 3 shillings value of labour power, 3 shillings surplus value. Then the value of the labour power cannot rise from three shillings to four, without the surplus value falling from three shillings to two; and the surplus value cannot rise from three shillings to four, without the value of labour power falling from three shillings to two. Under these circumstances, therefore, no change can take place in the absolute magnitude, either of the surplus value, or of the value of labour power, without a simultaneous change in their relative magnitudes, i.e., relatively to each other. It is impossible for them to rise or fall simultaneously.

Further, the value of labour power cannot fall, and consequently surplus value cannot rise, without a rise in the productiveness of labour. For

instance, in the above case, the value of the labour power cannot sink from three shillings to two, unless an increase in the productiveness of labour makes it possible to produce in 4 hours the same quantity of necessaries as previously required 6 hours to produce. On the other hand, the value of the labour power cannot rise from three shillings to four, without a decrease in the productiveness of labour, whereby eight hours become requisite to produce the same quantity of necessaries, for the production of which six hours previously sufficed. It follows from this, that an increase in the productiveness of labour causes a fall in the value of labour power and a consequent rise in surplus value, while, on the other hand, a decrease in such productiveness causes a rise in the value of labour power, and a fall in surplus value.

In formulating this law, Ricardo overlooked one circumstance; although a change in the magnitude of the surplus value or surplus labour causes a change in the opposite direction in the magnitude of the value of labour power, or in the quantity of necessary labour, it by no means follows that they vary in the same proportion. They do increase or diminish by the same quantity. But their proportional increase or diminution depends on their original magnitudes before the change in the productiveness of labour took place. If the value of the labour power be 4 shillings, or the necessary labour time 8 hours, and the surplus value be 2 shillings, or the surplus labour 4 hours, and if, in consequence of an increase in the productiveness of labour, the value of the labour power fall to 3 shillings, or the necessary labour to 6 hours, the surplus value will rise to 3 shillings, or the surplus labour to 6 hours. The same quantity, 1 shilling or 2 hours, is added in one case and subtracted in the other. But the proportional change of magnitude is different in each case. While the value of the labour power falls from 4 shillings to 3, i.e., by 1/4 or 25%, the surplus value rises from 2 shillings to 3, i.e., by 1/2 or 50%. It therefore follows that the proportional increase or diminution in surplus value, consequent on a given change in the productiveness of labour, depends on the original magnitude of that portion of the working day which embodies itself in surplus value; the smaller that portion, the greater is the proportional change; the greater that portion, the less is the proportional change.

(3.) Increase or diminution in surplus value is always consequent on, and never the cause of, the corresponding diminution or increase in the value of labour power.

Since the working day is constant in magnitude, and is represented by a value of constant magnitude, since, to every variation in the magnitude of surplus value, there corresponds an inverse variation in the value of labour power, and since the value of labour power cannot change, except in consequence of a change in the productiveness of labour, it clearly follows,

under these conditions, that every change of magnitude in surplus value arises from an inverse change of magnitude in the value of labour power. If, then, as we have already seen, there can be no change of absolute magnitude in the value of labour power, and in surplus value, unaccompanied by a change in their relative magnitudes, so now it follows that no change in their relative magnitudes is possible, without a previous change in the absolute magnitude of the value of labour power.

According to the third law, a change in the magnitude of surplus value, presupposes a movement in the value of labour power, which movement is brought about by a variation in the productiveness of labour. The limit of this change is given by the altered value of labour power. Nevertheless, even when circumstances allow the law to operate, subsidiary movements may occur. For example: if in consequence of the increased productiveness of labour, the value of labour power falls from 4 shillings to 3, or the necessary labour time from 8 hours to 6, the price of labour power may possibly not fall below 3s. 8d., 3s. 6d., or 3s. 2d., and the surplus value consequently not rise above 3s. 4d., 3s. 6d., or 3s. 10d. The amount of this fall, the lowest limit of which is 3 shillings (the new value of labour power), depends on the relative weight, which the pressure of capital on the one side, and the resistance of the labourer on the other, throws into the scale.

The value of labour power is determined by the value of a given quantity of necessaries. It is the value and not the mass of these necessaries that varies with the productiveness of labour. It is, however, possible that, owing to an increase of productiveness, both the labourer and the capitalist may simultaneously be able to appropriate a greater quantity of these necessaries, without any change in the price of labour power or in surplus value. If the value of labour power be 3 shillings, and the necessary labour time amount to 6 hours, if the surplus value likewise be 3 shillings, and the surplus labour 6 hours, then if the productiveness of labour were doubled without altering the ratio of necessary labour to surplus labour, there would be no change of magnitude in surplus value and price of labour power. The only result would be that each of them would represent twice as many use values as before; these use values being twice as cheap as before. Although labour power would be unchanged in price, it would be above its value. If, however, the price of labour power had fallen, not to 1s. 6d., the lowest possible point consistent with its new value, but to 2s. 10d. or 2s. 6d., still this lower price would represent an increased mass of necessaries. In this way it is possible with an increasing productiveness of labour, for the price of labour power to keep on falling, and yet this fall to be accompanied by a constant growth in the mass of the labourer's means of subsistence. But even in such case, the fall in the value of labour power would cause a corresponding rise of surplus value, and thus the abyss between the labourer's

position and that of the capitalist would keep widening.

Ricardo was the first who accurately formulated the three laws we have above stated. But he falls into the following errors: (1) he looks upon the special conditions under which these laws hold good as the general and sole conditions of capitalist production. He knows no change, either in the length of the working day, or in the intensity of labour; consequently with him there can be only one variable factor, viz., the productiveness of labour; (2), and this error vitiates his analysis much more than (1), he has not, any more than have the other economists, investigated surplus value as such, i.e., independently of its particular forms, such as profit, rent, etc. He therefore confounds together the laws of the rate of surplus value and the laws of the rate of profit. **The rate of profit is, as we have already said, the ratio of the surplus value to the total capital advanced; the rate of surplus value is the ratio of the surplus value to the variable part of that capital**. Assume that a capital C of £500 is made up of raw material, instruments of labour, etc. (c) to the amount of £400; and of wages (v) to the amount of £100; and further, that the surplus value (s) = £100. Then we have rate of surplus value s/v = £100/£100 = 100%. But the rate of profit s/C [= s/(c+v)] = £100/£500 = 20%. It is, besides, obvious that the rate of profit may depend on circumstances that in no way affect the rate of surplus value. I shall show in Book III that, with a given rate of surplus value, we may have any number of rates of profit, and that various rates of surplus value may, under given conditions, express themselves in a single rate of profit.

## SECTION 2.— WORKING DAY CONSTANT. PRODUCTIVENESS OF LABOUR CONSTANT. INTENSITY OF LABOUR VARIABLE

Increased intensity of labour means increased expenditure of labour in a given time. Hence a working day of more intense labour is embodied in more products than is one of less intense labour, the length of each day being the same. Increased productiveness of labour also, it is true, will supply more products in a given working day. But in this latter case, the value of each single product falls, for it costs less labour than before; in the former case, that value remains unchanged, for each article costs the same labour as before. Here we have an increase in the number of products, unaccompanied by a fall in their individual prices: as their number increases, so does the sum of their prices. But in the case of increased productiveness, a given value is spread over a greater mass of products. Hence the length of the working day being constant, a day's labour of increased intensity will be incorporated in an increased value, and, the value of money remaining unchanged, in more money. The value created varies with the extent to which the intensity of labour deviates from its normal intensity in the society. A given working day,

therefore, no longer creates a constant, but a variable value; in a day of 12 hours of ordinary intensity, the value created is, say 6 shillings, but with increased intensity, the value created may be 7, 8, or more shillings. It is clear that, if the value created by a day's labour increases from, say, 6 to 8 shillings then the two parts into which this value is divided, viz., price of labour power and surplus value, may both of them increase simultaneously, and either equally or unequally. They may both simultaneously increase from 3 shillings to 4. Here, the rise in the price of labour power does not necessarily imply that the price has risen above the value of labour power. On the contrary, the rise in price may be accompanied by a fall in value. This occurs whenever the rise in the price of labour power does not compensate for its increased wear and tear.

We know that, with transitory exceptions, a change in the productiveness of labour does not cause any change in the value of labour power, nor consequently in the magnitude of surplus value, unless the products of the industries affected are articles habitually consumed by the labourers. In the present case this condition no longer applies. For when the variation is either in the duration or in the intensity of labour, there is always a corresponding change in the magnitude of the value created, independently of the nature of the article in which that value is embodied.

If the intensity of labour were to increase simultaneously and equally in every branch of industry, then the new and higher degree of intensity would become the normal degree for the society, and would therefore cease to be taken account of. But still, even then, the intensity of labour would be different in different countries, and would modify the international application of the law of value. The more intense working day of one nation would be represented by a greater sum of money than would the less intense day of another nation.

## SECTION 3.— PRODUCTIVENESS AND INTENSITY OF LABOUR CONSTANT. LENGTH OF THE WORKING DAY VARIABLE

The working day may vary in two ways. It may be made either longer or shorter. From our present data, and within the limits of the assumptions made above we obtain the following laws:

(1.) The working day creates a greater or less amount of value in proportion to its length — thus, a variable and not a constant quantity of value.

(2.) Every change in the relation between the magnitudes of surplus value and of the value of labour power arises from a change in the absolute magnitude of the surplus labour, and consequently of the surplus value.

(3.) The absolute value of labour power can change only in

consequence of the reaction exercised by the prolongation of surplus labour upon the wear and tear of labour power. Every change in this absolute value is therefore the effect, but never the cause, of a change in the magnitude of surplus value.

We begin with the case in which the working day is shortened.

(1.) A shortening of the working day under the conditions given above, leaves the value of labour power, and with it, the necessary labour time, unaltered. It reduces the surplus labour and surplus value. Along with the absolute magnitude of the latter, its relative magnitude also falls, i.e., its magnitude relatively to the value of labour power whose magnitude remains unaltered. Only by lowering the price of labour power below its value could the capitalist save himself harmless.

All the usual arguments against the shortening of the working day, assume that it takes place under the conditions we have here supposed to exist; but in reality the very contrary is the case: a change in the productiveness and intensity of labour either precedes, or immediately follows, a shortening of the working day.

(2.) Lengthening of the working day. Let the necessary labour time be 6 hours, or the value of labour power 3 shillings; also let the surplus labour be 6 hours or the surplus value 3 shillings. The whole working day then amounts to 12 hours and is embodied in a value of 6 shillings. If, now, the working day be lengthened by 2 hours and the price of labour power remain unaltered, the surplus value increases both absolutely and relatively. Although there is no absolute change in the value of labour power, it suffers a relative fall. Under the conditions assumed in 1. there could not be a change of relative magnitude in the value of labour power without a change in its absolute magnitude. Here, on the contrary, the change of relative magnitude in the value of labour power is the result of the change of absolute magnitude in surplus value.

Since the value in which a day's labour is embodied, increases with the length of that day, it is evident that the surplus value and the price of labour power may simultaneously increase, either by equal or unequal quantities. This simultaneous increase is therefore possible in two cases, one, the actual lengthening of the working day, the other, an increase in the intensity of labour unaccompanied by such lengthening.

When the working day is prolonged, the price of labour power may fall below its value, although that price be nominally unchanged or even rise. The value of a day's labour power is, as will be remembered, estimated from its normal average duration, or from the normal duration of life among the labourers, and from corresponding normal transformations of organised bodily matter into motion, in conformity with the nature of man. Up to a certain point, the increased wear and tear of labour power, inseparable from a

lengthened working day, may be compensated by higher wages. But beyond this point the wear and tear increases in geometrical progression, and every condition suitable for the normal reproduction and functioning of labour power is suppressed. The price of labour power and the degree of its exploitation cease to be commensurable quantities.

## SECTION 4.— SIMULTANEOUS VARIATIONS IN THE DURATION, PRODUCTIVENESS, AND INTENSITY OF LABOUR

It is obvious that a large number of combinations are here possible. Any two of the factors may vary and the third remain constant, or all three may vary at once. They may vary either in the same or in different degrees, in the same or in opposite directions, with the result that the variations counteract one another, either wholly or in part. Nevertheless the analysis of every possible case is easy in view of the results given [in sections 1, 2 and 3]. The effect of every possible combination may be found by treating each factor in turn as variable, and the other two constant for the time being. We shall, therefore, notice, and that briefly, but two important cases.

### (1.) Diminishing productiveness of labour with a simultaneous lengthening of the working day

In speaking of diminishing productiveness of labour, we here refer to diminution in those industries whose products determine the value of labour power; such a diminution, for example, as results from decreasing fertility of the soil, and from the corresponding dearness of its products. Take the working day at 12 hours and the value created by it at 6 shillings, of which one half replaces the value of the labour power, the other forms the surplus value. Suppose, in consequence of the increased dearness of the products of the soil, that the value of labour power rises from 3 shillings to 4, and therefore the necessary labour time from 6 hours to 8. If there be no change in the length of the working day, the surplus labour would fall from 6 hours to 4, the surplus value from 3 shillings to 2. If the day be lengthened by 2 hours, i.e., from 12 hours to 14, the surplus labour remains at 6 hours, the surplus value at 3 shillings, but the surplus value decreases compared with the value of labour power, as measured by the necessary labour time. If the day be lengthened by 4 hours, viz., from 12 hours to 16, the proportional magnitudes of surplus value and value of labour power, of surplus labour and necessary labour, continue unchanged, but the absolute magnitude of surplus value rises from 3 shillings to 4, that of the surplus labour from 6 hours to 8, an increment of 33 1/3%. Therefore, with diminishing productiveness of labour and a simultaneous lengthening of the working day, the absolute

magnitude of surplus value may continue unaltered, at the same time that its relative magnitude diminishes; its relative magnitude may continue unchanged, at the same time that its absolute magnitude increases; and, provided the lengthening of the day be sufficient, both may increase.

### (2.) Increasing intensity and productiveness of labour with simultaneous shortening of the working day

Increased productiveness and greater intensity of labour, both have a like effect. They both augment the mass of articles produced in a given time. Both, therefore, shorten that portion of the working day which the labourer needs to produce his means of subsistence or their equivalent. The minimum length of the working day is fixed by this necessary but contractile portion of it. If the whole working day were to shrink to the length of this portion, surplus labour would vanish, a consummation utterly impossible under the régime of capital. Only by suppressing the capitalist form of production could the length of the working day be reduced to the necessary labour time. But, even in that case, the latter would extend its limits. On the one hand, because the notion of "means of subsistence" would considerably expand, and the labourer would lay claim to an altogether different standard of life. On the other hand, because a part of what is now surplus labour, would then count as necessary labour; I mean the labour of forming a fund for reserve and accumulation.

The more the productiveness of labour increases, the more can the working day be shortened; and the more the working day is shortened, the more can the intensity of labour increase. From a social point of view, the productiveness increases in the same ratio as the economy of labour, which, in its turn, includes not only economy of the means of production, but also the avoidance of all useless labour. The capitalist mode of production, while on the one hand, enforcing economy in each individual business, on the other hand, begets, by its anarchical system of competition, the most outrageous squandering of labour power and of the social means of production, not to mention the creation of a vast number of employments, at present indispensable, but in themselves superfluous.

The intensity and productiveness of labour being given, the time which society is bound to devote to material production is shorter, and as a consequence, the time at its disposal for the free development, intellectual and social, of the individual is greater, in proportion as the work is more and more evenly divided among all the able-bodied members of society, and as a particular class is more and more deprived of the power to shift the natural burden of labour from its own shoulders to those of another layer of society. In this direction, the shortening of the working day finds at last a limit in the

generalisation of labour. In capitalist society spare time is acquired for one class by converting the whole life-time of the masses into labour time.

## C h a p t e r 18: VARIOUS FORMULAE FOR THE RATE OF SURPLUS VALUE

We have seen that the rate of surplus value is represented by the following formulae:

$$\frac{\text{Surplus value}}{\text{Variable Capital}} \left(\frac{s}{v}\right) = \frac{\text{Surplus value}}{\text{Value of labour power}} = \frac{\text{Surplus labour}}{\text{Necessary labour}}$$

The two first of these formulae represent, as a ratio of values, that which, in the third, is represented as a ratio of the times during which those values are produced. These formulae, supplementary the one to the other, are rigorously definite and correct […]

There is [another] formula which I have occasionally already anticipated; it is

$$\frac{\text{Surplus value}}{\text{Value of labour power}} = \frac{\text{Surplus labour}}{\text{Necessary labour}} = \frac{\text{Unpaid labour}}{\text{Paid labour}}$$

After the investigations we have given above, it is no longer possible to be misled, by the formula

$$\frac{\text{Unpaid labour}}{\text{Paid labour}}$$

into concluding, that the capitalist pays for labour and not for labour power. This formula is only a popular expression for

$$\frac{\text{Surplus labour}}{\text{Necessary labour}}$$

The capitalist pays the value, so far as price coincides with value, of the labour power, and receives in exchange the disposal of the living labour power itself. His usufruct is spread over two periods. During one the labourer produces a value that is only equal to the value of his labour power; he produces its equivalent. This the capitalist receives in return for his advance of the price of the labour power, a product ready made in the market. During the other period, the period of surplus labour, the usufruct of the labour power creates a value for the capitalist, that costs him no equivalent. This expenditure of labour power comes to him gratis. In this sense it is that surplus labour can be called unpaid labour.

**Capital, therefore, it not only, as Adam Smith says, the command**

**over labour. It is essentially the command over unpaid labour**. All surplus value, whatever particular form (profit, interest, or rent), it may subsequently crystallize into, is in substance the materialisation of unpaid labour. The secret of the self-expansion of capital resolves itself into having the disposal of a definite quantity of other people's unpaid labour.

## P a r t 6: WAGES

### C h a p t e r 19: THE TRANSFORMATION OF THE VALUE (AND RESPECTIVELY THE PRICE) OF LABOUR POWER INTO WAGES

That which comes directly face to face with the possessor of money on the market, is in fact not labour, but the labourer. What the latter sells is his labour power. As soon as his labour actually begins, it has already ceased to belong to him; it can therefore no longer be sold by him. **Labour is the substance, and the immanent measure of value, but has itself no value […] What [bourgeois] economists therefore call value of labour, is in fact the value of labour power**, as it exists in the personality of the labourer, which is as different from its function, labour, as a machine is from the work it performs […]

Let us next see how value (and price) of labour power, present themselves in this transformed condition as wages. We know that the daily value of labour power is calculated upon a certain length of the labourer's life, to which, again, corresponds a certain length of working day. Assume the habitual working day as 12 hours, the daily value of labour power as 3s., the expression in money of a value that embodies 6 hours of labour. If the labourer receives 3s., then he receives the value of his labour power functioning through 12 hours […]

### C h a p t e r 20: TIME WAGES

Wages themselves again take many forms, a fact not recognizable in the ordinary economic treatises which, exclusively interested in the material side of the question, neglect every difference of form. An exposition of all these forms however, belongs to the special study of wage labour, not therefore to this work. Still the two fundamental forms must be briefly worked out here.

The sale of labour power, as will be remembered, takes place for a definite period of time. The converted form under which the daily, weekly, etc., value of labour power presents itself, is hence that of time wages, therefore day wages, etc.

Next it is to be noted that the laws set forth, in the 17th chapter, on

the changes in the relative magnitudes of price of labour power and surplus value, pass by a simple transformation of form, into laws of wages. Similarly the distinction between the exchange value of labour power, and the sum of the necessaries of life into which this value is converted, now reappears as the distinction between nominal and real wages. It would be useless to repeat here, with regard to the phenomenal form, what has been already worked out in the substantial form. We limit ourselves therefore to a few points characteristic of time wages.

The sum of money which the labourer receives for his daily or weekly labour, forms the amount of his nominal wages, or of his wages estimated in value. But it is clear that according to the length of the working day, that is, according to the amount of actual labour daily supplied, the same daily or weekly wage may represent very different prices of labour, i.e., very different sums of money for the same quantity of labour. We must, therefore, in considering time wages, again distinguish between the sum-total of the daily or weekly wages, etc., and the price of labour. How then, to find this price, i.e., the money value of a given quantity of labour? The average price of labour is found, when the average daily value of the labour power is divided by the average number of hours in the working day. If, e.g., the daily value of labour power is 3 shillings, the value of the product of 6 working hours, and if the working day is 12 hours, the price of 1 working hour is 3/12 shillings = 3d. The price of the working hour thus found serves as the unit measure for the price of labour.

It follows therefore that the daily and weekly wages, etc., may remain the same, although the price of labour falls constantly. If, e.g., the habitual working day is 10 hours and the daily value of the labour power 3s., the price of the working hour is 3 3/5d. It falls to 3s. as soon as the working day rises to 12 hours, to 2 2/5d. as soon as it rises to 15 hours. Daily or weekly wages remain, despite all this, unchanged. On the contrary, the daily or weekly wages may rise, although the price of labour remains constant or even falls. If, e.g., the working day is 10 hours, and the daily value of labour power 3 shillings, the price of one working hour is 3 3/5d. If the labourer, in consequence of increase of trade, works 12 hours, the price of labour remaining the same, his daily wage now rises to 3 shillings 7 1/5 d. without any variation in the price of labour. The same result might follow if, instead of the extensive amount of labour, its intensive amount increased. The rise of the nominal daily or weekly wages may therefore be accompanied by a price of labour that remains stationary or falls. The same holds as to the income of the labourer’s family, as soon as the quantity of labour expended by the head of the family is increased by the labour of the members of his family. There are, therefore, methods of lowering the price of labour independent of the reduction of the nominal daily or weekly wages.

As a general law it follows that, given the amount of daily or weekly labour, etc., the daily or weekly wages depend on the price of labour which itself varies either with the value of labour power, or with the difference between its price and its value. Given, on the other hand, the price of labour, the daily or weekly wages depend on the quantity of the daily or weekly labour.

The unit-measure for time wages, the price of the working hour, is the quotient of the value of a day's labour power, divided by the number of hours of the average working day. Let the latter be 12 hours, and the daily value of labour power 3 shillings, the value of the product of 6 hours of labour. Under these circumstances the price of a working hour is 3d.; the value produced in it is 6d. If the labourer is now employed less than 12 hours (or less than 6 days in the week), e.g., only 6 or 8 hours, he receives, with this price of labour, only 2s. or 1s. 6d. a day. As on our hypothesis he must work on the average 6 hours daily, in order to produce a day's wage corresponding merely to the value of his labour power, as according to the same hypothesis he works only half of every hour for himself, and half for the capitalist, it is clear that he cannot obtain for himself the value of the product of 6 hours if he is employed less than 12 hours. In previous chapters we saw the destructive consequences of overwork; here we find the sources of the sufferings that result to the labourer from his insufficient employment.

If the hour's wage is fixed so that the capitalist does not bind himself to pay a day's or a week's wage, but only to pay wages for the hours during which he chooses to employ the labourer, he can employ him for a shorter time than that which is originally the basis of the calculation of the hour wage, or the unit-measure of the price of labour. Since this unit is determined by the ratio [ *(daily value of labour power)/(working day of a given number of hours)* ] it, of course, loses all meaning as soon as the working day ceases to contain a definite number of hours. The connection between the paid and the unpaid labour is destroyed. The capitalist can now wring from the labour a certain quantity of surplus labour without allowing him the labour time necessary for his own subsistence. He can annihilate all regularity of employment, and according to his own convenience, caprice, and the interest of the moment, make the most enormous overwork alternate with relative or absolute cessation of work. He can, under the pretense of paying "the normal price of labour", abnormally lengthen the working day without any corresponding compensation to the labourer. Hence the perfectly rational revolt in 1860 of the London labourers, employed in the building trades, against the attempt of the capitalists to impose on them this sort of wage by the hour […]

The capitalist does not know that the normal price of labour also includes a definite quantity of unpaid labour, and that this very unpaid labour

is the normal source of his gain. The category of surplus labour time does not exist at all for him, since it is included in the normal working day, which he thinks he has paid for in the day's wages. But over-time does exist for him, the prolongation of the working day beyond the limits corresponding with the usual price of labour. Face to face with his underselling competitor, he even insists upon extra pay for this overtime. He again does not know that this extra pay includes unpaid labour, just as well as does the price of the customary hour of labour. For example, the price of one hour of the 12 hours' working day is 3d., say the value product of half a working hour, whilst the price of the overtime working hour is 4d., or the value product of 2/3 of a working hour. In the first case the capitalist appropriates to himself one-half, in the second, one-third of the working hour without paying for it.

## C h a p t e r 21: PIECE WAGES

Wages by the piece are nothing else than a converted form of wages by time, just as wages by time are a converted form of the value or price of labour power.

In piece wages it seems at first sight as if the use value bought from the labourer was, not the function of his labour power, living labour, but labour already realized in the product, and as if the price of this labour was determined, not as with time wages, by the fraction [ *(daily value of labour power)/(the working day of a given number of hours)* ] but by the capacity for work of the producer.

The confidence that trusts in this appearance ought to receive a first severe shock from the fact that both forms of wages exist side by side, simultaneously, in the same branches of industry […] In the regular factories in which throughout piece wages predominate, particular kinds of work are unsuitable to this form of wage, and are therefore paid by time. But it is, moreover, self-evident that the difference of form in the payment of wages alters in no way their essential nature, although the one form may be more favorable to the development of capitalist production than the other.

Let the ordinary working day contain 12 hours of which 6 are paid, 6 unpaid. Let its value product be 6 shillings, that of one hour's labour therefore 6d. Let us suppose that, as the result of experience, a labourer who works with the average amount of intensity and skill, who, therefore, gives in fact only the time socially necessary to the production of an article, supplies in 12 hours 24 pieces, either distinct products or measurable parts of a continuous whole. Then the value of these 24 pieces, after. subtraction of the portion of constant capital contained in them, is 6 shillings, and the value of a single piece 3d. The labourer receives 1 ½d. per piece, and thus earns in 12 hours 3 shillings. Just as, with time wages, it does not matter whether we

assume that the labourer works 6 hours for himself and 6 hours for the capitalist, or half of every hour for himself, and the other half for the capitalist, so here it does not matter whether we say that each individual piece is half paid, and half unpaid for, or that the price of 12 pieces is the equivalent only of the value of the labour power, whilst in the other 12 pieces surplus value is incorporated.

The form of piece wages is just as irrational as that of time wages. Whilst in our example two pieces of a commodity, after subtraction of the value of the means of production consumed in them, are worth 6d. as being the product of one hour, the labourer receives for them a price of 3d. Piece wages do not, in fact, distinctly express any relation of value. It is not, therefore, a question of measuring the value of the piece by the working time incorporated in it, but on the contrary, of measuring the working time the labourer has expended by the number of pieces he has produced. In time wages, the labour is measured by its immediate duration; in piece wages, by the quantity of products in which the labour has embodied itself during a given time. The price of labour time itself is finally determined by the equation: value of a day's labour = daily value of labour power. Piece wage is, therefore, only a modified form of time wage.

Let us now consider a little more closely the characteristic peculiarities of piece wages.

The quality of the labour is here controlled by the work itself, which must be of average perfection if the piece price is to be paid in full. Piece wages become, from this point of view, the most fruitful source of reductions of wages and capitalistic cheating. They furnish to the capitalist an exact measure for the intensity of labour. Only the working time which is embodied in a quantum of commodities determined beforehand, and experimentally fixed, counts as socially necessary working time, and is paid as such […]

Given piece wage, it is naturally the personal interest of the labourer to strain his labour power as intensely as possible; this enables the capitalist to raise more easily the normal degree of intensity of labour. It is moreover now the personal interest of the labourer to lengthen the working day, since with it his daily or weekly wages rise. This gradually brings on a reaction like that already described in time wages, without reckoning that the prolongation of the working day, even if the piece wage remains constant, includes of necessity a fall in the price of the labour.

In time wages, with few exceptions, the same wage holds for the same kind of work, whilst in piece wages, though the price of the working time is measured by a certain quantity of product, the day's or week's wage will vary with the individual differences of the labourers, of whom one supplies in a given time the minimum of product only, another the average, a third more than the average. With regard to actual receipts there is, therefore,

great variety according to the different skill, strength, energy, staying power, etc., of the individual labourers. Of course this does not alter the general relations between capital and wage labour. First, the individual differences balance one another in the workshop as a whole, which thus supplies in a given working time the average product, and the total wages paid will be the average wages of that particular branch of industry. Second, the proportion between wages and surplus value remains unaltered, since the mass of surplus labour supplied by each particular labourer corresponds with the wage received by him. But the wider scope that piece wage gives to individuality tends to develop on the one hand that individuality, and with it the sense of liberty, independence, and self-control of the labourers, and on the other, their competition one with another. Piece work has, therefore, a tendency, while raising individual wages above the average, to lower this average itself. But where a particular rate of piece wage has for a long time been fixed by tradition, and its lowering, therefore, presented especial difficulties, the masters, in such exceptional cases, sometimes had recourse to its compulsory transformation into time wages. Hence, e.g., in 1860 a great strike among the ribbon-weavers of Coventry. Piece wage is finally one of the chief supports of the hour-system described in the preceding chapter.

From what has been shown so far, it follows that piece wage is the form of wages most in harmony with the capitalist mode of production […]

With the changing productiveness of labour the same quantum of product represents a varying working time. Therefore, piece wage also varies, for it is the money expression of a determined working time. In our example above, 24 pieces were produced in 12 hours, whilst the value of the product of the 12 hours was 6s., the daily value of the labour power 3s., the price of the labour-hour 3d., and the wage for one piece ½d. In one piece half-an-hour's labour was absorbed. If the same working day now supplies, in consequence of the doubled productiveness of labour, 48 pieces instead of 24, and all other circumstances remain unchanged, then the piece wage falls from 1 ½d. to 3/4d., as every piece now only represents 1/4, instead of ½ of a working hour. 24 by 1½d. = 3s., and in like manner 48 by 3/4d. = 3s. In other words, piece wage is lowered in the same proportion as the number of the pieces produced in the same time rises, and, therefore, as the working time spent on the same piece falls. This change in piece wage, so far purely nominal, leads to constant battles between capitalist and labour. Either because the capitalist uses it as a pretext for actually lowering the price of labour, or because increased productive power of labour is accompanied by an increased intensity of the same. Or because the labourer takes seriously the appearance of piece wages (viz., that his product is paid for, and not his labour power) and therefore revolts against a lowering of wages, unaccompanied by a lowering in the selling price of the commodity […]

## C h a p t e r 22: NATIONAL DIFFERENCES OF WAGES

In the 17th chapter we were occupied with the manifold combinations which may bring about a change in magnitude of the value of labour power — this magnitude being considered either absolutely or relatively, i.e., as compared with surplus value; whilst on the other hand, the quantum of the means of subsistence in which the price of labour is realized might again undergo fluctuations independent of, or different from, the changes of this price. As has been already said, the simple translation of the value, or respectively of the price, of labour power into the exoteric form of wages transforms all these laws into laws of the fluctuations of wages. That which appears in these fluctuations of wages within a single country as a series of varying combinations, may appear in different countries as contemporaneous difference of national wages. In the comparison of the wages in different nations, we must therefore take into account all the factors that determine changes in the amount of the value of labour power; the price and the extent of the prime necessaries of life as naturally and historically developed, the cost of training the labourers, the part played by the labour of women and children, the productiveness of labour, its extensive and intensive magnitude. Even the most superficial comparison requires the reduction first of the average day wage for the same trades, in different countries, to a uniform working day. After this reduction to the same terms of the day wages, time wage must again be translated into piece wage, as the latter only can be a measure both of the productivity and the intensity of labour.

In every country there is a certain average intensity of labour below which the labour for the production of a commodity requires more than the socially necessary time, and therefore does not reckon as labour of normal quality. Only a degree of intensity above the national average affects, in a given country, the measure of value by the mere duration of the working time. This is not the case on the universal market, whose integral parts are the individual countries. The average intensity of labour changes from country to country; here it is greater, there less. These national averages form a scale, whose unit of measure is the average unit of universal labour. The more intense national labour, therefore, as compared with the less intense, produces in the same time more value, which expresses itself in more money.

But the law of value in its international application is yet more modified by the fact that on the world market the more productive national labour reckons also as the more intense, so long as the more productive nation is not compelled by competition to lower the selling price of its commodities to the level of their value.

In proportion as capitalist production is developed in a country, in the

same proportion do the national intensity and productivity of labour there rise above the international level. The different quantities of commodities of the same kind, produced in different countries in the same working time, have, therefore, unequal international values, which are expressed in different prices, i.e., in sums of money varying according to international values. The relative value of money will, therefore, be less in the nation with more developed capitalist mode of production than in the nation with less developed. It follows, then, that the nominal wages, the equivalent of labour power expressed in money, will also be higher in the first nation than in the second; which does not at all prove that this holds also for the real wages, i.e., for the means of subsistence placed at the disposal of the labourer.

But even apart from these relative differences of the value of money in different countries, it will be found, frequently, that the daily or weekly, etc., wage in the first nation is higher than in the second, whilst the relative price of labour, i.e., the price of labour as compared both with surplus value and with the value of the product, stands higher in the second than in the first [...]

## P a r t 7: THE ACCUMULATION OF CAPITAL

The conversion of a sum of money into means of production and labour power, is the first step taken by the quantum of value that is going to function as capital. This conversion takes place in the market, within the sphere of circulation. The second step, the process of production, is complete so soon as the means of production have been converted into commodities whose value exceeds that of their component parts, and, therefore, contains the capital originally advanced, plus a surplus value. These commodities must then be thrown into circulation. They must be sold, their value realised in money, this money afresh converted into capital, and so over and over again. This circular movement, in which the same phases are continually gone through in succession, forms the circulation of capital.

The first condition of accumulation is that the capitalist must have contrived to sell his commodities, and to reconvert into capital the greater part of the money so received. In the following pages we shall assume that capital circulates in its normal way. The detailed analysis of the process will be found in Book II.

The capitalist who produces surplus value — i.e., who extracts unpaid labour directly from the labourers, and fixes it in commodities, is, indeed, the first appropriator, but by no means the ultimate owner, of this surplus value. He has to share it with capitalists, with landowners, etc., who fulfil other functions in the complex of social production. Surplus value, therefore, splits up into various parts. Its fragments fall to various categories of persons, and

take various forms, independent the one of the other, such as profit, interest, merchants' profit, rent, etc. It is only in Book III that we can take in hand these modified forms of surplus value.

On the one hand, then, we assume that the capitalist sells at their value the commodities he has produced, without concerning ourselves either about the new forms that capital assumes while in the sphere of circulation, or about the concrete conditions of reproduction hidden under these forms. On the other hand, we treat the capitalist producer as owner of the entire surplus value, or, better perhaps, as the representative of all the sharers with him in the booty. We, therefore, first of all consider accumulation from an abstract point of view — i.e., as a mere phase in the actual process of production.

So far as accumulation takes place, the capitalist must have succeeded in selling his commodities, and in reconverting the sale-money into capital. Moreover, the breaking-up of surplus value into fragments neither alters its nature nor the conditions under which it becomes an element of accumulation. Whatever be the proportion of surplus value which the industrial capitalist retains for himself, or yields up to others, he is the one who, in the first instance, appropriates it. We, therefore, assume no more than what actually takes place. On the other hand, the simple fundamental form of the process of accumulation is obscured by the incident of the circulation which brings it about, and by the splitting up of surplus value. An exact analysis of the process, therefore, demands that we should, for a time, disregard all phenomena that hide the play of its inner mechanism.

## C h a p t e r 23: SIMPLE REPRODUCTION

Whatever the form of the process of production in a society, it must be a continuous process, must continue to go periodically through the same phases. A society can no more cease to produce than it can cease to consume. When viewed, therefore, as a connected whole, and as flowing on with incessant renewal, every social process of production is, at the same time, a process of reproduction.

The conditions of production are also those of reproduction. No society can go on producing, in other words, no society can reproduce, unless it constantly reconverts a part of its products into means of production, or elements of fresh products. All other circumstances remaining the same, the only mode by which it can reproduce its wealth, and maintain it at one level, is by replacing the means of production — i.e., the instruments of labour, the raw material, and the auxiliary substances consumed in the course of the year — by an equal quantity of the same kind of articles; these must be separated from the mass of the yearly products, and thrown afresh into the process of

production. Hence, a definite portion of each year's product belongs to the domain of production. Destined for productive consumption from the very first, this portion exists, for the most part, in the shape of articles totally unfitted for individual consumption.

If production be capitalistic in form, so, too, will be reproduction. Just as in the former the labour process figures but as a means towards the self-expansion of capital, so in the latter it figures but as a means of reproducing as capital — i.e., as self-expanding value — the value advanced. It is only because his money constantly functions as capital that the economic guise of a capitalist attaches to a man. If, for instance, a sum of £100 has this year been converted into capital, and produced a surplus value of £20, it must continue during next year, and subsequent years, to repeat the same operation. As a periodic increment of the capital advanced, or periodic fruit of capital in process, surplus value acquires the form of a revenue flowing out of capital.

If this revenue serve the capitalist only as a fund to provide for his consumption, and be spent as periodically as it is gained, then, *caeteris paribus*, simple reproduction will take place […]

The purchase of labour power for a fixed period is the prelude to the process of production; and this prelude is constantly repeated when the stipulated term comes to an end, when a definite period of production, such as a week or a month, has elapsed. But the labourer is not paid until after he has expended his labour power, and realised in commodities not only its value, but surplus value. He has, therefore, produced not only surplus value, which we for the present regard as a fund to meet the private consumption of the capitalist, but he has also produced, before it flows back to him in the shape of wages, the fund out of which he himself is paid, the variable capital; and his employment lasts only so long as he continues to reproduce this fund. Hence, that formula of the economists, referred to in Chapter 23, which represents wages as a share in the product itself. What flows back to the labourer in the shape of wages is a portion of the product that is continuously reproduced by him. The capitalist, it is true, pays him in money, but this money is merely the transmuted form of the product of his labour. While he is converting a portion of the means of production into products, a portion of his former product is being turned into money. It is his labour of last week, or of last year, that pays for his labour power this week or this year. The illusion begotten by the intervention of money vanishes immediately, if, instead of taking a single capitalist and a single labourer, we take the class of capitalists and the class of labourers as a whole. The capitalist class is constantly giving to the labouring class order-notes, in the form of money, on a portion of the commodities produced by the latter and appropriated by the former. The labourers give these order-notes back just as constantly to the capitalist class,

and in this way get their share of their own product. The transaction is veiled by the commodity form of the product and the money form of the commodity […]

When treating of the working day, we saw that the labourer is often compelled to make his individual consumption a mere incident of production. In such a case, he supplies himself with necessaries in order to maintain his labour power, just as coal and water are supplied to the steam-engine and oil to the wheel. His means of consumption, in that case, are the mere means of consumption required by a means of production; his individual consumption is directly productive consumption. This, however, appears to be an abuse not essentially appertaining to capitalist production.

The matter takes quite another aspect, when we contemplate, not the single capitalist, and the single labourer, but the capitalist class and the labouring class, not an isolated process of production, but capitalist production in full swing, and on its actual social scale. By converting part of his capital into labour power, the capitalist augments the value of his entire capital. He kills two birds with one stone. He profits, not only by what he receives from, but by what he gives to, the labourer. The capital given in exchange for labour power is converted into necessaries, by the consumption of which the muscles, nerves, bones, and brains of existing labourers are reproduced, and new labourers are begotten. Within the limits of what is strictly necessary, the individual consumption of the working class is, therefore, the reconversion of the means of subsistence given by capital in exchange for labour power, into fresh labour power at the disposal of capital for exploitation. It is the production and reproduction of that means of production so indispensable to the capitalist: the labourer himself. The individual consumption of the labourer, whether it proceed within the workshop or outside it, whether it be part of the process of production or not, forms therefore a factor of the production and reproduction of capital; just as cleaning machinery does, whether it be done while the machinery is working or while it is standing. The fact that the labourer consumes his means of subsistence for his own purposes, and not to please the capitalist, has no bearing on the matter. The consumption of food by a beast of burden is none the less a necessary factor in the process of production, because the beast enjoys what it eats. The maintenance and reproduction of the working class is, and must ever be, a necessary condition to the reproduction of capital. But the capitalist may safely leave its fulfilment to the labourer’s instincts of self-preservation and of propagation. All the capitalist cares for, is to reduce the labourer’s individual consumption as far as possible to what is strictly necessary, and he is far away from imitating those brutal South Americans, who force their labourers to take the more substantial, rather than the less substantial, kind of food.

Hence both the capitalist and his ideological representative, the political economist, consider that part alone of the labourer's individual consumption to be productive, which is requisite for the perpetuation of the class, and which therefore must take place in order that the capitalist may have labour power to consume; what the labourer consumes for his own pleasure beyond that part, is unproductive consumption. If the accumulation of capital were to cause a rise of wages and an increase in the labourer's consumption, unaccompanied by increase in the consumption of labour power by capital, the additional capital would be consumed unproductively. In reality, the individual consumption of the labourer is unproductive as regards himself, for it reproduces nothing but the needy individual; it is productive to the capitalist and to the State, since it is the production of the power that creates their wealth […]

Capitalist production, therefore, under its aspect of a continuous connected process, of a process of reproduction, produces not only commodities, not only surplus value, but it also produces and reproduces the capitalist relation; on the one side the capitalist, on the other the wage labourer […]

## C h a p t e r 24: CONVERSION OF SURPLUS VALUE INTO CAPITAL

### SECTION 1.— CAPITALIST PRODUCTION ON A PROGRESSIVELY INCREASING SCALE. TRANSITION OF THE LAWS OF PROPERTY THAT CHARACTERISE PRODUCTION OF COMMODITIES INTO LAWS OF CAPITALIST APPROPRIATION

Hitherto we have investigated how surplus value emanates from capital; we have now to see how capital arises from surplus value. Employing surplus value as capital, reconverting it into capital, is called accumulation of capital.

First let us consider this transaction from the standpoint of the individual capitalist. Suppose a spinner to have advanced a capital of £10,000, of which four-fifths (£8,000) are laid out in cotton, machinery, etc., and one-fifth (£2,000) in wages. Let him produce 240,000 lbs. of yarn annually, having a value of £2,000. The rate of surplus value being 100%, the surplus value lies in the surplus or net product of 40,000 lbs. of yarn, one-sixth of the gross product, with a value of £2,000 which will be realised by a sale. £2,000 is £2,000 […]

In order to convert this additional sum of £2,000 into capital, the master-spinner will, all circumstances remaining as before, advance four-fifths of it (£1,600) in the purchase of cotton, etc., and one-fifth (£400) in the purchase of additional spinners, who will find in the market the necessaries

of life whose value the master has advanced to them.

Then the new capital of £2,000 functions in the spinning mill, and brings in, in its turn, a surplus value of £400.

The capital value was originally advanced in the money form. The surplus value on the contrary is, originally, the value of a definite portion of the gross product. If this gross product be sold, converted into money, the capital value regains its original form. From this moment the capital value and the surplus value are both of them sums of money, and their reconversion into capital takes place in precisely the same way. The one, as well as the other, is laid out by the capitalist in the purchase of commodities that place him in a position to begin afresh the fabrication of his goods, and this time, on an extended scale. But in order to be able to buy those commodities, he must find them ready in the market.

His own yarns circulate, only because he brings his annual product to market, as all other capitalists likewise do with their commodities. But these commodities, before coming to market, were part of the general annual product, part of the total mass of objects of every kind, into which the sum of the individual capitals, i.e., the total capital of society, had been converted in the course of the year, and of which each capitalist had in hand only an aliquot part. The transactions in the market effectuate only the interchange of the individual components of this annual product, transfer them from one hand to another, but can neither augment the total annual production, nor alter the nature of the objects produced. Hence the use that can be made of the total annual product, depends entirely upon its own composition, but in no way upon circulation.

The annual production must in the first place furnish all those objects (use values) from which the material components of capital, used up in the course of the year, have to be replaced. Deducting these there remains the net or surplus product, in which the surplus value lies. And of what does this surplus product consist? Only of things destined to satisfy the wants and desires of the capitalist class, things which, consequently, enter into the consumption fund of the capitalists? Were that the case, the cup of surplus value would be drained to the very dregs, and nothing but simple reproduction would ever take place.

To accumulate it is necessary to convert a portion of the surplus product into capital. But we cannot, except by a miracle, convert into capital anything but such articles as can be employed in the labour process (i.e., means of production), and such further articles as are suitable for the sustenance of the labourer (i.e., means of subsistence). Consequently, a part of the annual surplus labour must have been applied to the production of additional means of production and subsistence, over and above the quantity of these things required to replace the capital advanced. In one word, surplus

value is convertible into capital solely because the surplus product, whose value it is, already comprises the material elements of new capital.

Now in order to allow of these elements actually functioning as capital, the capitalist class requires additional labour. If the exploitation of the labourers already employed do not increase, either extensively or intensively, then additional labour power must be found. For this the mechanism of capitalist production provides beforehand, by converting the working class into a class dependent on wages, a class whose ordinary wages suffice, not only for its maintenance, but for its increase. It is only necessary for capital to incorporate this additional labour power, annually supplied by the working class in the shape of labourers of all ages, with the surplus means of production comprised in the annual produce, and the conversion of surplus value into capital is complete. From a concrete point of view, accumulation resolves itself into the reproduction of capital on a progressively increasing scale. The circle in which simple reproduction moves, alters its form, and, to use Sismondi's expression, changes into a spiral […]

We here leave out of consideration the portion of the surplus value consumed by the capitalist […]

[In the example above, the] original capital was formed by the advance of £10,000. How did the owner become possessed of it? "By his own labour and that of his forefathers", answer unanimously the spokesmen of Political Economy. And, in fact, their supposition appears the only one consonant with the laws of the production of commodities.

But it is quite otherwise with regard to the additional capital of £2,000. How that originated we know perfectly well. There is not one single atom of its value that does not owe its existence to unpaid labour. The means of production, with which the additional labour power is incorporated, as well as the necessaries with which the labourers are sustained, are nothing but component parts of the surplus product, of the tribute annually exacted from the working class by the capitalist class […] The accumulation of the first additional capital of £2,000 presupposes a value of £10,000 belonging to the capitalist by virtue of his "primitive labour," and advanced by him. The second additional capital of £400 presupposes, on the contrary, only the previous accumulation of the £2,000, of which the £400 is the surplus value capitalised. The ownership of past unpaid labour is thenceforth the sole condition for the appropriation of living unpaid labour on a constantly increasing scale. The more the capitalist has accumulated, the more is he able to accumulate […]

The relation of exchange subsisting between capitalist and labourer becomes a mere semblance appertaining to the process of circulation, a mere form, foreign to the real nature of the transaction, and only mystifying it. The ever repeated purchase and sale of labour power is now the mere form; what

really takes place is this — the capitalist again and again appropriates, without equivalent, a portion of the previously materialised labour of others, and exchanges it for a greater quantity of living labour […]

Nor does it matter if simple reproduction is replaced by reproduction on an extended scale, by accumulation. In the former case the capitalist squanders the whole surplus value in dissipation, in the latter he demonstrates his bourgeois virtue by consuming only a portion of it and converting the rest into money […]

## SECTION 3.—SEPARATION OF SURPLUS VALUE INTO CAPITAL AND REVENUE. THE ABSTINENCE THEORY

In the last preceding chapter, we treated surplus value (or the surplus product) solely as a fund for supplying the individual consumption of the capitalist. In this chapter we have, so far, treated it solely as a fund for accumulation. It is, however, neither the one nor the other, but is both together. One portion is consumed by the capitalist as revenue, the other is employed as capital, is accumulated. Given the mass of surplus value, then, the larger the one of these parts, the smaller is the other. *Caeteris paribus*, the ratio of these parts determines the magnitude of the accumulation […]

At the historical dawn of capitalist production, – and every capitalist upstart has personally to go through this historical stage – avarice, and desire to get rich, are the ruling passions. But the progress of capitalist production not only creates a world of delights; it lays open, in speculation and the credit system, a thousand sources of sudden enrichment. When a certain stage of development has been reached, a conventional degree of prodigality, which is also an exhibition of wealth, and consequently a source of credit, becomes a business necessity to the “unfortunate” capitalist. Luxury enters into capital’s expenses of representation. Moreover, the capitalist gets rich, not like the miser, in proportion to his personal labour and restricted consumption, but at the same rate as he squeezes out the labour power of others, and enforces on the labourer abstinence from all life’s enjoyments. Although, therefore, the prodigality of the capitalist never possesses the bona fide character of the open-handed feudal lord’s prodigality, but, on the contrary, has always lurking behind it the most sordid avarice and the most anxious calculation, yet his expenditure grows with his accumulation, without the one necessarily restricting the other. But along with this growth, there is at the same time developed in his breast, a Faustian conflict between the passion for accumulation, and the desire for enjoyment […]

Accumulate, accumulate! That is Moses and the prophets! “Industry furnishes the material which saving accumulates”. Therefore, save, save, i.e., reconvert the greatest possible portion of surplus value, or surplus product

into capital! Accumulation for accumulation's sake, production for production's sake: by this formula classical economy expressed the historical mission of the bourgeoisie, and did not for a single instant deceive itself over the birth-throes of wealth. But what avails lamentation in the face of historical necessity? […]

## SECTION 4.— CIRCUMSTANCES THAT, INDEPENDENTLY OF THE PROPORTIONAL DIVISION OF SURPLUS VALUE INTO CAPITAL AND REVENUE, DETERMINE THE AMOUNT OF ACCUMULATION. DEGREE OF EXPLOITATION OF LABOUR POWER. PRODUCTIVITY OF LABOUR. GROWING DIFFERENCE IN AMOUNT BETWEEN CAPITAL EMPLOYED AND CAPITAL CONSUMED. MAGNITUDE OF CAPITAL ADVANCED

[… An] important factor in the accumulation of capital is the degree of productivity of social labour. With the productive power of labour increases the mass of the products, in which a certain value, and, therefore, a surplus value of a given magnitude, is embodied. The rate of surplus value remaining the same or even falling, so long as it only falls more slowly, than the productive power of labour rises, the mass of the surplus product increases. The division of this product into revenue and additional capital remaining the same, the consumption of the capitalist may, therefore, increase without any decrease in the fund of accumulation. The relative magnitude of the accumulation fund may even increase at the expense of the consumption fund, whilst the cheapening of commodities places at the disposal of the capitalist as many means of enjoyment as formerly, or even more than formerly. But hand-in-hand with the increasing productivity of labour, goes, as we have seen, the cheapening of the labourer, therefore a higher rate of surplus value, even when the real wages are rising. The latter never rise proportionally to the productive power of labour. The same value in variable capital therefore sets in movement more labour power, and, therefore, more labour. The same value in constant capital is embodied in more means of production, i.e., in more instruments of labour, materials of labour and auxiliary materials; it therefore also supplies more elements for the production both of use value and of value, and with these more absorbers of labour. The value of the additional capital, therefore, remaining the same or even diminishing, accelerated accumulation still takes place. Not only does the scale of reproduction materially extend, but the production of surplus value increases more rapidly than the value of the additional capital […]

Labour transmits to its product the value of the means of production consumed by it. On the other hand, the value and mass of the means of production set in motion by a given quantity of labour increase as the labour

becomes more productive. Though the same quantity of labour adds always to its products only the same sum of new value, still the old capital value, transmitted by the labour to the products, increases with the growing productivity of labour. An English and a Chinese spinner, e.g., may work the same number of hours with the same intensity; then they will both in a week create equal values. But in spite of this equality, an immense difference will obtain between the value of the week's product of the Englishman, who works with a mighty automaton, and that of the Chinaman, who has but a spinning-wheel. In the same time as the Chinaman spins one pound of cotton, the Englishman spins several hundreds of pounds. A sum, many hundred times as great, of old values swells the value of his product, in which those re-appear in a new, useful form, and can thus function anew as capital […]

With a given degree of exploitation of labour power, the mass of the surplus value produced is determined by the number of workers simultaneously exploited; and this corresponds, although in varying proportions, with the magnitude of the capital. The more, therefore, capital increases by means of successive accumulations, the more does the sum of the value increase that is divided into consumption fund and accumulation fund. The capitalist can, therefore, live a more jolly life, and at the same time show more "abstinence". And, finally, all the springs of production act with greater elasticity, the more its scale extends with the mass of the capital advanced.

## C h a p t e r 25: THE GENERAL LAW OF CAPITALIST ACCUMULATION

### SECTION 1.- THE INCREASED DEMAND FOR LABOUR POWER THAT ACCOMPANIES ACCUMULATION, THE COMPOSITION OF CAPITAL REMAINING THE SAME

In this chapter we consider the influence of the growth of capital on the lot of the labouring class. The most important factor in this inquiry is the composition of capital and the changes it undergoes in the course of the process of accumulation.

The **composition of capital** is to be understood in a two-fold sense. On the side of value, it is determined by the **proportion in which it is divided into constant capital or value of the means of production, and variable capital or value of labour power**, the sum total of wages. On the side of material, as it functions in the process of production, all capital is divided into means of production and living labour power. This latter composition is determined by the relation between the mass of the means of production employed, on the one hand, and the mass of labour necessary for

their employment on the other. I call the former the **day labourer**, the latter the **technical composition of capital**.

Between the two there is a strict correlation. To express this, I call the value composition of capital, in so far as it is determined by its technical composition and mirrors the changes of the latter, the **organic composition of capital**. Wherever I refer to the composition of capital, **without further qualification, its organic composition is always understood**.

The many individual capitals invested in a particular branch of production have, one with another, more or less different compositions. **The average of their individual compositions gives us the composition of the total capital in this branch of production. Lastly, the average of these averages, in all branches of production, gives us the composition of the total social capital of a country**, and with this alone are we, in the last resort, concerned in the following investigation […]

As simple reproduction constantly reproduces the capital relation itself, i.e., the relation of capitalists on the one hand, and wage workers on the other, so reproduction on a progressive scale, i.e., accumulation, reproduces the capital relation on a progressive scale, more capitalists or larger capitalists at this pole, more wage workers at that. The reproduction of a mass of labour power, which must incessantly re-incorporate itself with capital for that capital's self-expansion; which cannot get free from capital, and whose enslavement to capital is only concealed by the variety of individual capitalists to whom it sells itself, this reproduction of labour power forms, in fact, an essential of the reproduction of capital itself. Accumulation of capital is, therefore, increase of the proletariat […]

In the controversies on this subject the chief fact has generally been overlooked, viz., the *differentia specifica* of capitalistic production. Labour power is sold today, not with a view of satisfying, by its service or by its product, the personal needs of the buyer. **His aim is augmentation of his capital, production of commodities containing more labour than he pays for**, containing therefore a portion of value that costs him nothing, and that is nevertheless realised when the commodities are sold. **Production of surplus value is the absolute law of this mode of production**. Labour power is only saleable so far as it preserves the means of production in their capacity of capital, reproduces its own value as capital, and yields in unpaid labour a source of additional capital […]

Wages, as we have seen, by their very nature, always imply the performance of a certain quantity of unpaid labour on the part of the labourer. Altogether, irrespective of the case of a rise of wages with a falling price of labour, etc., such an increase only means at best a quantitative diminution of the unpaid labour that the worker has to supply. This diminution can never reach the point at which it would threaten the system itself. Apart from

violent conflicts as to the rate of wages (and Adam Smith has already shown that in such a conflict, taken on the whole, the master is always master), a rise in the price of labour resulting from accumulation of capital implies the following alternative:

Either the price of labour keeps on rising, because its rise does not interfere with the progress of accumulation. In this there is nothing wonderful, for, says Adam Smith, “after these (profits) are diminished, stock may not only continue to increase, but to increase much faster than before.... A great stock, though with small profits, generally increases faster than a small stock with great profits”. […] In this case it is evident that a diminution in the unpaid labour in no way interferes with the extension of the domain of capital. — Or, on the other hand, accumulation slackens in consequence of the rise in the price of labour, because the stimulus of gain is blunted. The rate of accumulation lessens; but with its lessening, the primary cause of that lessening vanishes, i.e., the disproportion between capital and exploitable labour power. The mechanism of the process of capitalist production removes the very obstacles that it temporarily creates. The price of labour falls again to a level corresponding with the needs of the self-expansion of capital, whether the level be below, the same as, or above the one which was normal before the rise of wages took place. We see thus: In the first case, it is not the diminished rate either of the absolute, or of the proportional, increase in labour power, or labouring population, which causes capital to be in excess, but conversely the excess of capital that makes exploitable labour power insufficient. In the second case, it is not the increased rate either of the absolute, or of the proportional, increase in labour power, or labouring population, that makes capital insufficient; but, conversely, the relative diminution of capital that causes the exploitable labour power, or rather its price, to be in excess. It is these absolute movements of the accumulation of capital which are reflected as relative movements of the mass of exploitable labour power, and therefore seem produced by the latter’s own independent movement. To put it mathematically: the rate of accumulation is the independent, not the dependent, variable; the rate of wages, the dependent, not the independent, variable […]

The law of capitalist production, that is at the bottom of the pretended “natural law of population”, reduces itself simply to this: The correlation between accumulation of capital and rate of wages is nothing else than the correlation between the unpaid labour transformed into capital, and the additional paid labour necessary for the setting in motion of this additional capital. It is therefore in no way a relation between two magnitudes, independent one of the other: on the one hand, the magnitude of the capital; on the other, the number of the labouring population; it is rather, at bottom, only the relation between the unpaid and the paid labour of the same

labouring population. If the quantity of unpaid labour supplied by the working class, and accumulated by the capitalist class, increases so rapidly that its conversion into capital requires an extraordinary addition of paid labour, then wages rise, and, all other circumstances remaining equal, the unpaid labour diminishes in proportion. But as soon as this diminution touches the point at which the surplus labour that nourishes capital is no longer supplied in normal quantity, a reaction sets in: a smaller part of revenue is capitalised, accumulation lags, and the movement of rise in wages receives a check. The rise of wages therefore is confined within limits that not only leave intact the foundations of the capitalistic system, but also secure its reproduction on a progressive scale. The law of capitalistic accumulation, metamorphosed by economists into pretended law of Nature, in reality merely states that the very nature of accumulation excludes every diminution in the degree of exploitation of labour, and every rise in the price of labour, which could seriously imperil the continual reproduction, on an ever-enlarging scale, of the capitalistic relation. It cannot be otherwise in a mode of production in which the labourer exists to satisfy the needs of self-expansion of existing values, instead of, on the contrary, material wealth existing to satisfy the needs of development on the part of the labourer. As, in religion, man is governed by the products of his own brain, so in capitalistic production, he is governed by the products of his own hand […]

## S E C T I O N 2.—RELATIVE DIMINUTION OF THE VARIABLE PART OF CAPITAL SIMULTANEOUSLY WITH THE PROGRESS OF ACCUMULATION AND OF THE CONCENTRATION THAT ACCOMPANIES IT

[…] On the basis of the production of commodities, where the means of production are the property of private persons, and where the artisan therefore either produces commodities, isolated from and independent of others, or sells his labour power as a commodity, because he lacks the means for independent industry, co-operation on a large scale can realise itself only in the increase of individual capitals, only in proportion as the means of social production and the means of subsistence are transformed into the private property of capitalists. The basis of the production of commodities can admit of production on a large scale in the capitalistic form alone. A certain accumulation of capital, in the hands of individual producers of commodities, forms therefore the necessary preliminary of the specifically capitalistic mode of production. We had, therefore, to assume that this occurs during the transition from handicraft to capitalistic industry. It may be called **primitive accumulation**, because it is the historic basis, instead of the historic result of specifically capitalist production. How it itself originates,

we need not here inquire as yet. It is enough that it forms the starting point. But all methods for raising the social productive power of labour that are developed on this basis, are at the same time methods for the increased production of surplus value or surplus product, which in its turn is the formative element of accumulation. They are, therefore, at the same time methods of the production of capital by capital, or methods of its accelerated accumulation. The continual re-transformation of surplus value into capital now appears in the shape of the increasing magnitude of the capital that enters into the process of production. This in turn is the basis of an extended scale of production, of the methods for raising the productive power of labour that accompany it, and of accelerated production of surplus value. If, therefore, a certain degree of accumulation of capital appears as a condition of the specifically capitalist mode of production, the latter causes conversely an accelerated accumulation of capital. With the accumulation of capital, therefore, the specifically capitalistic mode of production develops, and with the capitalist mode of production the accumulation of capital. Both these economic factors bring about, in the compound ratio of the impulses they reciprocally give one another, that change in the technical composition of capital by which the variable constituent becomes always smaller and smaller as compared with the constant.

Every individual capital is a larger or smaller concentration of means of production, with a corresponding command over a larger or smaller labour-army. Every accumulation becomes the means of new accumulation. With the increasing mass of wealth which functions as capital, accumulation increases the **concentration** of that wealth in the hands of individual capitalists, and thereby widens the basis of production on a large scale and of the specific methods of capitalist production. The growth of social capital is effected by the growth of many individual capitals. All other circumstances remaining the same, individual capitals, and with them the concentration of the means of production, increase in such proportion as they form aliquot parts of the total social capital. At the same time portions of the original capitals disengage themselves and function as new independent capitals. Besides other causes, the division of property, within capitalist families, plays a great part in this. With the accumulation of capital, therefore, the number of capitalists grows to a greater or less extent. Two points characterise this kind of **concentration** which grows directly out of, or rather is identical with, accumulation. First: The increasing concentration of the social means of production in the hands of individual capitalists is, other things remaining equal, limited by the degree of increase of social wealth. Second: The part of social capital domiciled in each particular sphere of production is divided among many capitalists who face one another as independent commodity producers competing with each other. Accumulation and the concentration

accompanying it are, therefore, not only scattered over many points, but the increase of each functioning capital is thwarted by the formation of new and the sub-division of old capitals. Accumulation, therefore, presents itself on the one hand as increasing concentration of the means of production, and of the command over labour; on the other, as repulsion of many individual capitals one from another.

This splitting-up of the total social capital into many individual capitals or the repulsion of its fractions one from another, is counteracted by their attraction. This last does not mean that simple concentration of the means of production and of the command over labour, which is identical with accumulation. It is concentration of capitals already formed, destruction of their individual independence, expropriation of capitalist by capitalist, transformation of many small into few large capitals. This process differs from the former in this, that it only presupposes a change in the distribution of capital already to hand, and functioning; its field of action is therefore not limited by the absolute growth of social wealth, by the absolute limits of accumulation. Capital grows in one place to a huge mass in a single hand, because it has in another place been lost by many. This is **centralisation** proper, as distinct from accumulation and **concentration**.

The laws of this centralisation of capitals, or of the attraction of capital by capital, cannot be developed here. A brief hint at a few facts must suffice. The battle of competition is fought by cheapening of commodities. The cheapness of commodities demands, *caeteris paribus*, on the productiveness of labour, and this again on the scale of production. Therefore, the larger capitals beat the smaller. It will further be remembered that, with the development of the capitalist mode of production, there is an increase in the minimum amount of individual capital necessary to carry on a business under its normal conditions […]

Commensurately with the development of capitalist production and accumulation there develop **the two most powerful levers of centralisation — competition and credit** […]

## SECTION 3.— PROGRESSIVE PRODUCTION OF A RELATIVE SURPLUS POPULATION OR INDUSTRIAL RESERVE ARMY

The accumulation of capital, though originally appearing as its quantitative extension only, is effected, as we have seen, under a progressive qualitative change in its composition, under a constant increase of its constant, at the expense of its variable constituent.

The specifically capitalist mode of production, the development of the productive power of labour corresponding to it, and the change thence resulting in the organic composition of capital, do not merely keep pace with

the advance of accumulation, or with the growth of social wealth. They develop at a much quicker rate, because mere accumulation, the absolute increase of the total social capital, is accompanied by the centralisation of the individual capitals of which that total is made up; and because the change in the technological composition of the additional capital goes hand in hand with a similar change in the technological composition of the original capital […] With the growth of the total capital, its variable constituent or the labour incorporated in it, also does increase, but in a constantly diminishing proportion […] This accelerated relative diminution of the variable constituent, that goes along with the accelerated increase of the total capital, and moves more rapidly than this increase, takes the inverse form, at the other pole, of an apparently absolute increase of the labouring population, an increase always moving more rapidly than that of the variable capital or the means of employment. But in fact, it is capitalistic accumulation itself that constantly produces, and produces in the direct ratio of its own energy and extent, a relatively redundant population of labourers, i.e., a population of greater extent than suffices for the average needs of the self-expansion of capital, and therefore a surplus population […]

The labouring population therefore produces, along with the accumulation of capital produced by it, the means by which it itself is made relatively superfluous, is turned into a relative surplus population; and it does this to an always increasing extent. This is a law of population peculiar to the capitalist mode of production […] But if a surplus labouring population is a necessary product of accumulation or of the development of wealth on a capitalist basis, this surplus population becomes, conversely, the lever of capitalistic accumulation, nay, a condition of existence of the capitalist mode of production. It forms a disposable industrial reserve army, that belongs to capital quite as absolutely as if the latter had bred it at its own cost. Independently of the limits of the actual increase of population, it creates, for the changing needs of the self-expansion of capital, a mass of human material always ready for exploitation […]

The course characteristic of modern industry, viz., a decennial cycle (interrupted by smaller oscillations), of periods of average activity, production at high pressure, crisis and stagnation, depends on the constant formation, the greater or less absorption, and the re-formation of the industrial reserve army or surplus population. In their turn, the varying phases of the industrial cycle recruit the surplus population, and become one of the most energetic agents of its reproduction. This peculiar course of modern industry, which occurs in no earlier period of human history, was also impossible in the childhood of capitalist production. The composition of capital changed but very slowly. With its accumulation, therefore, there kept pace, on the whole, a corresponding growth in the demand for labour. Slow

as was the advance of accumulation compared with that of more modern times, it found a check in the natural limits of the exploitable labouring population, limits which could only be got rid of by forcible means to be mentioned later […] The whole form of the movement of modern industry depends, therefore, upon the constant transformation of a part of the labouring population into unemployed or half-employed hands

Capitalist production can by no means content itself with the quantity of disposable labour power which the natural increase of population yields. It requires for its free play an industrial reserve army independent of these natural limits […]

The number of labourers commanded by capital may remain the same, or even fall, while the variable capital increases. This is the case if the individual labourer yields more labour, and therefore his wages increase, and this although the price of labour remains the same or even falls, only more slowly than the mass of labour rises. Increase of variable capital, in this case, becomes an index of more labour, but not of more labourers employed. It is the absolute interest of every capitalist to press a given quantity of labour out of a smaller, rather than a greater number of labourers, if the cost is about the same. In the latter case, the outlay of constant capital increases in proportion to the mass of labour set in action; in the former that increase is much smaller. The more extended the scale of production, the stronger this motive. Its force increases with the accumulation of capital […]

If the means of production, as they increase in extent and effective power, become to a less extent means of employment of labourers, this state of things is again modified by the fact that in proportion as the productiveness of labour increases, capital increases its supply of labour more quickly than its demand for labourers. The overwork of the employed part of the working class swells the ranks of the reserve, whilst conversely the greater pressure that the latter by its competition exerts on the former, forces these to submit to overwork and to subjugation under the dictates of capital. The condemnation of one part of the working class to enforced idleness by the overwork of the other part, and the converse, becomes a means of enriching the individual capitalists, and accelerates at the same time the production of the industrial reserve army on a scale corresponding with the advance of social accumulation […]

## PART 8: THE SO-CALLED PRIMITIVE ACCUMULATION

### CHAPTER 26: THE SECRET OF PRIMITIVE ACCUMULATION

We have seen how money is changed into capital; how through capital surplus value is made, and from surplus value more capital. But the

accumulation of capital presupposes surplus value; surplus value presupposes capitalistic production; capitalistic production presupposes the pre-existence of considerable masses of capital and of labour power in the hands of producers of commodities. The whole movement, therefore, seems to turn in a vicious circle, out of which we can only get by supposing a primitive accumulation (previous accumulation of Adam Smith) preceding capitalistic accumulation; an accumulation not the result of the capitalistic mode of production, but its starting point [...]

In themselves money and commodities are no more capital than are the means of production and of subsistence. They want transforming into capital. But this transformation itself can only take place under certain circumstances that centre in this, viz., that two very different kinds of commodity possessors must come face to face and into contact; on the one hand, the owners of money, means of production, means of subsistence, who are eager to increase the sum of values they possess, by buying other people's labour power; on the other hand, free labourers, the sellers of their own labour power, and therefore the sellers of labour. **Free labourers, in the double sense that neither they themselves form part and parcel of the means of production, as in the case of slaves, bondsmen, etc., nor do the means of production belong to them, as in the case of peasant-proprietors; they are, therefore, free from, unencumbered by, any means of production of their own.** With this polarisation of the market for commodities, the fundamental conditions of capitalist production are given. The capitalist system presupposes the complete separation of the labourers from all property in the means by which they can realize their labour. As soon as capitalist production is once on its own legs, it not only maintains this separation, but reproduces it on a continually extending scale. **The process, therefore, that clears the way for the capitalist system, can be none other than the process which takes away from the labourer the possession of his means of production; a process that transforms, on the one hand, the social means of subsistence and of production into capital, on the other, the immediate producers into wage labourers. The so-called primitive accumulation, therefore, is nothing else than the historical process of divorcing the producer from the means of production. It appears as primitive, because it forms the prehistoric stage of capital and of the mode of production corresponding with it**.

The economic structure of capitalist society has grown out of the economic structure of feudal society. The dissolution of the latter set free the elements of the former.

The immediate producer, the labourer, could only dispose of his own person after he had ceased to be attached to the soil and ceased to be the slave, serf, or bondsman of another. To become a free seller of labour power,

who carries his commodity wherever he finds a market, he must further have escaped from the regime of the guilds, their rules for apprentices and journeymen, and the impediments of their labour regulations. **Hence, the historical movement which changes the producers into wage workers, appears, on the one hand, as their emancipation from serfdom and from the fetters of the guilds, and this side alone exists for our bourgeois historians. But, on the other hand, these new freedmen became sellers of themselves only after they had been robbed of all their own means of production, and of all the guarantees of existence afforded by the old feudal arrangements.** And the history of this, their expropriation, is written in the annals of mankind in letters of blood and fire.

The industrial capitalists, these new potentates, had on their part not only to displace the guild masters of handicrafts, but also the feudal lords, the possessors of the sources of wealth. In this respect, their conquest of social power appears as the fruit of a victorious struggle both against feudal lordship and its revolting prerogatives, and against the guilds and the fetters they laid on the free development of production and the free exploitation of man by man. The *chevaliers d'industrie*, however, only succeeded in supplanting the *chevaliers* of the sword by making use of events of which they themselves were wholly innocent. They have risen by means as vile as those by which the Roman freedman once on a time made himself the master of his *patronus*.

The starting point of the development that gave rise to the wage labourer as well as to the capitalist, was the servitude of the labourer. The advance consisted in a change of form of this servitude, in the transformation of feudal exploitation into capitalist exploitation. To understand its march, we need not go back very far. Although we come across the first beginnings of capitalist production as early as the 14th or 15th century, sporadically, in certain towns of the Mediterranean, the capitalistic era dates from the 16th century. Wherever it appears, the abolition of serfdom has been long effected, and the highest development of the Middle Ages, the existence of sovereign towns, has been long on the wane.

In the history of primitive accumulation, all revolutions are epoch-making that act as levers for the capital class in course of formation; but, above all, those moments when great masses of men are suddenly and forcibly torn from their means of subsistence, and hurled as free and "unattached" proletarians on the labour market. **The expropriation of the agricultural producer, of the peasant, from the soil, is the basis of the whole process.** The history of this expropriation, in different countries, assumes different aspects, and runs through its various phases in different orders of succession, and at different periods. In England alone, which we take as our example, has it the classic form.

## CHAPTER 27: EXPROPRIATION OF THE AGRICULTURAL POPULATION FROM THE LAND

In England, serfdom had practically disappeared in the last part of the 14th century. The immense majority of the population consisted then, and to a still larger extent, in the 15th century, of free peasant proprietors, whatever was the feudal title under which their right of property was hidden. In the larger seignorial domains, the old bailiff, himself a serf, was displaced by the free farmer. The wage labourers of agriculture consisted partly of peasants, who utilised their leisure time by working on the large estates, partly of an independent special class of wage labourers, relatively and absolutely few in numbers. The latter also were practically at the same time peasant farmers, since, besides their wages, they had allotted to them arable land to the extent of 4 or more acres, together with their cottages. Besides they, with the rest of the peasants, enjoyed the usufruct of the common land, which gave pasture to their cattle, furnished them with timber, fire-wood, turf, etc. In all countries of Europe, feudal production is characterised by division of the soil amongst the greatest possible number of subfeudatories. The might of the feudal lord, like that of the sovereign, depended not on the length of his rent roll, but on the number of his subjects, and the latter depended on the number of peasant proprietors. Although, therefore, the English land, after the Norman Conquest, was distributed in gigantic baronies, one of which often included some 900 of the old Anglo-Saxon lordships, it was bestrewn with small peasant properties, only here and there interspersed with great seignorial domains. Such conditions, together with the prosperity of the towns so characteristic of the 15th century, allowed of that wealth of the people which Chancellor Fortescue so eloquently paints in his "*Laudibus legum Angliae*"; but it excluded the possibility of capitalistic wealth.

The prelude of the revolution that laid the foundation of the capitalist mode of production, was played in the last third of the 15th, and the first decade of the 16th century. A mass of free proletarians was hurled on the labour market by the breaking-up of the bands of feudal retainers, who, as Sir James Steuart well says, "everywhere uselessly filled house and castle". Although the royal power, itself a product of bourgeois development, in its strife after absolute sovereignty forcibly hastened on the dissolution of these bands of retainers, it was by no means the sole cause of it. In insolent conflict with king and parliament, the great feudal lords created an incomparably larger proletariat by the forcible driving of the peasantry from the land, to which the latter had the same feudal right as the lord himself, and by the usurpation of the common lands. The rapid rise of the Flemish wool manufactures, and the corresponding rise in the price of wool in England,

gave the direct impulse to these evictions. The old nobility had been devoured by the great feudal wars. The new nobility was the child of its time, for which money was the power of all powers. Transformation of arable land into sheep-walks was, therefore, its cry [...] In his history of Henry VII, Bacon says: “Inclosures at that time (1489) began to be more frequent, whereby arable land (which could not be manured without people and families) was turned into pasture, which was easily rid by a few herdsmen; and tenancies for years, lives, and at will (whereupon much of the yeomanry lived) were turned into demesnes” [...]

The process of forcible expropriation of the people received in the 16th century a new and frightful impulse from the Reformation, and from the consequent colossal spoliation of the church property. The Catholic church was, at the time of the Reformation, feudal proprietor of a great part of the English land. The suppression of the monasteries, etc., hurled their inmates into the proletariat. The estates of the church were to a large extent given away to rapacious royal favourites, or sold at a nominal price to speculating farmers and citizens, who drove out, en masse, the hereditary sub-tenants and threw their holdings into one. The legally guaranteed property of the poorer folk in a part of the church’s tithes was tacitly confiscated [...]

Even in the last decade of the 17th century, the yeomanry, the class of independent peasants, were more numerous than the class of farmers. They had formed the backbone of Cromwell’s strength, and, even according to the confession of Macaulay, stood in favourable contrast to the drunken squires and to their servants, the country clergy, who had to marry their masters’ cast-off mistresses. About 1750, the yeomanry had disappeared, and so had, in the last decade of the 18th century, the last trace of the common land of the agricultural labourer. We leave on one side here the purely economic causes of the agricultural revolution. We deal only with the forcible means employed [...]

The “Glorious Revolution” brought into power, along with William of Orange, the landlord and capitalist appropriators of surplus value. They inaugurated the new era by practising on a colossal scale thefts of state lands, thefts that had been hitherto managed more modestly. These estates were given away, sold at a ridiculous figure, or even annexed to private estates by direct seizure. All this happened without the slightest observation of legal etiquette. The Crown lands thus fraudulently appropriated, together with the robbery of the Church estates, as far as these had not been lost again during the republican revolution, form the basis of the today princely domains of the English oligarchy. The bourgeois capitalists favoured the operation with the view, among others, to promoting free trade in land, to extending the domain of modern agriculture on the large farm-system, and to increasing their supply of the free agricultural proletarians ready to hand. Besides, the new

landed aristocracy was the natural ally of the new bankocracy, of the newly-hatched haute finance, and of the large manufacturers, then depending on protective duties.

Communal property – always distinct from the State property just dealt with – was an old Teutonic institution which lived on under cover of feudalism. We have seen how the forcible usurpation of this, generally accompanied by the turning of arable into pasture land, begins at the end of the 15th and extends into the 16th century. But, at that time, the process was carried on by means of individual acts of violence against which legislation, for a hundred and fifty years, fought in vain. The advance made by the 18th century shows itself in this, that the law itself becomes now the instrument of the theft of the people's land, although the large farmers make use of their little independent methods as well. The parliamentary form of the robbery is that of Acts for enclosures of Commons, in other words, decrees by which the landlords grant themselves the people's land as private property, decrees of expropriation of the people [...]

In the 19th century, the very memory of the connexion between the agricultural labourer and the communal property had, of course, vanished [...]

The spoliation of the church's property, the fraudulent alienation of the State domains, the robbery of the common lands, the usurpation of feudal and clan property, and its transformation into modern private property under circumstances of reckless terrorism, were just so many idyllic methods of primitive accumulation. They conquered the field for capitalistic agriculture, made the soil part and parcel of capital, and created for the town industries the necessary supply of a "free" and outlawed proletariat […]

## CHAPTER 31: GENESIS OF THE INDUSTRIAL CAPITALIST

The genesis of the industrial capitalist did not proceed in such a gradual way as that of the farmer. Doubtless many small guild-masters, and yet more independent small artisans, or even wage labourers, transformed themselves into small capitalists, and (by gradually extending exploitation of wage labour and corresponding accumulation) into full-blown capitalists. In the infancy of capitalist production, things often happened as in the infancy of medieval towns, where the question, which of the escaped serfs should be master and which servant, was in great part decided by the earlier or later date of their flight. The snail's pace of this method corresponded in no wise with the commercial requirements of the new world market that the great discoveries of the end of the 15th century created. But the Middle Ages had handed down two distinct forms of capital, which mature in the most different economic social formations, and which before the era of the capitalist mode of production, are considered as capital *quand même* —

usurer's capital and merchant's capital [...]

The money capital formed by means of usury and commerce was prevented from turning into industrial capital, in the country by the feudal constitution, in the towns by the guild organisation. These fetters vanished with the dissolution of feudal society, with the expropriation and partial eviction of the country population. The new manufactures were established at sea-ports, or at inland points beyond the control of the old municipalities and their guilds. Hence in England an embittered struggle of the corporate towns against these new industrial nurseries.

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins, signalised the rosy dawn of the era of capitalist production. These idyllic proceedings are the chief momenta of primitive accumulation. On their heels treads the commercial war of the European nations, with the globe for a theatre [...]

The different momenta of primitive accumulation distribute themselves now, more or less in chronological order, particularly over Spain, Portugal, Holland, France, and England. In England at the end of the 17th century, they arrive at a systematical combination, embracing the colonies, the national debt, the modern mode of taxation, and the protectionist system. These methods depend in part on brute force, e.g., the colonial system. But, they all employ the power of the State, the concentrated and organised force of society, to hasten, hot-house fashion, the process of transformation of the feudal mode of production into the capitalist mode, and to shorten the transition. **Force is the midwife of every old society pregnant with a new one. It is itself an economic power** [...]

The colonial system ripened, like a hot-house, trade and navigation. The "societies Monopolia" of Luther were powerful levers for concentration of capital. The colonies secured a market for the budding manufactures, and, through the monopoly of the market, an increased accumulation. The treasures captured outside Europe by undisguised looting, enslavement, and murder, floated back to the mother-country and were there turned into capital. Holland, which first fully developed the colonial system, in 1648 stood already in the acme of its commercial greatness [...] Today industrial supremacy implies commercial supremacy. In the period of manufacture properly so called, it is, on the other hand, the commercial supremacy that gives industrial predominance. Hence the preponderant rôle that the colonial system plays at that time [...]

The system of public credit, i.e., of national debts, whose origin we discover in Genoa and Venice as early as the Middle Ages, took possession of Europe generally during the manufacturing period. The colonial system with

its maritime trade and commercial wars served as a forcing-house for it. Thus it first took root in Holland. National debts, i.e., the alienation of the state — whether despotic, constitutional or republican — marked with its stamp the capitalistic era [...]

The public debt becomes one of the most powerful levers of primitive accumulation. As with the stroke of an enchanter's wand, it endows barren money with the power of breeding and thus turns it into capital, without the necessity of its exposing itself to the troubles and risks inseparable from its employment in industry or even in usury. The state creditors actually give nothing away, for the sum lent is transformed into public bonds, easily negotiable, which go on functioning in their hands just as so much hard cash would. But further, apart from the class of lazy annuitants thus created, and from the improvised wealth of the financiers, middlemen between the government and the nation [,] the national debt has given rise to joint-stock companies, to dealings in negotiable effects of all kinds, and to agiotage, in a word to stock-exchange gambling and the modern bankocracy. At their birth the great banks, decorated with national titles, were only associations of private speculators, who placed themselves by the side of governments, and, thanks to the privileges they received, were in a position to advance money to the State. Hence the accumulation of the national debt has no more infallible measure than the successive rise in the stock of these banks [...]

With the national debt arose an international credit system, which often conceals one of the sources of primitive accumulation in this or that people. Thus the villainies of the Venetian thieving system formed one of the secret bases of the capital-wealth of Holland to whom Venice in her decadence lent large sums of money. So also was it with Holland and England. By the beginning of the 18th century the Dutch manufactures were far outstripped. Holland had ceased to be the nation preponderant in commerce and industry. One of its main lines of business, therefore, from 1701-1776, is the lending out of enormous amounts of capital, especially to its great rival England. The same thing is going on today between England and the United States. A great deal of capital, which appears today in the United States without any certificate of birth, was yesterday, in England, the capitalised blood of children.

As the national debt finds its support in the public revenue, which must cover the yearly payments for interest, etc., the modern system of taxation was the necessary complement of the system of national loans. The loans enable the government to meet extraordinary expenses, without the tax-payers feeling it immediately, but they necessitate, as a consequence, increased taxes. On the other hand, the raising of taxation caused by the accumulation of debts contracted one after another, compels the government always to have recourse to new loans for new extraordinary expenses.

Modern fiscality, whose pivot is formed by taxes on the most necessary means of subsistence (thereby increasing their price), thus contains within itself the germ of automatic progression. Overtaxation is not an incident, but rather a principle [...]

Colonial system, public debts, heavy taxes, protection, commercial wars, etc., these children of the true manufacturing period, increase gigantically during the infancy of modern industry [...]

## CHAPTER 32: HISTORICAL TENDENCY OF CAPITALIST ACCUMULATION

What does the primitive accumulation of capital, i.e., its historical genesis, resolve itself into? In so far as it is not immediate transformation of slaves and serfs into wage labourers, and therefore a mere change of form, it only means the expropriation of the immediate producers, i.e., the dissolution of private property based on the labour of its owner. Private property, as the antithesis to social, collective property, exists only where the means of labour and the external conditions of labour belong to private individuals. But according as these private individuals are labourers or not labourers, private property has a different character. The numberless shades, that it at first sight presents, correspond to the intermediate stages lying between these two extremes. The private property of the labourer in his means of production is the foundation of petty industry, whether agricultural, manufacturing, or both; petty industry, again, is an essential condition for the development of social production and of the free individuality of the labourer himself. Of course, this petty mode of production exists also under slavery, serfdom, and other states of dependence. But it flourishes, it lets loose its whole energy, it attains its adequate classical form, only where the labourer is the private owner of his own means of labour set in action by himself: the peasant of the land which he cultivates, the artisan of the tool which he handles as a virtuoso. This mode of production presupposes parcelling of the soil and scattering of the other means of production. As it excludes the concentration of these means of production, so also it excludes co-operation, division of labour within each separate process of production, the control over, and the productive application of the forces of Nature by society, and the free development of the social productive powers. It is compatible only with a system of production, and a society, moving within narrow and more or less primitive bounds. To perpetuate it would be, as Pecqueur rightly says, “to decree universal mediocrity". At a certain stage of development, it brings forth the material agencies for its own dissolution. From that moment new forces and new passions spring up in the bosom of society; but the old social organisation fetters them and keeps them down. It must be annihilated; it is

annihilated. Its annihilation, the transformation of the individualised and scattered means of production into socially concentrated ones, of the pigmy property of the many into the huge property of the few, the expropriation of the great mass of the people from the soil, from the means of subsistence, and from the means of labour, this fearful and painful expropriation of the mass of the people forms the prelude to the history of capital. It comprises a series of forcible methods, of which we have passed in review only those that have been epoch-making as methods of the primitive accumulation of capital. The expropriation of the immediate producers was accomplished with merciless Vandalism, and under the stimulus of passions the most infamous, the most sordid, the pettiest, the most meanly odious. Self-earned private property, that is based, so to say, on the fusing together of the isolated, independent labouring individual with the conditions of his labour, is supplanted by capitalistic private property, which rests on exploitation of the nominally free labour of others, i.e., on wage labour.

As soon as this process of transformation has sufficiently decomposed the old society from top to bottom, as soon as the labourers are turned into proletarians, their means of labour into capital, as soon as the capitalist mode of production stands on its own feet, then the further socialisation of labour and further transformation of the land and other means of production into socially exploited and, therefore, common means of production, as well as the further expropriation of private proprietors, takes a new form. That which is now to be expropriated is no longer the labourer working for himself, but the capitalist exploiting many labourers. This expropriation is accomplished by the action of the immanent laws of capitalistic production itself, by the centralisation of capital. One capitalist always kills many. Hand in hand with this centralisation, or this expropriation of many capitalists by few, develop, on an ever-extending scale, the co-operative form of the labour process, the conscious technical application of science, the methodical cultivation of the soil, the transformation of the instruments of labour into instruments of labour only usable in common, the economising of all means of production by their use as means of production of combined, socialised labour, the entanglement of all peoples in the net of the world market, and with this, the international character of the capitalistic regime. Along with the constantly diminishing number of the magnates of capital, who usurp and monopolise all advantages of this process of transformation, grows the mass of misery, oppression, slavery, degradation, exploitation; but with this too grows the revolt of the working class, a class always increasing in numbers, and disciplined, united, organised by the very mechanism of the process of capitalist production itself. The monopoly of capital becomes a fetter upon the mode of production, which has sprung up and flourished along with, and under it. Centralisation of the means of production and socialisation of labour

at last reach a point where they become incompatible with their capitalist integument. This integument is burst asunder. The knell of capitalist private property sounds. The expropriators are expropriated.

The capitalist mode of appropriation, the result of the capitalist mode of production, produces capitalist private property. This is the first negation of individual private property, as founded on the labour of the proprietor. But capitalist production begets, with the inexorability of a law of Nature, its own negation. It is the negation of negation. This does not re-establish private property for the producer, but gives him individual property based on the acquisition of the capitalist era: i.e., on co-operation and the possession in common of the land and of the means of production.

The transformation of scattered private property, arising from individual labour, into capitalist private property is, naturally, a process, incomparably more protracted, violent, and difficult, than the transformation of capitalistic private property, already practically resting on socialised production, into socialised property. In the former case, we had the expropriation of the mass of the people by a few usurpers; in the latter, we have the expropriation of a few usurpers by the mass of the people [...]

# CAPITAL

## BOOK 2:
## THE PROCESS OF CIRCULATION OF CAPITAL

# PART 1: THE METAMORPHOSES OF CAPITAL AND THEIR CIRCUITS

## CHAPTER 1: THE CIRCUIT OF MONEY CAPITAL

The circular movement of capital takes place in three stages, which, according to the presentation in Book I, form the following series:

*First stage*: The capitalist appears as a buyer on the commodity- and the labour market; his money is transformed into commodities, or it goes through the circulation act M — C.

*Second Stage*: Productive consumption of the purchased commodities by the capitalist. He acts as a capitalist producer of commodities; his capital passes through the process of production. The result is a commodity of more value than that of the elements entering into its production.

*Third Stage*: The capitalist returns to the market as a seller; his commodities are turned into money; or they pass through the circulation act C — M.

Hence the formula for the circuit of money capital is: M — C ... P ... C' — M', the dots indicating that the process of circulation is interrupted, and C' and M' designating C and M increased by surplus value.

The first and third stages were discussed in Book I only in so far as this was necessary for the understanding of the second stage, the process of production of capital. For this reason, the various forms which capital takes on in its different stages, and which now assumes and now strips off in the repetition of its circuit, were not considered. These forms are now the direct object of our study.

In order to conceive these forms in their pure state, one must first of all discard all factors which have nothing to do with the changing or building of forms as such. It is therefore taken for granted here not only that the commodities are sold at their values but also that this takes place under the same conditions throughout. Likewise disregarded therefore are any changes of value which might occur during the movement in circuits.

### I. FIRST STAGE. M—C

M — C represents the conversion of a sum of money into a sum of commodities; the purchaser transforms his money into commodities, the sellers transform their commodities into money. What renders this act of the general circulation of commodities simultaneously a functionally definite

section in independent circuit of some individual capital is primarily not the form of the act but its material content, the specific use-character of the commodities which change places with the money. These commodities are on the one hand means of production, on the other labour power, material and personal factors in the production of commodities whose specific nature must of course correspond to the special kind of articles to be manufactured. If we call labour power L, and the means of production MP, then the sum of commodities to be bought, C, is equal to L + MP, or more briefly C $< ^{L.}_{MP}$ . M — C, considered as to its substance is therefore represented by M — C $< ^{L.}_{MP}$ , that is to say M — C is composed of M — L and M — MP. The sum of money M is separated into two parts, one of which buys labour power, the other means of production. These two series of purchases belong to entirely different markets, the one to the commodity-market proper, the other to the labour market.

[… In] brief, value exists here in the condition or form of *productive capital*, which has the factor of creating value and surplus value. Let us call capital in this form P.

Now the value of P is equal to that of L + MP, it is equal to M exchanged for L and MP. M is the same capital value as P, only it has a different mode of existence, it is capital value in the state or form of money — *money capital*.

M — C, or its general form M — C, a sum of purchases of commodities, an act of the general circulation of commodities, is therefore at the same time — as a stage in the independent circuit of capital — a transformation of capital value from its money form into its productive form. More briefly, it is the transformation of *money capital* into *productive capital* […]

M — L is the characteristic moment in the transformation of money capital into productive capital, because it is the essential condition for the real transformation of value advanced in the form of money into capital, into a value producing surplus value. M — MP is necessary only for the purpose of realising the quantity of labour bought in the process M — L […]

[… Wages] are but a disguised form, a form in which for instance the price of one day's labour power presents itself as the price of the labour rendered fluent by this labour power in one day. The value produced by this labour power in, say, six hours of labour is thus expressed as the value of twelve hours' functioning or operation of the labour power.

[…] In order that capital may be able to arise and take control of production, a definite stage in the development of trade is assumed. This applies therefore also to the circulation of commodities, and hence to the production of commodities; for no articles can enter circulation as

commodities unless they are produced for sale, hence as commodities. But the production of commodities does not become the normal, dominant type of production until capitalist production serves as its basis […]

It is therefore quite clear that the formula for the circuit of money capital, M — C ... C' — M', is the matter-of-course form of the circuit of capital only on the basis of already developed capitalist production, because it presupposes the existence of a class of wage labourers on a social scale. We have seen that capitalist production does not only create commodities and surplus value, but also reproduces to an ever increasing extent the class of wage labourers, into whom it transforms the vast majority of direct producers. Since the first condition for its realisation is the permanent existence of a class of wage labourers, M — C ... P ... C' — M' presupposes a capital in the form of productive capital, and hence the form of the circuit of productive capital.

## II. SECOND STAGE. FUNCTION OF PRODUCTIVE CAPITAL

The circuit of capital, which we have here considered, begins with the act of circulation M — C, the transmutation of money into commodities — purchase. Circulation must therefore be complemented by the antithetical metamorphosis C — M, the transformation of commodities into money — sale. But the direct result of M — C $\overset{L.}{<}_{MP}$ is the interruption of the circulation of the capital value advanced in the form of money. By the transformation of money capital into productive capital the capital value has acquired a bodily form in which it cannot continue to circulate but must enter into consumption, viz., into productive consumption. The use of labour power, labour, can be materialised only in the labour process. The capitalist cannot resell the labourer as a commodity because he is not his chattel slave and the capitalist has not bought anything except the right to use his labour power for a certain time. On the other hand the capitalist cannot use this labour power in any other way than by utilising means of production to create commodities with its help. The result of the first stage is therefore entrance into the second, the productive stage of capital.

This movement is represented by M — C $\overset{L.}{<}_{MP}$ ... P, in which the dots indicate that the circulation of capital is interrupted, while its circular movement continues, since it passes from the sphere of circulation of commodities into that of production. The first stage, the transformation of money capital into productive capital, is therefore merely the harbinger and introductory phase of the second stage, the functioning of productive capital.

[… The] same conditions which give rise to the basic condition of capitalist production, the existence of a class of wage workers, facilitate the

transition of all commodity production to capitalist commodity production. As capitalist production develops, it has a disintegrating, resolvent effect on all older forms of production, which, designed mostly to meet the direct needs of the producer, transform only the excess produced into commodities. Capitalist production makes the sale of products the main interest, at first apparently without affecting the mode of production itself. Such was for instance the first effect of capitalist world commerce on such nations as the Chinese, Indians, Arabs, etc. But, secondly, wherever it takes root capitalist production destroys all forms of commodity production which are based either on the self-employment of the producers, or merely on the sale of the excess product as commodities. Capitalist production first makes the production of commodities general and then, by degrees, transforms all commodity production into capitalist commodity production.

Whatever the social form of production, labourers and means of production always remain factors of it. But in a state of separation from each other either of these factors can be such only potentially. For production to go on at all they must unite. The specific manner in which this union is accomplished distinguishes the different economic epochs of the structure of society from one another. In the present case, the separation of the free worker from his means of production is the starting-point given, and we have seen how and under what conditions these two elements are united in the hands of the capitalist, namely, as the productive mode of existence of his capital. The actual process which the personal and material creators of commodities enter upon when thus brought together, the process of production, becomes therefore itself a function of capital, the capitalist process of production, the nature of which has been fully analysed in the first book of this work. Every enterprise engaged in commodity production becomes at the same time an enterprise exploiting labour power […]

Productive capital, in performing its functions, consumes its own component parts for the purpose of transforming them into a mass of products of a higher value. Since labour power acts merely as one of its organs, the excess of the product's value engendered by its surplus labour over and above the value of productive capital's constituent elements is also the fruit of capital. The surplus labour of labour power is the gratuitous labour performed for capital and thus forms surplus value for the capitalist, a value which costs him no equivalent return. The product is therefore not only a commodity, but a commodity pregnant with surplus value. Its value is equal to P + s, that is to say equal to the value of the productive capital P consumed in the production of the commodity plus the surplus values created by it. Let us assume that this commodity consists of 10,000 lbs. of yarn, and that means of production worth £372 and labour power worth £50 were consumed in the fabrication of this quantity of yarn. During the process of spinning, the

spinners transmitted to the yarn the value of the means of production consumed by their labour, amounting to £372, and at the same time they created, in proportion with the labour power expended by them, new value to the amount of, say, £128. The 10,000 lbs. of yarn therefore represent a value of £500.

### III. THIRD STAGE. C' -M'

[...] Suppose the commodity of the capitalist to consist of 10,000 lbs. of cotton yarn. If £372 represent the value of the means of production consumed in the spinning process, and new value to the amount of £128 has been created, the yarn has a value of £500, which is expressed in its price of the same amount. Suppose further that this price is realised by the sale C — M. What is it that makes of this simple act of all commodity circulation at the same time a capital-function? No change that takes place inside of it, neither in the use-character of the commodity — for it passes into the hands of the buyer as an object of use — nor in its value, for this value has not experienced any change of magnitude, but only of form. It first existed in the form of yarn, while now it exists in the form of money. Thus a substantial distinction is evident between the first stage M — C and the last stage C — M. There the advanced money functions as money capital, because it is transformed by means of the circulation into commodities of a specific use value. Here the commodities can serve as capital only to the extent that they bring this character with them in ready shape from the process of production before their circulation begins. During the spinning process, the spinners create yarn value to the amount of £128. Of this sum, say £50 represent to the capitalist merely an equivalent for his outlay for labour power, while £78 — when the degree of exploitation of labour power is 156 per cent — form surplus value. The value of the 10,000 lbs. of yarn therefore embodies first the value of the consumed productive capital P, the constant part of which amounts to £372 and the variable to £50, their sum being £422, equal to 8,440 lbs. of yarn. Now the value of the productive capital P is equal to C, the value of its constituent elements, which in the stage M — C confronted the capitalist as commodities in the hands of their sellers.

In the second place, however, the value of the yarn contains a surplus value of £78, equal to 1,560 lbs. of yarn. C as an expression of the value of the 10,000 lbs. of yarn is therefore equal to C plus ΔC, or C plus an increment of C (equal to £78), which we shall call c, since it exists in the same commodity form as now the original value C. The value of the 10,000 lbs. of yarn, equal to £500, is therefore represented by C + c = C'. What turns C, the expression of the value of 10,000 lbs. of yarn, into C' is not the absolute magnitude of its value (£500), for that is determined, as in the case of any

other C standing for the expression of the value of some other sum of commodities, by the quantity of labour embodied in it. It is its relative value magnitude, its value magnitude as compared with that of capital P consumed in its production. This value is contained in it plus the surplus value supplied by the productive capital. Its value is greater, exceeds that of the capital value by this surplus value c. The 10,000 lbs. of yarn are the bearers of the capital value expanded, enriched by this surplus value, and they are so by virtue of being the product of the capitalist process of production. C' expresses a value relation, the relation of the value of the commodities produced to that of the capital spent on their production, in other words, expresses the fact that its value is composed of capital value and surplus value. The 10,000 lbs. of yarn represent commodity capital, C', only because they are a converted form of the productive capital P, hence in a connection which exists originally only in the circuit of this individual capital, or only for the capitalist who produced the yarn with the help of his capital. It is, so to say, only an internal, not an external relation that turns the 10,000 lbs. of yarn in their capacity of vehicles of value into a commodity capital. They exhibit their capitalist birthmark not in the absolute magnitude of their value but in its relative magnitude, in the magnitude of their value as compared with that possessed by the productive capital embodied in them before it was transformed into commodities. If, then, these 10,000 lbs. of yarn are sold at their value of £500, this act of circulation, considered by itself, is identical with C — M, a mere transformation of an unchanging value from the form of a commodity into that of money. But as a special stage in the circuit of an individual capital, the same act is a realisation of the capital value embodied in the commodity to the amount of £422 plus the surplus value, likewise embodied in it, of £78. That is to say it represents C' — M', the transformation of the commodity capital from its commodity form into the money form [...]

The mass of commodities C', being the depository of the expanded capital, must furthermore pass in its entirety through the metamorphosis C' — M'. The quantity sold is here a main determinant. The individual commodity figures only as an integral part of the total mass. The £500 worth of value exists in the 10,000 lbs. of yarn. If the capitalist succeeds in selling only 7,440 lbs. at their value of £372, he has replaced only the value of his constant capital, the value of the expanded means of production. If he sells 8,440 lbs. he recovers only the value of the total capital advanced. He must sell more in order to realise some surplus value, and he must sell the entire 10,000 lbs. in order to realise the surplus value of £78 (1,560 lbs. of yarn). In £500 in money he receives merely an equivalent for the commodity sold. His transaction within the circulation is simply C — M. If he had paid his labourers £64 in wages instead of £50 his surplus value would only be £64 instead of £78, and the degree of exploitation would have been only 100 per

cent instead of 156. But the value of the yarn would not change; only the relation between its component parts would be different. The circulation act C — M would still represent the sale of 10,000 lbs. of yarn for £500, their value.

C' is equal to C + c (or £422 + £78). C equals the value of P, the productive capital, and this equals the value of M, the money advanced in M — C, the purchase of the elements of production, amounting to £422 in our example. If the mass of commodities is sold at its value, then C equals £422 and c equals £78, the value of the surplus product of 1,560 lbs. of yarn. If we call c, expressed in money, m, then C' — M' = (C + c) — (M + m), and **the circuit M — C ... P ... C' — M', in its expanded form, is therefore represented by M — C** $\begin{matrix} L \\ < \\ MP \end{matrix}$ **... P ... (C + c) — (M + m)**.

In the first stage the capitalist takes articles of consumption out of the commodity market proper and the labour market. In the third stage he throws commodities back, but only into one market, the commodity market proper. However the fact that he extracts from the market, by means of his commodities, a greater value than he threw upon it originally is due only to the circumstance that he throws more commodity value back upon it than he first drew out of it. He threw value M upon it and drew out of it the equivalent C; he throws C + c back upon it, and draws out of it the equivalent M + m.

M was in our example equal to the value of 8,440 lbs. of yarn. But he throws 10,000 lbs. of yarn on the market, consequently he returns a greater value than he took from it. On the other hand he threw this increased value on the market only because through the exploitation of labour power in the process of production he had created surplus value (as an aliquot part of the product expressed in surplus product). It is only by virtue of being the product of this process that the mass of commodities becomes commodity capital, the bearer of the expanded capital value […]

## IV. THE CIRCUIT AS A WHOLE

We have seen that the process of circulation is interrupted at the end of its first phase, M — **C** $\begin{matrix} L \\ < \\ MP \end{matrix}$, by P, in which the commodities L and MP bought in the market are consumed as the material and value components of productive capital. The product of this consumption is a new commodity, C', altered in respect of substance and value. The interrupted process of circulation, M — C, must be completed by C — M. But the bearer of this second and concluding phase of circulation is C', a commodity different in substance and value from the original C. The circulation series therefore appears as 1) M — $C_1$; 2) $C'_2$ — M', where in the second phase of the first

commodity, C1, another commodity of greater value and different use form, $C'_2$, is substituted during the interruption caused by the functioning of P, the production of C' from the elements of C, the forms of existence of productive capital P. However, the first form of appearance in which capital faced us, M — C — M' (extended: 1) M — $C_1$; 2) $C_1$ — M') shows the same commodity twice. Both times it is the same commodity into which money is transformed in the first phase and reconverted into more money in the second phase. In spite of this essential difference, both circulations share this much: that in their first phase money is transformed into commodities, and in the second commodities into money, that the money spent in the first phase returns in the second. On the one hand both have in common this reflux of the money to its starting-point, on the other hand also the excess of the returning money over the money advanced. **To that extent the formula M — C ... C' — M' is contained in the general formula M — C — M'.**

It follows furthermore that each time equally great quantities of simultaneously existing values face and replace each other in the two metamorphoses M — C and C' — M' belonging in circulation. The change in value pertains exclusively to the metamorphosis P, the process of production, which thus appears as a real metamorphosis of capital, as compared with the merely formal metamorphosis of circulation.

Let us now consider **the total movement, M — C ... P ... C' — M', or, M — C** $\overset{Mp}{<}$ **... P ... C' (C + c) — M' (M + m), its more expanded form**. Capital here appears as a value which goes through a series of interconnected, interdependent transformations, a series of metamorphoses which form just as many phases, or stages, of the process as a whole. Two of these phases belong in the sphere of circulation, one of them in that of production. In each one of these phases capital value has a different form for which there is a correspondingly different, special function. Within this movement the advanced value does not only preserve itself but grows, increases in magnitude. Finally, in the concluding stage, it returns to the same form which it had at the beginning of the process as a whole. This process as a whole constitutes therefore the process of moving in circuits.

The two forms assumed by capital value at the various stages of its circulation are those of money capital and commodity capital. The form pertaining to the stage of production is that of productive capital. The capital which assumes these forms in the course of its total circuit and then discards them and in each of them performs the function corresponding to the particular form, is industrial capital, industrial here in the sense it comprises every branch of industry run on a capitalist basis.

**Money capital, commodity capital and productive capital, do not therefore designate independent kinds of capital whose functions form**

**the content of likewise independent branches of industry separated from one another. They denote here only special functional forms of industrial capital, which assumes all three of them one after the other.**

Capital describes its circuit normally only so long as its various phases pass uninterruptedly into one another. If capital stops short in the first phase M — C, money capital assumes the rigid form of a hoard; if it stops in the phase of production, the means of production lie without functioning on the one side, while labour power remains unemployed on the other; and if capital stops short in the last phase C' — M', piles of unsold commodities accumulate and clog the flow of circulation […]

Let us finally consider M — C ... P ... C' — M' as a special form of the circular course of capital, alongside the other forms which we shall analyse later […] It appears as the circuit of money capital, because industrial capital in its *money form*, as money capital, forms the starting-point and the point of return of its total process. The formula itself expresses the fact that the money is not expended here as money but is merely advanced, hence is merely the money form of capital, money capital. It expresses furthermore that exchange value, not use value, is the determining aim of this movement. Just because the money form of value is the independent, tangible form in which value appears, the form of circulation M ... M', the initial and terminal points of which are real money, expresses most graphically the compelling motive of capitalist production — money-making. The process of production appears merely as an unavoidable intermediate link, as a necessary evil for the sake of money-making. All nations with a capitalist mode of production are therefore seized periodically by a feverish attempt to make money without the intervention of the process of production […]

## C h a p t e r 2: THE CIRCUIT OF PRODUCTIVE CAPITAL

**The circuit of productive capital has the general formula P ... C' — M' — C ... P**. It signifies the periodical renewal of the functioning of productive capital, hence its reproduction, or its process of production as a process of reproduction aiming at the self-expansion of value; not only production but a periodical reproduction of surplus value; the function of industrial capital in its productive form, and this function performed not once but periodically repeated, so that the renewal is determined by the starting-point. A portion of C' may (in certain cases, in various branches of industrial capital) re-enter directly as means of production into the same labour process out of which it came in the shape of a commodity. This merely saves the transformation of the value of this portion into real money or token money or else the commodity finds an independent expression only as money of account. This part of value does not enter into the circulation. Thus values enter into the process of production which do not enter into the process of circulation. The same is true of that part of C' which is consumed by the capitalist *in natura* as part of the surplus product. But this is insignificant for capitalist production. It deserves consideration, if at all, only in agriculture.

Two things are at once strikingly apparent in this form.

For one thing, while in the first form, M ... M', the process of production, the function of P, interrupts the circulation of money capital and acts only as a mediator between its two phases M — C and C' — M', here the entire circulation process of industrial capital, its entire movement within the phase of circulation, constitutes only an interruption and consequently only the connecting link between the productive capital, which as the first extreme opens the circuit, and that which closes it as the other extreme in the same form, hence in the form in which it starts again. Circulation proper appears but as an instrument promoting the periodically renewed reproduction, rendered continuous by the renewal.

For another thing, the entire circulation presents itself in a form which is the opposite of that which it has in the circuit of money capital. There it was: M — C — M (M — C. C — M), apart from the determination of value; here it is, again apart from the value determination: C — M — C (C — M. M — C), i.e., the form of the simple circulation of commodities

## I. SIMPLE REPRODUCTION

Let us first consider the process C' — M' — C, which takes place in the sphere of circulation between the two extremes P ... P.

The starting-point of this circulation is commodity capital; C' = C + c = P + c. The function of commodity capital C' — M' (the realisation of the capital value contained in it equals P, which now exists as the constituent part

C of C', as well as of the surplus value contained in it, which exists as a constituent part of the same quantity of commodities and has the value c) was examined in the first form of the circuit. But there this function formed the second phase of the interrupted circulation and the concluding phase of the entire circuit. Here it forms the second phase of the circuit but the first phase of the circulation. The first circuit ends with M', and since M' as well as the original M can again open the second circuit as money capital, it was not necessary at first to see whether M and m (surplus value) contained in M' continue in their course together or whether each of them pursues its own course. This would only have become necessary if we had followed up further the first circuit in its renewed course. But this point must be decided in the circuit of the productive capital, because the determination of its very first circuit depends on it and because C' — M' appears in it as the first phase of the circulation, which has to be complemented by M — C. It depends on this decision whether the formula represents simple reproduction or reproduction on an extended scale. The character of the circuit changes according to the decision made.

Let us, then, consider first the simple reproduction of productive capital, assuming that, as in the first chapter, conditions remain constant and that commodities are bought and sold at their values.

On this assumption the entire surplus value enters into the individual consumption of the capitalist. As soon as the transformation of the commodity capital C' into money has taken place, that part of the money which represents the capital value continues to circulate in the circuit of industrial capital; the other part, which is surplus value changed into money, enters into the general circulation of commodities, constitutes a circulation of money emanating from the capitalist but taking place outside of the circulation of his individual capital.

In our illustration we had a commodity capital C' of 10,000 lbs. of yarn, valued at £500; £422 of this represent the value of the productive capital and continue, as the money form of 8,440 lbs. of yarn, the capital circulation begun by C', while the surplus value of £78, the money form of 1,560 lbs. of yarn, the excess of the commodity product, leaves this circulation and describes a separate course within the general circulation of commodities.

$$C' \begin{pmatrix} C \\ + \\ c \end{pmatrix} \begin{matrix} - \\ - \\ - \end{matrix} \quad M' \begin{pmatrix} M \\ + \\ m \end{pmatrix} \begin{matrix} - \\ \\ - \end{matrix} \begin{matrix} C \\ \\ c \end{matrix} \quad < \begin{matrix} L \\ MP \end{matrix}$$

m — c represents a series of purchases by means of money which the capitalist spends either for commodities proper or for personal services to his cherished self or family. These purchases are made piecemeal at various times. The money therefore exists temporarily in the form of a supply, or hoard, destined for current consumption, since money whose circulation has been interrupted assumes the form of a hoard. Its function as a medium of circulation, which includes its transient form of a hoard, does not enter the circulation of capital in its money form M. This money is not advanced but spent […]

The circulation of C and c, of capital value and surplus value, splits after the transformation of C' into M'. Hence it follows:

First, while the commodity capital is realised by C' — M' = C' — (M + m), the movement of capital value and surplus value, which in C' — M' is still united and carried on by the same quantity of commodities, becomes separable, both of them henceforth possessing independent forms as separate sums of money.

Secondly, if this separation takes place, m being spent as the revenue of the capitalist, while M as a functional form of capital value continues its course determined by the circuit, the first act, C' — M', in connection with the subsequent acts, M — C and m — c, may be represented as two different circulations C — M — C and c — m — c; and both of these series, so far as their general form is concerned, belong in the usual circulation of commodities […]

C' acts from the very outset as commodity capital, and the purpose of the entire process, enrichment (the production of surplus value), does not by any means exclude increasing consumption on the part of the capitalist as his surplus value (and hence his capital) increases; on the contrary, it emphatically includes it.

Indeed, in the circulation of the revenue of the capitalist, the produced commodity c (or the fraction of the produced commodity C' ideally corresponding to it) serves only to transform it, first into money, and from money into a number of other commodities serving private consumption. But we must not, at this point, overlook the trifling circumstance that c is commodity value which did not cost the capitalist anything, an incarnation of surplus labour, for which reason it originally stepped on the stage as a component part of commodity capital C'. […]

## II. ACCUMULATION AND REPRODUCTION ON AN EXTENDED SCALE

[...] We considered first simple reproduction, assuming that the entire

surplus value is spent as revenue. In reality under normal conditions a part of the surplus value must always be spent as revenue, and another part must be capitalised. And it is quite immaterial whether a certain surplus value produced in any particular period is entirely consumed or entirely capitalised. On the average — the general formula can represent only the average movement — both cases occur. But in order not to complicate the formula, it is better to assume that the entire surplus value is accumulated. The formula: P ... C' — M' — C' $\overset{L}{<}_{MP}$ ... P' stands for productive capital, which is reproduced on an enlarged scale and with greater value, and which as augmented productive capital begins its second circuit, or, what amounts to the same, renews its first circuit. As soon as this second circuit is begun, we once more have P as the starting-point; only this P is a larger productive capital than the first P was. Hence, if in the formula M ... M' the second circuit begins with M', M' functions as M, as an advanced money capital of a definite magnitude. It is a larger money capital than the one with which the first circular movement was opened, but all reference to its augmentation by the capitalisation of surplus value ceases as soon as it assumes the function of advanced money capital. This origin is expunged in its form of money capital, which begins its circuit. This also applies to P' as soon as it functions as the starting-point of a new circuit.

If we compare P ... P' with M ... M', or with the first circuit, we find that they have not the same significance at all. M ... M' taken by itself as an isolated circuit, expresses only that M, the money capital (or industrial capital in its circuit as money capital), is money generating money, value generating value, in other words, produces surplus value. But in the P circuit the process of producing surplus value is already completed upon the termination of the first stage, the process of production, and after going through the second stage (the first stage of the circulation), C' — M', the capital value plus surplus value already exist as realised money capital, as M', which appeared as the last extreme in the first circuit. That surplus value has been produced is depicted in the first-considered formula P ... P (see expanded formula [*supra*]) by c — m — c, which, in its second stage, falls outside of the circulation of capital and represents the circulation of surplus value as revenue. In this form, where the entire movement is represented by P ... P, where consequently there is no difference in value between the two extremes, the self-expansion of the advanced value the production of surplus value, is therefore represented in the same way as in M ... M', except that the act C' — M', which appears as the last stage in M ... M', and as the second stage of the circuit, serves as the first stage of the circulation in P ... P.

In P ... P', P' does not indicate that the surplus value has been produced but that the produced surplus value has been capitalised, hence that capital has been accumulated and that therefore P', in contrast to P, consists of

the original capital value plus the value of the capital accumulated because of the capital value's movement […]

## C h a p t e r 3: THE CIRCUIT OF COMMODITY CAPITAL

**The general formula for the circuit of commodity capital is:**
**C' — M' — C ... P ... C'.**

C' appears not alone as the product but also as the premise of the two previous circuits, since that which M — C means for the one capital C' — M' means for the other, inasmuch as at least a part of the means of production is itself the commodity product of other individual capitals describing their circuits. In our case for instance coal, machinery, etc., represent the commodity capital of the mine-owner, of the capitalist machine-manufacturer, etc. Furthermore we have shown [in Chapter 1], that not only the circuit P ... P but also the circuit C' ... C' is assumed even in the first repetition of M ... M', before this second circuit of money capital is completed.

If reproduction takes place on an extended scale, then the final C' is greater than the initial C' and should therefore be designated here as C".

The difference between the third form and the first two is as follows: First, in this case the total circulation with its two antithetical phases opens the circuit, while in the Form I the circulation is interrupted by the process of production and in Form II the total circulation with its two complementary phases appears merely as a means of effecting the process of reproduction and therefore constitutes the movement mediating between P ... P. In the case of M ... M', the form of circulation is M — C ... C' — M' = M — C — M. In the case of P ... P it has the inverted form C' — M'. M — C = C — M — C. In the case of C' — C' it likewise has this form.

Secondly, when circuits I and II are repeated, even if the final points M' and P' form the starting-points of the renewed circuit, the form in which M' and P' were produced disappears. M' = M plus m and P' = P plus p begin the new process as M and P. But in the form III the starting-point C must be designated as C', even if the circuit is renewed on the same scale, for the following reason. In Form I, as soon as M' as such opens a new circuit it functions as money capital M, as an advance in money form of the capital value that is to produce surplus value. The size of the advanced money capital, augmented by the accumulation achieved during the first circuit, has increased. But whether the size of the advanced money capital is £422 or £500 does not alter the fact that it appears as simple capital value. M' no longer exists as self-expanded capital or a capital pregnant with surplus value, as a capital relation. Indeed, it is to expand itself only during its process. The same is true of P ... P'; P' must steadily continue to function as P,

as capital value which is to produce surplus value, and must renew its circuit.

The commodity capital circuit, on the contrary, does not open with just capital value but with capital value augmented in the commodity form. Hence it includes from the start the circuit of not only capital value existing in the form of commodities, but also of surplus value. Consequently if simple reproduction takes place in this form, the C' at the terminal point is equal in size to the C' at the starting-point. If a part of the surplus value enters into the capital circuit, C", an enlarged C', appears at the close instead of C'. This is merely a larger C' than that of the proceeding circuit, with a larger accumulated capital value. Hence it begins its new circuit with a relatively larger, newly created surplus value. In any event C' always inaugurates the circuit as a commodity capital which is equal to capital value plus surplus value […]

## C h a p t e r 4: THE THREE FORMULAS OF THE CIRCUIT

**The three formulas may be set down in the following manner, using Tc for total circulation process:**

**I. M — C ... P ... C' — M'**

**II. P ... Tc ... P**

**III. Tc ... P (C')**

If we combine all three forms, all premises of the process appear as its result, as a premise produced by it itself. Every element appears as a point of departure, of transit, and of return. The total process presents itself as the unity of the processes of production and circulation. The process of production becomes the mediator of the process of circulation and vice versa.

All three circuits have the following in common: The self-expansion of value as the determining purpose, as the compelling motive. In I this is expressed in its form. Formula II begins with P, the very process of creating surplus value. In III the circuit begins with the self-expanded value, even if the movement is repeated on the same scale.

As C — M means M — C for the buyer, and M — C means C — M for the seller, the circulation of capital presents only the ordinary metamorphosis of commodities, and the laws evolved with regard to it […] on the mass of money in circulation are valid here. However, if we do not cling to this formal aspect but rather consider the actual connection between the metamorphoses of the various individual capitals, in other words, if we study the connection between the circuits of individual capitals as partial movements of the process of reproduction of the total social capital, then the mere change of form of money and commodities cannot explain the connection.

In a constantly revolving circle every point is simultaneously a point

of departure and a point of return. If we interrupt the rotation, not every point of departure is a point of return. Thus we have seen that not only does every individual circuit presuppose (*implicite*) the others, but also that the repetition of the circuit in one form comprises the performance of the circuit in the other forms. The entire difference thus appears to be a merely formal one, or as a merely subjective distinction existing solely for the observer.

Since every one of these circuits is considered a special form of this movement in which various individual industrial capitals are engaged, this difference exists only as an individual one. But in reality every individual industrial capital is present simultaneously in all three circuits. These three circuits, the forms of reproduction assumed by the three forms of capital, are made continuously side by side. For instance, one part of the capital value, which now performs the function of commodity capital, is transformed into money capital, but at the same time another part leaves the process of production and enters the circulation as a new commodity capital. The circuit form C' ... C' is thus continuously described; and so are the other two forms. The reproduction of capital in each one of its forms and stages is just as continuous as the metamorphosis of these forms and the successive passage through the three stages. The entire circuit is thus a unity of its three forms […]

Capital as self-expanding value embraces not only class relations, a society of a definite character resting on the existence of labour in the form of wage labour. It is a movement, a circuit-describing process going through various stages, which itself comprises three different forms of circuit-describing process. Therefore it can be understood only as a motion, not as a thing at rest […]

## Ch a p t e r 5: THE TIME OF CIRCULATION

We have seen that the movement of capital through the sphere of production and the two phases of the sphere of circulation takes place in a series of periods of time. The duration of its sojourn in the sphere of production is its time of production, that of its stay in the sphere of circulation its time of circulation. The total time during which it describes its circuit is therefore equal to the sum of its time of production and its time of circulation.

The time of production naturally comprises the period of the labour process, but is not comprised in it […] Periodical interruptions of the labour process, by night for instance, interrupt the functioning of these instruments of labour, but not their stay at the place of production. They belong to this place when they are in function as well as when they are not. On the other hand the capitalist must have a definite supply of raw material and auxiliary

material in readiness, in order that the process of production may take place for a longer or shorter time on a previously determined scale, without being dependent on the accidents of daily supply from the market. This supply of raw material, etc., is productively consumed only by degrees. There is, therefore, a difference between its time of production and its time of functioning. The time of production of the means of production in general comprises, therefore, 1) the time during which they function as means of production, hence serve in the productive process; 2) the stops during which the process of production, and thus the functioning of the means of production embodied in it, are interrupted; 3) the time during which they are held in readiness as prerequisites of that process, hence already represent productive capital but have not yet entered into the process of production.

The difference so far considered has in each case been the difference between the time which the productive capital stays in the sphere of production and that it stays in the process of production. But the process of production may itself be responsible for interruptions of the labour process, and hence of the labour time — intervals during which the subject of labour is exposed to the action of physical processes without the further intervention of human labour. The process of production, and thus the functioning of the means of production, continue in this case, although the labour process, and thus the functioning of the means of production as instruments of labour, have been interrupted. This applies, for instance, to the grain, after it has been sown, the wine fermenting in the cellar, the labour-material of many factories, such as tanneries, where the material is exposed to the action of chemical processes. The time of production is here longer than the labour time. The difference between the two consists in an excess of the production time over the labour time. This excess always arises from the latent existence of productive capital in the sphere of production without functioning in the process of production itself or from its functioning in the productive process without taking part in the labour process […]

The intervals in the labour time which the subject of labour must endure in the process of production itself create neither value nor surplus value. But they advance the product, form a part of its life, a process through which it must pass. The value of the apparatus, etc., is transferred to the product in proportion to the entire time during which they perform their function; the product is brought to this stage by labour itself, and the employment of these apparatus is as much a condition of production as is the reduction to dust of a part of the cotton which does not enter into the product but nevertheless transfers its value to the product. The other part of the latent capital, such as buildings, machinery, etc., the instruments of labour whose functioning is interrupted only by the regular pauses of the productive process — irregular interruptions caused by the restriction of production,

crises, etc., are total losses — adds value without entering into the creation of the product. The total value which this part of capital adds to the product is determined by its average durability; it loses value, because it loses its use value, both during the time that it performs its functions as well as during that in which it does not.

Finally the value of the constant part of capital, which continues in the productive process although the labour process is interrupted, re-appears in the result of the productive process […] Labour always transfers the value of the means of production to the product, in so far as it really consumes them in a suitable manner, as means of production. And it does not change the matter whether labour has to bear continually on its subject by means of the instruments of labour in order to produce this effect or whether it merely needs to give the first impulse by providing the means of production with conditions under which they undergo the intended alteration of themselves, in consequence of natural processes, without the further assistance of labour.

Whatever may be the reason for the excess of production time over the labour time — whether the circumstance that means of production constitute only latent productive capital and hence are still in a stage preliminary to the actual productive process or that their own functioning is interrupted within the process of production by its pauses or finally that the process of production itself necessitates interruptions of the labour process — in none of these cases do the means of production function as absorbers of labour. And if they do not absorb labour, they do not absorb surplus labour, either. Hence there is no expansion of the value of productive capital so long as it stays in that part of its production time which exceeds the labour time, no matter how inseparable from these pauses the carrying on of the process of self-expansion may be […]

The time of production, then, is always that time in which a capital produces use values and expands, hence functions as productive capital, although it includes time in which it is either latent or produces without expanding its value […]

Time of circulation and time of production mutually exclude each other. During its time of circulation capital does not perform the functions of productive capital and therefore produces neither commodities nor surplus value […] The expansion and contraction of the time of circulation operate therefore as negative limits to the contraction or expansion of the time of production or of the extent to which a capital of a given size functions as productive capital […]

[…] The time of circulation is but a phase of the time of turnover; the latter however includes the time of production or reproduction […]

## CHAPTER 6: THE COSTS OF CIRCULATION

## I. GENUINE COSTS OF CIRCULATION
## 1. THE TIME OF PURCHASE AND SALE

[…] To the capitalist who has others working for him, buying and selling becomes a primary function. Since he appropriates the product of many on a large social scale, he must sell it on the same scale and then reconvert it from money into elements of production. Now as before neither the time of purchase nor of sale creates any value [… Commerce belongs] to the *faux frais* of production [… and] constitutes merely a part of the costs of circulation.

## 2. BOOKKEEPING

Apart from the actual buying and selling, labour time is expended on bookkeeping, which besides absorbs materialised labour such as pens, ink, paper, desks, office paraphernalia. This function, therefore, exacts the expenditure on the one hand of labour power and on the other of instruments of labour. It is the same condition of things as obtained in the case of the time of purchase and sale [… It] is palpably clear that this function and the instruments of labour consumed by it, such as paper, etc., represent additional consumption of labour time and instruments which are necessary, but constitute a deduction from the time available for productive consumption as well as from the instruments of labour which function in the real process of production [and] enter into the creation of products and value […] But there is a certain difference between the costs incidental to bookkeeping, or the unproductive expenditure of labour time on the one hand and those of mere buying and selling time on the other. The latter arise only from the definite social form of the process of production, from the fact that it is the process of production of commodities. Bookkeeping, as the control and ideal synthesis of the process, becomes the more necessary the more the process assumes a social scale and loses its purely individual character. It is therefore more necessary in capitalist production than in the scattered production of handicraft and peasant economy […]

## 3. MONEY

Whether a product is fabricated as a commodity or not, it is always a material form of wealth, a use value intended for individual or productive consumption. Its value as a commodity is ideally expressed in its price, which does not change its actual use form in the least. But the fact that certain commodities like gold and silver function as money and as such reside

exclusively in the process of circulation (even in the form of hoards, reserve funds, etc., they remain in the sphere of circulation, although latently) is a pure product of the particular social form of the process of production, the process of production of commodities. Since under capitalist production products assume the general form of commodities, and the overwhelming mass of products is created as commodities and must therefore assume the form of money, and since the vast bulk of commodities, the part of social wealth functioning as commodities, grows continually, it follows that the quantity of gold and silver functioning as means of circulation, paying medium, reserve fund, etc., likewise increases. These commodities performing the function of money enter into neither individual nor productive consumption. They represent social labour in a fixed form in which it serves as a mere circulation machine. Besides the fact that a part of social wealth has been condemned to assume this unproductive form, the wearing down of the money demands its constant replacement, or the conversion of more social labour, in the form of products, into more gold and silver. These replacement costs are considerable in capitalistically developed nations, because in general the portion of wealth tied up in the form of money is tremendous. Gold and silver as money commodities mean circulation costs to society which arise solely out of the social form of production. They are *faux frais* of commodity production in general, and they increase with the development of this production, especially of capitalist production. They represent a part of the social wealth that must be sacrificed to the process of circulation

## II. COSTS OF STORAGE

Costs of circulation, which originate in a mere change of form of value, in circulation, ideally considered, do not enter into the value of commodities. The parts of capital expended as such costs are merely deductions from the productively expended capital so far as the capitalist is concerned. The costs of circulation which we shall consider now are of a different nature. They may arise from processes of production which are only continued in circulation, the productive character of which is hence merely concealed by the circulation form. On the other hand they may be, from the standpoint of society, mere costs, unproductive expenditure of living or materialised labour, but for that very reason they become productive of value for the individual capitalist, may constitute an addition to the selling price of his commodities. This already follows from the fact that these costs are different in different spheres of production, and here and there even for different individual capitals in one and the same sphere of production. By being added to the prices of commodities they are distributed in proportion to

the amount to be borne by each individual capitalist. But all labour which adds value can also add surplus value, and will always add surplus value under capitalist production, as the value created by labour depends on the amount of the labour itself, whereas the surplus value created by it depends on the extent to which the capitalist pays for it. Consequently costs which enhance the price of a commodity without adding to its use value, which therefore are to be classed as unproductive expenses so far as society is concerned, may be a source of enrichment to the individual capitalist. On the other hand, as this addition to the price of the commodity merely distributes these costs of circulation equally, they do not thereby cease to be unproductive in character. For instance insurance companies divide the losses of individual capitalists among the capitalist class. But this does not prevent these equalised losses from remaining losses so far as the aggregate social capital is concerned.

## 1. FORMATION OF SUPPLY IN GENERAL

[…] The abidance of the commodity capital as a commodity supply in the market requires buildings, stores, storage places, warehouses, in other words, an expenditure of constant capital; furthermore the payment of labour power for placing the commodities in storage. Besides, commodities spoil and are exposed to the injurious influences of the elements. Additional capital must be invested, partly in instruments of labour, in material form, and partly in labour power to protect the commodities against the above.

Thus the existence of capital in its form of commodity capital and hence of commodity supply gives rise to costs which must be classed as costs of circulation, since they do not come within the sphere of production. These costs of circulation differ from those mentioned under I by the fact that they enter to a certain extent into the value of the commodities, i.e., they increase the prices of commodities. At all events the capital and labour power which serve the need of preserving and storing the commodity supply are withdrawn from the direct process of production. On the other hand the capitals thus employed, including labour power as a constituent of capital, must be replaced out of the social product. Their expenditure has therefore the effect of diminishing the productive power of labour, so that a greater amount of capital and labour is required to obtain a particular useful effect. They are *unproductive costs* […]

As a matter of fact, supplies exist in three forms: in the form of productive capital, in the form of a fund for individual consumption, and in the form of a commodity supply or commodity capital. The supply in one form decreases relatively when it increases in another, although its quantity may increase absolutely in all three forms simultaneously […]

## 2. THE COMMODITY SUPPLY PROPER

[…] Only to the extent that the commodity supply is a premise of commodity circulation and is itself a form necessarily arising in commodity circulation, only in so far as this apparent stagnation is therefore a form of the movement itself, just as the formation of a money reserve is a premise of money circulation — only to that extent is such stagnation normal. But as soon as the commodities lying in the reservoirs of circulation do not make room for the swiftly succeeding wave of production, so that the reservoirs become over-stocked, the commodity supply expands in consequence of the stagnation in circulation just as the hoards increase when money circulation is clogged. It does not make any difference whether this jam occurs in the warehouses of the industrial capitalist or in the storerooms of the merchant. The commodity supply is in that case not a prerequisite of uninterrupted sale, but a consequence of the impossibility of selling the goods. The costs are the same, but since they now arise purely out of the form, that is to say, out of the necessity of transforming the commodities into money and out of the difficulty of going through this metamorphosis, they do not enter into the values of the commodities but constitute deductions, losses of value in the realisation of the value. Since the normal and abnormal forms of the supply do not differ in form and both clog circulation, these phenomena may be confused and deceive the agent of production himself so much the more since for the producer the process of circulation of his capital may continue while that of his commodities which have changed hands and now belong to merchants may be arrested. If production and consumption swell, other things being equal, then the commodity supply swells likewise. It is renewed and absorbed just as fast, but its size is greater. Hence the bulging size of the commodity supply, for which stagnant circulation is responsible, may be mistaken for a symptom of the expansion of the process of reproduction, especially when the development of the credit system makes it possible to wrap the real movement in mystery […]

## III. COSTS OF TRANSPORTATION

It is not necessary to go here into all the details of the costs of circulation, such as packing, sorting, etc. The general law is that *all costs of circulation, which arise only from changes in the forms of commodities do not add to their value*. They are merely expenses incurred in the realisation of the value or in its conversion from one form into another. The capital spent to meet those costs (including the labour done under its control) belongs among the *faux frais* of capitalist production. They must be replaced from the surplus

product and constitute, as far as the entire capitalist class is concerned, a deduction from the surplus value or surplus product, just as the time a labourer needs for the purchase of his means of subsistence is lost time. But the costs of transportation play a too important part to pass them by without a few brief remarks.

[… The] use value of things is materialised only in their consumption, and their consumption may necessitate a change of location of these things, hence may require an additional process of production, in the transport industry. The productive capital invested in this industry imparts value to the transported products, partly by transferring value from the means of transportation, partly by adding value through the labour performed in transport. This last-named increment of value consists, as it does in all capitalist production, of a replacement of wages and of surplus value.

Within each process of production, a great role is played by the change of location of the subject of labour and the required instruments of labour and labour power — such as cotton trucked from the carding to the spinning room or coal hoisted from the shaft to the surface. The transition of the finished product as finished goods from one independent place of production to another located at a distance shows the same phenomenon, only on a larger scale. The transport of products from one productive establishment to another is furthermore followed by the passage of the finished products from the sphere of production to that of consumption. The product is not ready for consumption until it has completed these movements.

As was shown above, the general law of commodity production holds: The productivity of labour is inversely proportional to the value created by it. This is true of the transport industry as well as of any other. The smaller the amount of dead and living labour required for the transportation of commodities over a certain distance, the greater the productive power of labour, and vice versa […]

The transport industry forms on the one hand an independent branch of production and thus a separate sphere of investment of productive capital. On the other hand its distinguishing feature is that it appears as a continuation of a process of production within the process of circulation and for the process of circulation.

## PART 2: THE TURNOVER OF CAPITAL

### CHAPTER 7: THE TURNOVER TIME AND THE NUMBER OF TURNOVERS

We have seen that the entire **time of turnover** of a given capital is **equal to the sum of** its **time of circulation** and its **time of production**. It is

the period of time from the moment of the advance of capital value in a definite form to the return of the functioning capital value in the same form […] **A circuit performed by a capital and meant to be a periodical process, not an individual act, is called its turnover. The duration of this turnover is determined by the sum of its time of production and its time of circulation. This time total constitutes the time of turnover of the capital**. It measures the interval of time between one circuit period of the entire capital value and the next, the periodicity in the process of life of capital or, if you like, the time of the renewal, the repetition, of the process of self-expansion, or production, of one and the same capital value […] Apart from the individual adventures which may accelerate or shorten the time of turnover of certain capitals, this time differs in the different spheres of investment. **Just as the working day is the natural unit for measuring the function of labour power, so the year is the natural unit for measuring the turnovers of functioning capital**. The natural basis of this unit is the circumstance that the most important crops of the temperate zone, which is the mother country of capitalist production, are annual products. **If we designate the year as the unit of measure of the turnover time by T, the time of turnover of a given capital by t, and the number of its turnovers by n, then n = T/t. If, for instance, the time of turnover t is 3 months, then n is equal to 12/3, or 4; capital is turned over four times per year. If t = 18 months, then n = 12/18 = ⅔, or capital completes only two-thirds of its turnover in one year.** If its time of turnover is several years, it is computed in multiples of one year. From the point of view of the capitalist, the time of turnover of his capital is the time for which he must advance his capital in order to create surplus value with it and receive it back in its original shape […]

## CHAPTER 8: FIXED CAPITAL AND CIRCULATING CAPITAL

### I. DISTINCTIONS OF FORM

We have seen […] that, in relation to the products toward the creation of which it contributes, a portion of the constant capital retains that definite use form in which it enters into the process of production. Hence it performs the same functions for a longer or shorter period, in ever repeated labour processes. This applies for instance to industrial buildings, machinery, etc. — in short to all things which we comprise under the name of *instruments of labour*. This part of constant capital yields up value to the product in proportion as it loses its own exchange value together with its own use value. This delivery of value, or this transition of the value of such a means of production to the product which it helps to create is determined by a

calculation of averages. It is measured by the average duration of its function, from the moment that the means of production enters into the process of production to the moment that it is completely spent, dead and gone, and must be replaced by a new sample of the same kind, or reproduced […]

A portion of the advanced capital value becomes *fixed* in this form determined by the function of the instruments of labour in the process. In the performance of this function, and thus by the wear and tear of the instruments of labour, a part of their value passes on to the product, while the other remains fixed in the instruments of labour and thus in the process of production. The value fixed in this way decreases steadily, until the instrument of labour is worn out, its value having been distributed during a shorter or longer period over a mass of products originating from a series of constantly repeated labour processes. But so long as they are still effective as instruments of labour and need not yet be replaced by new ones of the same kind, a certain amount of constant capital value remains fixed in them, while the other part of the value originally fixed in them is transferred to the product and therefore circulates as a component part of the commodity supply. The longer an instrument lasts, the slower it wears out, the longer will its constant capital value remains fixed in this use form. But whatever may be its durability, the proportion in which it yields value is always inverse to the entire time it functions. If of two machines of equal value one wears out in five years and the other in ten, then the first yields twice as much value in the same time as the second […] It is this peculiarity which gives to this portion of constant capital the form of *fixed capital*. All the other material parts of capital advanced in the process of production form by way of contrast the *circulating*, or *fluid*, capital […] Such are auxiliary materials, which are consumed by the instruments of labour themselves in the performance of their functions, like coal consumed by a steam-engine [… They] are entirely consumed in every labour process which they enter and must therefore be wholly replaced by new means of production of the same kind in every new labour process […] Cattle as beasts of toil are fixed capital; as beef cattle they are raw material which finally enters into circulation as a product; hence they are circulating, not fixed capital […] These components of the productive capital — the parts of its value invested in labour power and in means of production which do not constitute fixed capital — by reason of their common turnover characteristics confront the fixed capital as circulating or fluent capital […]

The value of the circulating capital — in labour power and means of production — is advanced only for the time during which the product is in process of production, in accordance with the scale of production determined by the volume of the fixed capital. This value enters entirely into the product, is therefore fully returned by its sale from the sphere of circulation, and can

be advanced anew.

[… It] is only the productive capital which can be divided into fixed and circulating capital. But this antithesis does not apply to the other two modes of existence of industrial capital, that is to say, commodity capital and money capital, nor does it exist as an antithesis of these two modes to productive capital. It exists *only for productive capital and within its sphere*. No matter how much money capital and commodity capital may function as capital and no matter how fluently they may circulate, they cannot become circulating capital as distinct from fixed capital until they are transformed into circulating components of productive capital.

[…] The turnover of the fixed component part of capital, and therefore also the time of turnover necessary for it, comprises several turnovers of the circulating constituents of capital. In the time during which the fixed capital turns over once, the circulating capital turns over several times […]

## II. COMPONENTS. REPLACEMENT, REPAIR, AND ACCUMULATION OF FIXED CAPITAL

[…] The fixed capital however requires also a positive expenditure of labour for its maintenance in good repair. The machinery must be cleaned from time to time. It is a question here of additional labour without which the machinery becomes useless […] It is here not a question of replacing the labour contained in the machine, but of constant additional labour made necessary by its use. It is not a question of labour performed by the machine, but of labour spent on it, of labour in which it is not an agent of production but raw material. The capital expended for this labour must be classed as circulating capital, although it does not enter into the labour process proper to which the product owes its existence. This labour must be continually expended in production, hence its value must be continually replaced by that of the product. The capital invested in it belongs in that part of circulating capital which has to cover the unproductive costs and is to be distributed over the produced values according to an annual average calculation […]

The damage which separate parts of the machinery, etc., may incur is naturally accidental and so are therefore the repairs involved [… In] spite of its accidental character repair work is unevenly distributed over the various periods of life of fixed capital.

[… It] is taken for granted in estimating the average life of fixed capital that it is constantly kept in good working order, partly by cleaning (including the cleaning of the premises), partly by repairs as often as required. The transfer of value through wear and tear of fixed capital is calculated on its average life, but this average life itself is based on the

assumption that the additional capital required for maintenance purposes is continually advanced.

But then it is also evident that the value added by this extra expenditure of capital and labour cannot enter into the price of the commodities concerned at the same time as it is incurred. For example, a manufacturer of yarn cannot sell his yarn dearer this week than last, merely because one of his wheels broke or a belt tore this week. The general costs of spinning have not been changed in any way by this accident in some individual factory. Here, as in all determinations of value, the average decides. Experience shows the average occurrence of such accidents and the average volume of the maintenance and repair work necessary during the average life of the fixed capital invested in a given branch of business. This average expense is distributed over the average life and added to the price of the product in corresponding aliquot parts; hence it is replaced by means of its sale.

The additional capital which is thus replaced belongs to the circulating capital, although the manner of its expenditure is irregular […] This capital, expended in repairs properly so called, is in many respects a capital *sui generis*, which can be classed neither as circulating nor as fixed capital, but belongs with greater justification to the former, since it figures among the running expenses […]

## CHAPTER 9: THE AGGREGATE TURNOVER OF ADVANCED CAPITAL. CYCLES OF TURNOVER

We have seen that the fixed and circulating component parts of productive capital are turned over in various ways and at various periods, also that the different constituents of the fixed capital of a business have different periods of turnover, depending on their different durabilities and therefore on their different times of reproduction […] **The aggregate turnover of an advanced capital is the average turnover of its various constituent parts** […] Suppose the fixed capital is £80,000 and its period of reproduction 10 years, so that £8,000 of it annually return to their money form, or it completes one-tenth of its turnover. Suppose further the circulating capital is £20,000, and its turnover is completed five times per year. The total capital would then be £100,000. The turned-over fixed capital is £8,000, the turned-over circulating capital five times £20,000, or £100,000. Then the capital turned over during one year is £108,000, or £8,000 more than the advanced capital. 1 + 2/25 of the capital have been turned over […]

Therefore the *turnover time of the value* of the advanced capital differs from its actual time of reproduction or from the actual time of turnover of its component parts. Take for instance a capital of £4,000 and let

it turn over, say, five times a year. The turned-over capital is then five times £4,000, or £20,000. But what returns at the end of each turnover to be advanced anew is the originally advanced capital of £4,000. Its magnitude is not changed by the number of turnover periods, during which it performs anew its functions as capital. (Apart from surplus value.) […]

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

## CHAPTER 12: THE WORKING PERIOD

Let us take two branches of business with working days of equal length, say, of ten hours each, one of them a cotton spinning-mill, the other a locomotive works. In one of these branches a definite quantity of finished product, cotton yarn, is turned out daily or weekly; in the other, the labour process has to be repeated for perhaps three months in order to manufacture a finished product, a locomotive [… When] we speak of a **working period** we mean the number of connected working days required in a certain branch of industry for the manufacture of a finished product […] We have assumed that capitals of equal size are invested in spinning and machine-building, that these capitals contain equal proportions of constant and variable, fixed and circulating capital, that the working days are of equal length, in brief, that all conditions are equal except the duration of the working period. In the first week, the outlay for both is the same, but the product of the spinner can be

sold and the proceeds of the sale used to buy new labour power, new raw materials, etc.; in short, production can be resumed on the same scale. The machine-manufacturer on the other hand cannot reconvert the circulating capital expended in the first week into money and resume operations with it until three months later, when his product is finished. There is therefore first a difference in the return of the identical quantities of capital invested. But in the second place identical amounts of productive capital are employed during the three months in both spinning and machine-building. However the magnitude of the outlay of capital in the case of the yarn manufacturer is quite different from that of the machine-builder; for in the one case the same capital is rapidly renewed and the same operation can therefore be repeated, while in the other case the renewal of the capital is relatively slow, so that ever new quantities of capital must be added to the old up to the time of its renewal. Consequently there is a difference not only in the length of time of renewal of definite portions of capital, or in the length of time for which the capital is advanced, but also in the quantity of the capital to be advanced according to the duration of the labour process (although the capitals employed daily or weekly are equal). This circumstance is worthy of note for the reason that the term of the advance may be prolonged, as we shall see in the cases treated in the next chapter, without thereby necessitating a corresponding increase in the amount of the capital to be advanced. The capital must be advanced for a longer time, and a larger amount of capital is tied up in the form of productive capital […]

Conditions such as cooperation, division of labour, application of machinery, which augment the product of the individual working day, shorten at the same time the working period of connected acts of production. Thus machinery shortens the building time of houses, bridges, etc. […] Greater speed due to improved shipbuilding cuts the turnover time of capital invested in shipping […]

## CHAPTER 13: THE TIME OF PRODUCTION

**Working time** is always **production time**, that is to say, time during which capital is held fast in the sphere of production. But vice versa, not all time during which capital is engaged in the process of production is necessarily working time.

It is here not a question of interruptions of the labour process necessitated by natural limitations of the labour power itself, although we have seen to what extent the mere circumstance that fixed capital — factory buildings, machinery, etc. — lies idle during pauses in the labour process, became one of the motives for an unnatural prolongation of the labour process and for day-and-night work. We are dealing here rather with

interruptions independent of the length of the labour process, brought about by the very nature of the product and its fabrication, during which the subject of labour is for a longer or shorter time subjected to natural processes, must undergo physical, chemical and physiological changes, during which the labour process is entirely or partially suspended.

For instance grape after being pressed must ferment awhile and then rest for some time in order to reach a certain degree of perfection. In many branches of industry the product must pass through a drying process, for instance in pottery, or be exposed to certain conditions in order to change its chemical properties, as for instance in bleaching. Winter grain needs about nine months to mature. Between the time of sowing and harvesting the labour process is almost entirely suspended […]

In all these cases therefore **the production time of the advanced capital consists of two periods: one period during which the capital is engaged in the labour process and a second period during which its form of existence — that of an unfinished product — is abandoned to the sway of natural processes, without being at that time in the labour process.** Nor does it matter in the least here and there. The working period and the production period do not coincide in these cases. The production period is longer than the working period. But **the product is not finished, not ready, hence not fit to be converted from the form of productive into that of commodity capital until the production period is completed**. Consequently the length of the turnover period increases in proportion to the length of the production time that does not consist of working time. In so far as the production time in excess of the working time is not fixed by natural laws given once and for all, such as govern the maturing of grain, the growth of an oak, etc., the period of turnover can often be more or less shortened by an artificial reduction of the production time. Such instances are the introduction of chemical bleaching instead of bleaching on the green and more efficient drying apparatus […]

The long production time (which comprises a relatively small period of working time) and the great length of the periods of turnover entailed make forestry an industry of little attraction to private and therefore capitalist enterprise […]

## CHAPTER 14: THE TIME OF CIRCULATION

All circumstances considered so far which distinguish the periods of turnover of different capitals invested in different branches of industry and hence also the periods for which capital must be advanced, originate in the process of production itself, such as the difference between fixed and circulating capital, the difference in the working periods, etc. But the time of

turnover of capital is equal to the sum of its production time plus its circulation, or rotation, time. It is therefore a matter of course that a difference in the time of circulation causes a difference in the time of turnover and hence in the length of the period of turnover. This becomes more evident either on comparing two different investments of capital in which all circumstances modifying the turnover are equal except the time of circulation, or on selecting a given capital with a given proportion of fixed and circulating capital, a given working period, etc., with only the times of circulation varying, hypothetically.

One of the sections of the time of circulation — relatively the most decisive — consists of the **time of selling**, the period during which capital exists in the state of commodity capital. The time of circulation, and hence the period of turnover in general, are long or short depending on the relative length of this selling time. An additional outlay of capital may become necessary as a result of expenses of storage, etc.

[…] The improvement of the means of communication and transportation cuts down absolutely the wandering period of the commodities […] Whereas on the one hand the improvement of the means of transportation and communication brought about by the progress of capitalist production reduces the time of circulation of particular quantities of commodities, the same progress and the opportunities created by the development of transport and communication facilities make it imperative, conversely, to work for ever more remote markets, in a word — for the world market. The mass of commodities in transit for distant places grows enormously, and with it therefore grows, both absolutely and relatively, that part of social capital which remains continually for long periods in the stage of commodity capital, within the time of circulation. There is a simultaneous growth of that portion of social wealth which, instead of serving as direct means of production, is invested in means of transportation and communication and in the fixed and circulating capital required for their operation.

The mere relative length of the transit of the commodities from their place of production to their market produces a difference not only in the first part of the circulation time, the selling time, but also in its second part, the reconversion of the money into the elements of the productive capital, the buying time. Suppose a commodity is shipped to India. This requires, say, four months. Let us assume that the selling time is equal to zero, i.e., the commodities are made to order and are paid for on delivery to the agent of the producer. The return of the money (no matter in what form) requires another four months. Thus it takes altogether eight months before a capital can again function as productive capital, renew the same operation. The differences in the turnover thus occasioned form one of the material bases of

the various terms of credit, just as overseas commerce in general, for instance in Venice and Genoa, is one of the sources of the credit system […]

Now let us take up the second stage of the time of circulation, **the buying time**, or that period in which capital is reconverted from the money form into the elements of productive capital. During this period it must persist for a shorter or longer time in its condition of money capital, hence a certain portion of the total capital advanced must all the time be in the condition of money capital, although this portion consists of constantly changing elements. For instance, of the total capital advanced in a certain business, n times £100 must be available in the form of money capital, so that, while all the constituent parts of these n times £100 are continually converted into productive capital, this sum is nevertheless just as continually replenished by the influx from the circulation, from the realised commodity capital. A definite part of the advanced capital value is therefore continually in the condition of money capital, i.e., a form not pertaining to its sphere of production but its sphere of circulation.

We have already seen that the prolongation of the time for which capital is fettered in the form of commodity capital on account of the distance of the market results in direct delay of the return of the money and consequently also the transformation of the capital from money capital into productive capital.

We have furthermore seen […] with reference to the purchase of commodities, that the time of buying, the greater or smaller distance from the main sources of the raw material, makes it necessary to purchase raw material for a longer period and have it available in the form of a productive supply, of latent or potential productive capital; that in consequence it increases the amount of capital to be advanced at one time […]

[An] effect is produced in various branches of business by the more or less prolonged periods in which rather large quantities of raw material are thrown on the market. In London for example great auction sales of wool take place every three months, and the wool market is controlled by them. The cotton market on the other hand is on the whole restocked continuously, if not uniformly, from harvest to harvest. Such periods determine the principal dates when these raw materials are bought. Their effect is particularly great on speculative purchases necessitating advances for longer or shorter periods for these elements of production, just as the nature of the produced commodities acts on the speculative, intentional withholding of a product for a longer or shorter term in the form of potential commodity capital […]

Apart from all speculation, the volume of the purchases of those commodities which must always be available as a productive supply depends on the times of the renewal of this supply, hence on circumstances which in

their turn are dependent on market conditions and which therefore are different for different raw materials. In these cases money must be advanced from time to time in rather large quantities and in lump sums. It returns more or less rapidly, but always in instalments, according to the turnover of capital. One portion of it, namely the part reconverted into wages, is just as continually expended again at short intervals. But another portion, namely that which is to be reconverted into raw material, etc., must be accumulated for rather long periods, as a reserve fund for either buying or paying. Therefore it exists in the form of money capital, although the volume in which it exists as such, changes.

We shall see in the next chapter that other circumstances arising either from the process of production or that of circulation make it necessary for a certain portion of the advanced capital to be available in the form of money. In general it must be noted that the economists are very prone to forget not only that a part of the capital required in a business passes successively through the three stages of money capital, productive capital, and commodity capital, but also that different portions of it continuously and simultaneously possess these forms, although the relative magnitudes of these portions vary all the time […]

## C h a p t e r 15: EFFECT OF THE TIME OF TURNOVER ON THE MAGNITUDE OF ADVANCED CAPITAL

In this chapter and in the next, the sixteenth, we deal with the influence of the time of turnover on the self-expansion of capital.

Take the commodity capital which is the product of a working period of, say, nine weeks. Let us, for the time being, leave aside that portion of the value of the product which is added to it by the average wear and tear of the fixed capital, and also the surplus value added to the product during the process of production. The value of this product is then equal to that of the circulating capital, advanced for its production, i.e., of the wages and the raw and auxiliary materials consumed in its production. Let this value be £900, so that the weekly outlay is £100. The period of production, which here coincides with the working period, is therefore nine weeks. It is immaterial whether it is assumed that this is the working period of a continuous product, or whether it is a continuous working period for a discrete product, so long as the quantity of discrete product brought to market at one time costs nine weeks' labour. Let the time of circulation be three weeks. Then the entire period of turnover is twelve weeks. At the end of nine weeks the advanced productive capital is converted into commodity capital, but now it stays for three weeks in the period of circulation. The new period of production therefore cannot start before the beginning of the thirteenth week, and

production would be at a standstill for three weeks, or for a quarter of the entire period of turnover. It again does not make any difference whether it is assumed that it takes so long on an average to sell the product, or that this length of time is bound up with the remoteness of the market or the terms of payment for the goods sold. Production would be standing still for three weeks every three months, making it four times three, or twelve weeks in a year, which means three months, or one-quarter, of the annual period of turnover. Hence, if production is to be continuous and carried along the same scale week after week, there is only this alternative:

Either the scale of production must be reduced, so that the £900 suffice to keep the work going both during the working period and the time of circulation of the first turnover, is then commenced with the tenth week, before the first period of turnover is completed, for the period of turnover is twelve weeks, and the working period nine weeks. A sum of £900 distributed over twelve weeks makes £75 per week. It is evident in the first place that such a reduced scale of business presupposes changed dimensions of the fixed capital and therefore, on the whole, a curtailment of the business. In the second place, it is questionable whether such a reduction can take place at all, for in each business there exists, commensurate with the development of its production, a normal minimum of invested capital essential to maintain its capacity to complete. This normal minimum grows steadily with the advance of capitalist production, and hence it is not fixed. There are numerous intermediate grades between the normal minimum existing at any particular time and the ever increasing normal maximum, a medium which permits of many different scales of capital investment. Within the limits of this medium reductions may take place, their lowest limit being the prevailing normal minimum.

When there is a hitch in production, when the markets are overstocked, and when raw materials rise in price, etc., the normal outlay of circulating capital is restricted — once the pattern of the fixed capital has been set — by cutting down working time to, say, one half. On the other hand, in times of prosperity, the pattern of the fixed capital given, there is an abnormal expansion of the circulating capital, partly through the extension of working time and partly through its intensification. In businesses which have, from the outset, to reckon with such fluctuations, the situation is relieved partly by recourse to the above measures and partly by employing simultaneously a greater number of labourers, in combination with the application of reserve fixed capital, such as reserve locomotives on railways, etc. However, such abnormal fluctuations are not considered here, where we assume normal conditions.

In order to make production continuous, therefore, the expenditure of the same circulating capital is here distributed over a longer period, over

twelve weeks instead of nine. In every section of time there consequently functions a reduced productive capital. The circulating portion of the productive capital is reduced from 100 to 75, or one-quarter. The total amount by which the productive capital functioning for a working period of nine weeks is reduced equals 9 times 25, or £225, or one-quarter of £900. But the ratio of the time of circulation to that of turnover is likewise three-twelfths, or one-quarter. It follows therefore: circulation of the productive capital transformed into commodity capital, if it is rather to be carried on simultaneously and continuously week after week, and if no special circulating capital is available for this purpose, it can be done only by curtailing productive operations, by reducing the circulating component of the functioning productive capital. The portion of circulating capital thus set free for production during the time of circulation is to the total advanced circulating capital as the time of circulation is to the period of turnover. This applies, as has already been stated, only to branches of production in which the labour process is carried on in the same scale week after week, where therefore no varying amounts of capital are to be invested in different working periods, as for instance in agriculture.

If on the other hand we assume that the nature of the business excludes a reduction of the scale of production, and thus of the circulating capital to be advanced each week, then continuity of production can be secured only by additional circulating capital, in the above-named case of £300. During the twelve-week turnover period, £1,200 are successively invested, and £300 is one-quarter of this sum as three weeks is of twelve. At the end of the working time of nine weeks the capital value of £900 has been converted from the form of productive into that of commodity capital. Its working period is concluded, but it cannot be re-opened with the same capital. During the three weeks in which it stays in the sphere of circulation, functioning as commodity capital, it is in the same state, so far as the process of production is concerned, as if it did not exist at all. We rule out in the present case all credit relations and take for granted that the capitalist operates only with his own money. But during the time the capital advanced for the first working period, having completed its process of production, stays three weeks in the process of circulation, there functions an additional capital investment of £300, so that the continuity of production is not broken.

Now, the following must be noted in this connection:

Firstly: The working period of the capital of £900 first advanced is completed at the close of nine weeks and it does not return until after three weeks are up, that is to say, at the beginning of the thirteenth week. But a new working period is immediately begun with the additional capital of £300. By this means continuity of production is maintained.

Secondly: The functions of the original capital of £900 and of the

capital of £300 newly added at the close of the first nine-week working period, inaugurating the second working period after the conclusion of the first without any interruption, are, or at least could be, clearly distinguished in the first period of turnover, while they cross each other each other in the course of the second period of turnover […]

In this entire section we have discussed only the turnovers of the circulating capital, not those of the fixed, for the simple reason that the question at issue has nothing to do with fixed capital. The instruments of labour, etc., employed in the process of production form only fixed capital, inasmuch as their time of employment exceeds the period of turnover of the circulating capital; inasmuch as the period of time during which these instruments of labour continue to serve in perpetually repeated labour processes is greater than the period of turnover of the circulating capital, and hence equal to the n periods of turnover of the circulating capital. Regardless of whether the total time represented by these n periods of turnover of the circulating capital is longer or shorter, that portion of the productive capital which was advanced for this time in fixed capital is not advanced anew during its course. It continues its functions in its old use form. The difference is merely this: In proportion to the varying length of a single working period of each period of turnover of the circulating capital, the fixed capital gives up a greater or smaller part of its original value to the product of that working period, and proportionally to the duration of the circulation time of each period of turnover this value-part of the fixed capital given up to the product returns quicker or slower in money form. The nature of the subject we are discussing in this section — the turnover of the circulating portion of productive capital — derives from the very nature of this portion. The circulating capital employed in a working period cannot be applied in a new working period until it has completed its turnover, until it has been transformed into commodity capital, from that into money capital, and from that back into productive capital. Hence, in order that the first working period may be immediately followed by a second, capital must be advanced anew and converted into the circulating elements of productive capital, and its quantity must be sufficient to fill the void occasioned by the circulation period of the circulating capital advanced or the first working period. This is the source of the influence exerted by the length of the working period of the circulating capital over the scale of the labour process and the division of the advanced capital or the addition of new portions of capital. This was precisely what we had to examine in this section […]

From the preceding investigation it follows that

A. The different portions into which capital must be divided in order that one part of it may be continually in the working period while others are in the period of circulation, relieve one another, like different independent

individual capitals, in two cases: (1) when the working period is equal to the period of circulation, so that the period of turnover is divided into two equal sections; (2) when the period of circulation is longer than the working period, but at the same time is a simple multiple of the working period, so that one period of circulation is equal to n working periods, in which case n must be a whole number. In these cases no portion of the successively advanced capital is set free.

B. On the other hand in all cases in which (1) the period of circulation is longer than the working period without being a simple multiple of it, and (2) in which the working period is longer than the circulation period, a portion of the total circulating capital is set free continually and periodically at the close of each working period, beginning with the second turnover. This freed capital is equal to that portion of the total capital which has been advanced for the circulation period, provided the working period is longer than the period of circulation; and equal to that portion of the capital which has to fill up the excess of the circulation period over the working period or over a multiple of working periods, provided the circulation period is longer than the working period.

C. It follows that for the aggregate social capital, so far as its circulating part is concerned, the release of capital must be the rule, while the mere alternation of portions of capital functioning successively in the production process must be the exception. For the equality of the working and circulation periods, or the equality of the period of circulation and a simple multiple of the working period, this regular proportionality of the two components of the period of turnover has absolutely nothing to do with the nature of the case and for this reason it can occur on the whole only as a matter of exception.

A very considerable portion of the social circulating capital, which is turned over several times a year, will therefore periodically exist in the form of released capital during the annual turnover cycle.

It is furthermore evident that, all other circumstances being equal, the magnitude of the released capital grows with the volume of the labour process or with the scale of production, hence with the development of capitalist production in general […]

## CHAPTER 16: THE TURNOVER OF VARIABLE CAPITAL

### I. THE ANNUAL RATE OF SURPLUS VALUE

[…] We shall apply the term capital A to the variable capital of £500, which is turned over ten times per year, producing an annual surplus value of £5,000 for which, therefore, the yearly rate of surplus value is 1,000%.

Now let us assume that another variable capital, B, of £5,000, is advanced for one whole year (i.e., here for 50 weeks), so that it is turned over only once a year. We assume furthermore that at the end of the year the product is paid for on the same day that it is finished, so that the money capital, into which it is converted, returns on the same day. The circulation period is then zero, the period of turnover equals the working period, namely, one year. As in the preceding case there is to be found in the labour process each week a variable capital of £100, or of £5,000 in 50 weeks. Let the rate of surplus value be the same, or 100%, i.e., let one half of the working day of the same length consist of surplus labour. If we consider 5 weeks, the invested variable capital is £500, the rate of surplus value 100% and therefore the amount of surplus value produced in 5 weeks £500. The quantity of labour power here exploited, and the intensity of its exploitation, are assumed to be exactly the same as those of capital A.

Each week the invested variable capital of £100 produces a surplus value of £100, hence in 50 weeks the invested capital of 50 × 100 = £5,000 produces a surplus value of £5,000. The amount of surplus value produced annually is the same as in the previous case, £5,000, but the yearly rate of surplus value is entirely different. It is equal to the surplus value produced in one year divided by the advanced variable capital: 5,000s/5,000v, or 100%, while in the case of capital A it was 1,000%.

In the case of both capitals A and B, we have invested a variable capital of £100 a week. The degree of self-expansion, or the rate of surplus value, is likewise the same, 100%, and so is the magnitude of the variable capital, £100. The same quantity of labour power is exploited, the volume and degree of exploitation are equal in both cases, the working days are the same and equally divided into necessary labour and surplus labour. The amount of variable capital employed in the course of the year is £5,000 in either case; it sets the same amount of labour in motion, and extracts the same amount of surplus value, £5,000, from the labour power set in motion by these two equal capitals. Nevertheless there is a difference of 900% in the annual rate of surplus value of the two capitals A and B […]

The variable capital **advanced** for a definite period of time is converted into **employed**, hence actually functioning and operative variable capital only to the extent that it really steps into the sections of that period of time taken up by the labour process, to the extent that it really functions in the labour process. In the intermediate time, in which a portion of it is advanced in order to be employed later, this portion is practically non-existent for the labour process and has therefore no influence on the formation of either value or surplus value […]

The circumstances which differentiate the relation between the **advanced** and the **employed** variable capital affect the production of surplus

value — the rate of surplus value being given — only to the extent, and only by reason of the fact that they differentiate the quantity of variable capital which can be really employed in a stated period of time, for instance in one week, 5 weeks, etc. The **advanced variable capital** functions as variable capital only to the extent and only during the time that it is actually employed, and not during the time in which it remains in stock, is **advanced, without being employed**. But all the circumstances which differentiate the relation between the **advanced and the employed variable capital** come down to the difference of the periods of turnover (determined by the difference of either the working period, or the circulation period, or both). **The law of production of surplus value states that equal quantities of functioning variable capital produce equal quantities of surplus value if the rate of surplus value is the same.** If then, equal quantities of variable capital are employed by the capitals A and B in equal periods of time with equal rates of surplus value, they must generate equal quantities of surplus value in equal periods of time, no matter how different the ratio of this variable capital employed during a definite period of time to the variable capital advanced during the same time, and no matter therefore how different the ratio of the quantities of surplus value produced, not to the employed but to the advanced variable capital in general. The difference of this ratio, far from contradicting the laws of the production of surplus value that have been demonstrated, rather corroborates them and is one of their inevitable consequences […]

The **real rate of surplus value** expresses nothing but **the ratio of the variable capital employed during a definite period to the surplus value produced in the same time**; or the quantity of unpaid labour set in motion by the variable capital employed during this time. It has absolutely nothing to do with that portion of the variable capital which is advanced during the time in which it is not employed. Hence it has likewise nothing to do with the ratio between that portion of capital which is advanced during a definite period of time and that portion which is employed during the same period of time — a ratio that is modified and differentiated for different capitals by the turnover period.

It follows rather from what has been set forth above that the **annual rate of surplus value** coincides only in one single case with the **real rate of surplus value** which expresses the degree of exploitation of labour; namely in the case when the advanced capital is turned over only once a year and the capital advanced is thus equal to the capital turned over in the course of the year, when therefore the ratio of the quantity of the surplus value produced during the year to the capital employed during the year in this production coincides and is identical with the ratio of the quantity of surplus value produced during the year to the capital advanced during the year.

A) The annual rate of surplus value is equal to the
(quantity of surplus value produced during the year) / (variable capital advanced)
But the quantity of the surplus value produced during the year is equal to the real rate of surplus value multiplied by the variable capital employed in its production. The capital employed in the production of the annual quantity of surplus value is equal to the advanced capital multiplied by the number of its turnovers, which we shall call n. Formula A is therefore transformed into the following:
B) The annual rate of surplus value is equal to the
(real rate of surplus value × variable capital advanced × n) / (variable capital advanced)
For instance, in the case of capital B = 100 × 5,000 × 1 / 5,000 , or 100%.
Only when n is equal to 1, that is, when the variable capital advanced is turned over only once a year, and hence equal to the capital employed or turned over during a year, the annual rate of surplus value is equal to its real rate.

**Let us call the annual rate of surplus value S', the real rate of surplus value s', the advanced variable capital v, the number of turnovers n**. Then S' = s'vn/v = s'n. In other words, S' is equal to s'n, and it is equal to s' only when n = 1, and hence S' = s' times 1, or s'.

It follows furthermore that the annual rate of surplus value is always equal to s'n, i.e., to the real rate of surplus value produced in one period of turnover by the variable capital consumed during that period, multiplied by the number of turnovers of this variable capital during one year, or (what amounts to the same) multiplied by its inverted time of turnover calculated for one year. (If the variable capital is turned over ten times per year, then its time of turnover is 1/10 of a year; its inverted time of turnover therefore 10/1 or 10.)

It follows furthermore that S' = s' when n is equal to 1. S' is greater than s' when n is greater than 1; i.e., when the advanced capital is turned over more than once a year or the turned-over capital is greater than the capital advanced.

Finally, S' is smaller than s' when n is smaller than 1, that is, when the capital turned over during the year is only a part of the advanced capital, so that the period of turnover is longer than one year […]

## III. THE TURNOVER OF THE VARIABLE CAPITAL FROM THE SOCIAL POINT OF VIEW

Let us look at this matter for a moment from the point of view of society. Let the wages of one labourer be £1 per week, the working day 10

hours. In case of A as well as B 100 labourers are employed during a year (£100 for 100 labourers per week, or £500 for 5 weeks, or £5,000 for 50 weeks), and each one of them works 60 hours per week of 6 days. So 100 labourers work 6,000 hours per week and 300,000 hours in 50 weeks. This labour power is taken hold of by A and B and therefore cannot be expended by society for anything else. To this extent the matter is the same socially with both A and B. Furthermore: In the cases of both A and B the 100 labourers employed by either side receive a yearly wage of £5,000 (or, together for the 200 labourers, £10,000) and withdraw from society means of subsistence to that amount. So far the matter is therefore socially the same in the case of both A and B. Since the labourers in either case are paid by the week, they weekly withdraw their means of subsistence from society and, in either case, throw a weekly equivalent in money into circulation. But here the difference begins.

*First*. The money which the A labourer throws into circulation is not only, as it is for the B labourer, the money form of the value of his labour power (in fact a means of payment for labour already performed); it is, counting from the second turnover period after the opening of the business, the money form of his own value (equal to the price of the labour power plus the surplus value) created during the first period of turnover, by which his labour is paid during the second period of turnover. This is not the case with the B labourer. As far as the latter is concerned, the money is here, true enough, a medium of payment for work already done by him, but this work done is not paid for with the value which it itself produced and which was turned into money (not with the money form of the value of the labour itself has produced). This cannot be done until the beginning of the second year, when the B labourer is paid with the value produced by him in the preceding year and turned into money.

The shorter the period of turnover of capital — the shorter therefore the intervals at which it is reproduced throughout the year — the quicker is the variable portion of the capital, originally advanced by the capitalist in the form of money, transformed into the money form of the value (including, besides, surplus value) created by the labourer to replace this variable capital [… and] the greater comparatively is the quantity of surplus value which he extracts during the year with a given rate of surplus value, because he can buy the labourer so much more frequently with the money form of the value created by that labourer […]

If the scale of production is given, the absolute magnitude of the advanced variable money capital (and of the circulating capital in general) decreases proportionately to the decrease of the turnover period, while the annual rate of surplus value increases. If the magnitude of the advanced capital is given, the scale of production grows; hence, if the rate of surplus

value is given, the absolute quantity of surplus value created in one period of turnover likewise grows, simultaneously with the rise in the annual rate of surplus value effected by the shortening of the periods of reproduction. It generally follows from the foregoing investigation that the different lengths of the turnover periods make it necessary for money capital to be advanced in very different amounts in order to set in motion the same quantity of productive circulating capital and the same quantity of labour with the same degree of exploitation of labour.

*Second* — and this is interlinked with the first difference — the B and A labourers pay for the means of subsistence which they buy with the variable capital that has been transformed in their hands into a medium of circulation. For instance they not only withdraw wheat from the market, but they also replace it with an equivalent in money. But since the money wherewith the B labourer pays for his means of subsistence, which he withdraws from the market, is not the money form of a value produced and thrown by him on the market during the year, as it is in the case of the A labourer, he supplies the seller of the means of subsistence with money, but not with commodities — be they means of production or means of subsistence — which this seller could buy with the proceeds of the sale, as he can in the case of A. The market is therefore stripped of labour power, means of subsistence for this labour power, fixed capital in the form of instruments of labour used in the case of B, and of materials of production, and to replace them an equivalent in money is thrown on the market; but during the year no product is thrown on the market with which to replace the material elements of productive capital withdrawn from it. If we conceive society as being not capitalist but communist, there will be no money capital at all in the first place, not the disguises cloaking the transactions arising on account of it. The question then comes down to the need of society to calculate beforehand how much labour, means of production, and means of subsistence it can invest, without detriment, in such lines of business as for instance the building of railways, which do not furnish any means of production or subsistence, nor produce any useful effect for a long time, a year or more, while they extract labour, means of production and means of subsistence from the total annual production. In capitalist society however where social reason always asserts itself only *post festum* great disturbances may and must constantly occur. On the one hand pressure is brought to bear on the money market, while on the other, an easy money market calls such enterprises into being en masse, thus creating the very circumstances which later give rise to pressure on the money market. Pressure is brought to bear on the money market, since large advances of money capital are constantly needed here for long periods of time. And this regardless of the fact that industrialists and merchants throw the money capital necessary to carry on their business into speculative

railway schemes; etc., and make it good by borrowing in the money market.

On the other hand pressure on society's available productive capital. Since elements of productive capital are for ever being withdrawn from the market and only an equivalent in money is thrown on the market in their place, the effective demand rises without itself furnishing any element of supply. Hence a rise in the prices of productive materials as well as means of subsistence. To this must be added that stock-jobbing is a regular practice and capital is transferred on a large scale. A band of speculators, contractors, engineers, lawyers, etc., enrich themselves. They create a strong demand for articles of consumption on the market, wages rising at the same time. So far as foodstuffs are involved, agriculture too is stimulated. But as these foodstuffs cannot be suddenly increased in the course of the year, their import grows, just as that of exotic foods in general (coffee, sugar, wine, etc.) and of articles of luxury. Hence excessive imports and speculation in this line of the import business. Meanwhile, in those branches of industry in which production can be rapidly expanded (manufacture proper, mining, etc.), climbing prices give rise to sudden expansion soon followed by collapse. The same effect is produced in the labour market, attracting great numbers of the latent relative surplus population, and even of the employed labourers, to the new lines of business. In general such large-scale undertakings as railways withdraw a definite quantity of labour power from the labour market, which can come only from such lines of business as agriculture, etc., where only strong lads are needed. This still continues even after the new enterprises have become established lines of business and the migratory working class needed for them has already been formed, as for instance in the case of temporary rise above the average in the scale of railway construction. A portion of the reserve army of labourers, which keep wages down, is absorbed. A general rise in wages ensues, even in the hitherto well employed sections of the labour market. This lasts until the inevitable crash again releases the reserve army of labour and wages are once more depressed to their minimum, and lower. […]

## CHAPTER 17: THE CIRCULATION OF SURPLUS VALUE

We have just seen that a difference in the period of turnover causes a difference in the annual rate of surplus value, even if the mass of the annually produced surplus value is the same.

But there are furthermore necessarily differences in the capitalisation of surplus value, in *accumulation*, and also in the quantity of surplus value produced during the year, while the rate of surplus value remains the same.

To begin with, we note that capital A (in the illustration of the preceding chapter) has a current periodical revenue, so that with the

exception of the period of turnover inaugurating the business, it pays for its own consumption within the year out of its production of surplus value, and need not cover it by advances out of its own funds. But the latter has to be done in the case of B. While it produces as much surplus value in the same intervals of time as A, the surplus value is not realised and therefore cannot be consumed either productively or individually. So far as individual consumption is concerned, the surplus value is anticipated. Funds for that purpose must be advanced.

One portion of the productive capital, which it is difficult to classify namely the additional capital required for the repair and maintenance of the fixed capital, is now likewise seen in a new light.

In the case of A this portion of capital is not advanced — in full or for the greater part — at the beginning of production. It need not be available or even in existence. It comes out of the business itself by a direct transformation of surplus value into capital, i.e., by its direct employment as capital. A part of the surplus value which is not only periodically generated but also realised during the year can defray the expenditures that must be incurred for repairs, etc. A portion of the capital needed to carry on the business on its original scale is thus produced in the course of business by the business itself by means of capitalising part of the surplus value. This is impossible for capital B. The portion of capital in question must in his case form a part of the capital originally advanced. In both cases this portion will figure in the books of the capitalists as an advanced capital, which it really is, since according to our assumption it forms a part of the productive capital required for maintaining the business on a certain scale. But it makes all the difference in the world out of which funds it is advanced. In the case of B it is really a part of the capital to be originally advanced or held available. In the case of A on the other hand it is a part of the surplus value used as capital. This last case shows that not only the accumulated capital but also a portion of the originally advanced capital may simply be capitalised surplus value.

As soon as the development of credit interferes, the relation between originally advanced capital and capitalised surplus value becomes still more complicated. For instance from not having sufficient capital of his own at the very outset for this purpose, A borrows from banker C a portion of the productive capital with which he starts in business or continues it during the year. Banker C lends him a sum of money which consists only of surplus value deposited with the banker by capitalists D, E, F, etc. As far as A is concerned there is as yet no question of accumulated capital. But with regard to D, E, F, etc., A is, in fact, nothing but an agent capitalising surplus value appropriated by them […]

Along with the real accumulation or conversion of surplus value into productive capital (and a corresponding reproduction on an extended scale),

there is, then, an accumulation of money, a raking together of a portion of the surplus value in the form of latent money capital, which is not intended to function as additional active capital until later, when it swells to a certain volume.

That is how the matter looks from the standpoint of the individual capitalist. But simultaneously with the development of capitalist production the credit system also develops. The money capital which the capitalist cannot as yet employ in his own business is employed by others, who pay him interest for its use. It serves him as money capital in its specific meaning, as a kind of capital distinguished from productive capital. But it serves as capital in another's hands […]

For reproduction only two normal cases are possible, apart from disturbances, which interfere with reproduction even on a fixed scale.

There is either reproduction on a simple scale.

Or there is capitalisation of surplus value, accumulation.

## I. Simple Reproduction

In the case of simple reproduction the surplus value produced and realised annually, or periodically, if there are several turnovers during the year, is consumed individually, that is to say, unproductively, by its owner, the capitalist […]

Even if simple reproduction is assumed, a portion of the surplus value must therefore always exist in the form of money and not of products, because otherwise it could not be converted for purposes of consumption from money into products. This conversion of the surplus value from its original commodity form into money must be further analysed at this place. In order to simplify the matter, we shall presuppose the most elementary form of the problem, namely the exclusive circulation of metal coin, of money which is a real equivalent.

According to the laws of the simple circulation of commodities […,] the mass of the metal coin existing in a country must not only be sufficient to circulate the commodities, but must also suffice to meet the currency fluctuations, which arise partly from fluctuations in the velocity of the circulation, partly from a change in the prices of commodities, partly from the various and varying proportions in which the money functions as a medium of payment or as a medium of circulation proper. The proportion in which the existing quantity of money is split into a hoard and money in circulation varies continually, but the total quantity of money is always equal to the sum of the money hoarded and the money circulating. This quantity of money (quantity of precious metal) is a gradually accumulated hoard of society. Since a portion of this hoard is consumed by wear and tear, it must be

replaced annually, the same as any other product. This takes place in reality by a direct or indirect exchange of a part of the annual product of a particular country for the product of countries producing gold and silver. However, this international character of the transaction conceals its simple course. In order to reduce the problem to its simplest and most lucid expression, it must be assumed that the production of gold and silver takes place in that particular country itself, that therefore the production of gold and silver constitutes a part of the total social production within every country.

Apart from the gold and silver produced for articles of luxury, the minimum of their annual production must be equal to the wear of metal coin annually occasioned by the circulation of money. Furthermore, if the sum of the values of the annually produced and circulating quantity of commodities increases, the annual production of gold and silver must likewise increase, inasmuch as the increased sum of values of the circulating commodities and the quantity of money required for their circulation (and the corresponding formation of a hoard) are not made good by a greater velocity of money currency and a more comprehensive function of money as a medium of payment, i.e., by a greater mutual balancing of purchases and sales without the intervention of actual money.

A portion of the social labour power and a portion of the social means of production must therefore be expended annually in the production of gold and silver.

The capitalists who are engaged in the production of gold and silver and who, according to our assumption of simple reproduction, carry on their production only within the bounds of the annual average wear and tear and the annual average consumption of gold and silver entailed thereby throw their surplus value — which they consume annually, according to our assumption, without capitalising any of it — directly into circulation in the money form, which is its natural form; unlike the other branches of production, where it is the converted form of the product.

Furthermore, as far as wages are concerned — the money form in which the variable capital is advanced — they are also not replaced by the sale of the product, by its conversion into money, but by a product itself whose natural form is from the outset that of money.

Finally the same applies also to that portion of the product of precious metals which is equal to the value of the periodically consumed constant capital, both the constant circulating and constant fixed capital consumed during the year […]

If we consider at first only the circulating portion of capital advanced in M, the starting-point of M — C ... P ... M', we find that a certain sum of money is advanced, thrown into circulation for the payment of labour power and the purchase of materials of production. But this sum is not withdrawn

from circulation by the circuit of *this* capital, in order to be thrown into it anew. The product is money even in its bodily form; there is no need therefore of transforming it into money by means of exchange, by a process of circulation. It passes from the process of production into the sphere of circulation, not in the form of commodity capital which has to be reconverted in money capital, but as money capital which is to be reconverted into productive capital, i.e., which is to buy fresh labour power and materials of production. The money form of the circulating capital consumed in labour power and means of production is replaced, not by the sale of the product, but by the bodily form of the product itself; hence, not by once more withdrawing its value from circulation in money form, but by additional newly produced money.

Let us suppose that this circulating capital is £500, the period of turnover 5 weeks, the working period 4 weeks, the period of circulation only 1 week. From the outset, money for 5 weeks must be partly advanced for a productive supply, and partly be ready to be paid out gradually in wages. At the beginning of the 6th week, £400 will have returned and £100 will have been released. This is constantly repeated. Here, as in previous cases, £100 will always be found in released form during a certain time of the turnover. But they consist of additional, newly produced, money, the same as the other £400. We have in this case 10 turnovers per year and the annual product is £5,000 in gold […]

In the case of every other capital of £500 turned over under the same conditions, the ever renewed money form is the converted form of the commodity capital produced and thrown into circulation every 4 weeks and which by its sale — that is to say, by a periodical withdrawal of the quantity of money it represented when it originally entered into the process — assumes this money form anew over and over again. Here, on the contrary, in every turnover period a new additional £500 in money is thrown from the process of production itself into circulation, in order to withdraw from it continually materials of production and labour power […]

Let the circulating capital of £500 advanced in the form of money capital, whatever its period of turnover, now stand for the total circulating capital of society, that is, of the capitalist class. Let the surplus value be £100. How can the entire capitalist class manage to draw continually £600 out of circulation, when it continually throws only £500 into it?

After the money capital of £500 has been converted into productive capital, the latter transforms itself within the process of production into commodities worth £600 and there are in circulation not only commodities valued at £500, equal to the money capital originally advanced, but also a newly produced surplus value of £100.

This additional surplus value of £100 is thrown into circulation in the

form of commodities. No doubt about that. But such an operation does not by any means furnish the additional money for the circulation of this additional commodity value […]

The capitalist class remains consequently the sole point of departure of the circulation of money. If they need £400 for the payment of means of production and £100 for the payment of labour power, they throw £500 into circulation. But the surplus value incorporated in the product, with a rate of surplus value incorporated in the product, with a rate of surplus value of 100%, is equal in value to £100. How can they continually draw £600 out of circulation, when they continually throw only £500 into it?

[… Paradoxical] as it may appear at first sight, it is the capitalist class itself that throws the money into circulation which serves for the realisation of the surplus value incorporated in the commodities. But, *nota bene*, it does not throw it into circulation as advanced money, hence not as capital. It spends it as a means of purchase for its individual consumption. The money is not therefore advanced by the capitalist class, although it is the point of departure of its circulation.

Let us take some individual capitalist who is starting in business, a farmer for instance. During the first year, he advances a money capital of, say, £5,000, paying £4,000 for means of production, and £1,000 for labour power. Let the rate of surplus value be 100%, the amount of surplus value appropriated by him £1,000. The above £5,000 comprise all the money he advances as money capital. But the man must also live, and he does not take in any money until the end of the year. Take it that his consumption amounts to £1,000. These he must have in his possession. He may say that he has to advance himself these £1,000 during the first year. But this advance, which here has only a subjective meaning, denotes nothing else but that he must pay for his individual consumption during the first year out of his own pocket instead of defraying it out of the gratuitous production of his labourers. He does not advance this money as capital. He spends it, pays it out for an equivalent in means of subsistence which he consumes. This value has been spent by him in money, thrown into circulation and withdrawn from it in the form of commodity values. These commodity values he has consumed. He has thus ceased to bear any relation to their value. The money with which he paid for this value exists now as an element of the circulating money. But he has withdrawn the value of this money from circulation in the form of products; and this value is now destroyed together with the products in which it existed. It’s all gone. But at the end of the year he throws commodities worth £6,000 into circulation and sells them. By this means he recovers: 1) his advanced money capital of £5,000; 2) the realised surplus value of £1,000. He has advanced as capital, has thrown into circulation, £5,000, and he withdraws from it £6,000 — £5,000 of which cover his capital, and £1,000

his surplus value. The last £1,000 are turned into money with the money which he himself has thrown into circulation, which he did not advance, but spent as a consumer, not as a capitalist. They now return to him as the money form of the surplus value produced by him. And henceforth this operation is repeated every year. But beginning with the second year, the £1,000 which he spends are constantly the converted form, the money form, of the surplus value produced by him. He spends them annually and they return to him annually.

If his capital were turned over more frequently a year, it would not alter this state of affairs, but would affect the length of time, and hence the amount which he would have to throw into circulation for his individual consumption over and above his advanced money capital.

This money is not thrown into circulation by the capitalist as capital. But it is a decided trait of the capitalist to be able to live on means in his possession until surplus value begins to return.

In the present case we assumed that the sum of money which the capitalist throws into circulation to pay for his individual consumption until the first returns of his capital is exactly equal to the surplus value which he produced and hence must turn into money. This is obviously an arbitrary assumption so far as the individual capitalist is concerned. But it must be correct when applied to the entire capitalist class as simple reproduction is assumed. It only expresses the same thing as the assumption; namely, that the entire surplus value, and it alone — hence no fraction of the original capital stock — is consumed unproductively […]

## II. Accumulation and Reproduction on an Extended Scale

Since accumulation takes place in the form of extended reproduction, it is evident that it does not offer any new problem with regard to money circulation.

In the first place, as far as the additional money capital required for the functioning of the increasing productive capital is concerned, that is supplied by the portion of the realised surplus value thrown into circulation by the capitalists as money capital, not as the money form of the revenue. The money is already in the hands of the capitalists. Only its employment is different.

Now however in consequence of the additional productive capital, its product, an additional mass of commodities is thrown into circulation. Together with this additional quantity of commodities, a part of the additional money needed for its realisation is thrown into circulation, inasmuch as the value of this mass of commodities is equal to that of the productive capital consumed in their production. This additional amount of money has been

advanced precisely as additional money capital, and therefore returns to the capitalist through the turnover of his capital. Here the same question as above re-appears. Where does the additional money come from with which to realise the additional surplus value now contained in the form of commodities?

The general reply is again the same. The sum total of the prices of the circulating commodities has been increased, not because the prices of a given quantity of commodities have risen, but because the mass of commodities now circulating is greater than that of the previously circulating commodities, without it being offset by a fall in prices. The additional money required for the circulation of this greater quantity of commodities of greater value must be secured either by greater economy in the use of the circulating quantity of money — whether by balancing the payments, etc., by measures which accelerate the circulation of the same coins — or by the transformation of money from the form of a hoard into that of a circulating medium. The latter does not only imply that idle money capital begins to function as a means of purchase or payment, or that money capital already functioning as a reserve fund while performing this function for its owner, actively circulates for society (as is the case with bank deposits which are continually lent), thus performing a double function. It also implies that the stagnating reserve funds of coins are economised.

"In order that money should flow continuously as coin, coin must constantly coagulate as money. The continual currency of coin depends on its continual stagnation, in greater or smaller quantities, in reserve funds of coin which spring up throughout the sphere of circulation and also necessitate it; the formation, distribution, dissolution, and re-formation of these reserve funds are constantly alternating, their existence constantly disappears, their disappearance constantly exists. Adam Smith expressed this never-ceasing transformation of coin into money and of money into coin by saying that every owner of commodities must always keep in supply, aside from the particular commodity which he sells, a certain quantity of the universal commodity with which he buys. We saw that in the circulation C — M — C the second member M — C splits up constantly into a series of purchases which do not take place at once but at successive intervals of time, so that one part of M is current as coin while the other rests as money. As a matter of fact money is in that case only suspended coin and the separate parts of the current mass of coins continuously appear now in the one form, and now in the other, alternating constantly. This first transformation of the medium of circulation into money represents, therefore, but a technical aspect of money circulation itself". (Karl Marx, *Zur Kritik der Politischen Oekonomie*, 1859, pp. 105, 106.) ("Coin" as distinguished from money is here employed to indicate money in its function of a mere medium of circulation in contrast

with its other functions.)

When all these measures do not suffice, additional gold must be produced, or, what amounts to the same, a part of the additional product exchanged, directly or indirectly, for gold — the product of countries in which precious metals are mined.

The entire amount of labour power and social means of production expended in the annual production of gold and silver intended as instruments of circulation constitutes a bulky item of the *faux frais* of the capitalist mode of production, of the production of commodities in general. It is an equivalent abstraction from social utilisation of as many additional means of production and consumption as possible, i.e., of real wealth. To the extent that the costs of this expensive machinery of circulation are decreased, the given scale of production or the given degree of its extension remaining constant, the productive power of social labour is *eo ipso* increased. Hence, so far as the expediencies developing with the credit system have this effect, they increase capitalist wealth directly, either by performing a large portion of the social production and labour power without any intervention of real money, or by raising the functional capacity of the quantity of money really functioning.

This disposes also of the absurd question whether capitalist production in its present volume would be possible without the credit system (even if regarded only from this point of view), that is, with the circulation of metallic coin alone. Evidently this is not the case. It would rather have encountered barriers in the volume of production of precious metals. On the other hand one must not entertain any fantastic illusions on the productive power of the credit system, so far as it supplies or sets in motion money capital. A further analysis of this question is out of place here.

# PART 3: THE REPRODUCTION AND CIRCULATION OF THE AGGREGATE SOCIAL CAPITAL

## CHAPTER 18: INTRODUCTION

### I. THE SUBJECT INVESTIGATED

The direct process of the production of capital is its labour and self-expansion process, the process whose result is the commodity product and whose compelling motive is the production of surplus value.

The process of reproduction of capital comprises this direct process of production as well as the two phases of the circulation process proper, i.e., the entire circuit which, as a periodic process — a process which constantly repeats itself in definite periods — constitutes the turnover of capital.

Whether we study the circuit in the form of M ... M' or that of P ... P,

the direct process of production P itself always forms but one link in this circuit. In the one form it appears as a promoter of the process of circulation; in the other the process of circulation appears as its promoter. Its continuous renewal, the continuous re-appearance of capital as productive capital, is in either case determined by its transformations in the process of circulation. On the other hand the continuously renewed process of production is the condition of the transformations which the capital undergoes ever anew in the sphere of circulation, of its alternate appearance as money capital and commodity capital.

Every individual capital forms, however, but an individualised fraction, a fraction endowed with individual life, as it were, of the aggregate social capital, just as every individual capitalist is but an individual element of the capitalist class. The movement of the social capital consists of the totality of the movements of its individualised fractional parts, the turnovers of the individual capitals. Just as the metamorphosis of the individual commodity is a link in the series of metamorphoses of the commodity world — the circulation of commodities — so the metamorphosis of the individual capital, its turnover, is a link in the circuit described by social capital.

This total process comprises both the productive consumption (the direct process of production) together with the conversions of form (materially considered, exchanges) which bring it about, and the individual consumption together with the conversions of form or exchanges by which it is brought about. It includes on the one hand the conversion of variable capital into labour power, and therefore the incorporation of labour power in the process of capitalist production. Here the labourer acts as the seller of his commodity, labour power, and the capitalist as its buyer. But on the other hand the sale of the commodities embraces also their purchase by the working class, hence their individual consumption. Here the working class appears as buyer and the capitalists as sellers of commodities to the labourers.

The circulation of the commodity capital includes the circulation of surplus value, hence also the purchases and sales by which the capitalist effect their individual consumption, the consumption of surplus value.

The circuit of the individual capitals in their aggregate as social capital, hence considered in its totality, comprises not only the circulation of capital but also the general circulation of commodities. The latter can originally consist of only two components: 1) The circuit of capital proper and 2) the circuit of the commodities which enter into individual consumption, consequently of the commodities for which the labourer expends his wages and the capitalist his surplus value (or a part of it). At any rate, the circuit of capital comprises also the circulation of the surplus value, since the latter is a part of the commodity capital, and likewise the conversion

of the variable capital into labour power, the payment of wages. But the expenditure of this surplus value and wages for commodities does not form a link in the circulation of capital, although at least the expenditure of wages is essential for this circulation.

**In Book I the process of capitalist production was analysed as an individual act as well as a process of reproduction: the production of surplus value and the production of capital itself**. The changes of form and substance experienced by capital in the sphere of circulation were assumed without dwelling upon them. It was presupposed that on the one hand the capitalist sells the product at its value and on the other that he finds within the sphere of circulation the objective means of production for restarting or continuing the process. The only act within the sphere of circulation on which we have dwelt was the purchase and sale of labour power as the fundamental condition of capitalist production.

**In the first part of this Book II, the various forms were considered which capital assumes in its circuit, and the various forms of this circuit itself.** The circulation time must now be added to the working time discussed in Book I.

**In the second part, the circuit was studied as being periodic, i.e., as a turnover**. It was shown on the one hand in what manner the various constituents of capital (fixed and circulating) accomplish the circuit of forms in different periods of time and in different ways; on the other hand the circumstances were examined by which the different lengths of the working period and circulation period are conditioned. The influence was shown which the period of the circuit and the different proportions of its component parts exert upon the dimensions of the production process itself and upon the annual rate of surplus value. Indeed, while it was the successive forms continually assumed and discarded by capital in its circuit that were studied in Part I, it was shown in Part II how a capital of a given magnitude is simultaneously, though in varying proportions, divided, within this flow and succession of forms, into different forms: productive capital, money capital, and commodity capital, so that they not only alternate with one another, but different portions of the total capital value are constantly side by side and function in these different states. Especially money capital came forward with distinctive features not shown in Book I. Certain laws were found according to which diverse large components of a given capital must be continually advanced and renewed — depending on the conditions of the turnover — in the form of money capital in order to keep a productive capital of a given size constantly functioning.

**But in both the first and the second Parts it was always only a question of some individual capital, of the movement of some individualised part of social capital.**

However the circuits of the individual capitals intertwine, presuppose and necessitate one another, and form, precisely in this interlacing, the movement of the total social capital. Just as in the simple circulation of commodities the total metamorphosis of a commodity appeared as a link in the series of metamorphoses of the world of commodities, so now the metamorphosis of the individual capital appears as a link in the series of metamorphoses of the social capital. But while simple commodity circulation by no means necessarily comprises the circulation of capital — since it may take place on the basis of non-capitalist production — the circuit of the aggregate social capital, as was noted, comprises also the commodity circulation lying outside the circuit of individual capital, i.e., the circulation of commodities which do not represent capital.

**We have now to study the process of circulation (which in its entirety is a form of the process of reproduction) of the individual capitals as components of the aggregate social capital, that is to say, the process of circulation of this aggregate social capital**.

## II. THE ROLE OF MONEY CAPITAL

In the study of the turnover of the individual capital, money capital revealed two aspects.

In the first place it constitutes the form in which every individual capital appears upon the scene and opens its process as capital. It therefore appears as the *primus motor*, lending impetus to the entire process.

In the second place, that portion of the advanced capital value which must be continually advanced and renewed in the form of money differs in its ratio to the productive capital which it sets in motion, i.e., in its ratio to the continuous scale of production, depending on the particular length of the period of turnover and the particular ratio between its two component parts — the working period and the period of circulation. But whatever this ratio may be, the portion of the capital value in process which can continually function as productive capital is limited in any event by that portion of the advanced capital value which must always exist beside the productive capital in the form of money. It is here merely a question of the normal turnover, an abstract average. Additional money capital required to compensate for interruptions of the circulation is excepted.

[…] Commodity production presupposes commodity circulation, and commodity circulation presupposes the expression of commodities in money, the circulation of money; the splitting of a commodity into commodity and money is a law of the expression of the product as a commodity. Similarly the capitalist production of commodities — whether considered socially or individually — presupposes capital in the form of money, or money capital,

both as the *primus motor* of every incipient business, and as its continual motor. The circulating capital especially implies that the money capital acts with constant repetition at short intervals as a motor. The entire advanced capital value, that is to say, all the elements of capital, consisting of commodities, labour power, instruments of labour, and materials of production, must be bought over and over again with money. What is true here of the individual capital is also true of the social capital, which functions only in the form of many individual capitals. But as we showed in Book I, it does not at all follow from this that capital's field of operation, the scale of production, depends — even on a capitalist basis — for its *absolute* limits on the amount of functioning money capital.

Incorporated in capital are elements of production whose expansion within certain limits is independent of the magnitude of the advanced money capital. Though payment of labour power be the same, it can be exploited more or less extensively or intensively. If the money capital is increased with this greater exploitation (that is, if wages are raised), it is not increased proportionately, hence not at all *pro tanto*.

The productively exploited natural materials — the soil, the seas, ores, forests, etc. — which do not constitute elements of capital value, are more intensively or extensively exploited with a greater exertion of the same amount of labour power, without an increased advance of money capital. The real elements of productive capital are thus multiplied without requiring an additional money capital […] The same instruments of labour, and thus the same fixed capital, can be used more effectively by an extension of the time they are daily used and by a greater intensity of employment, without an additional outlay of money for fixed capital […] The same is true of the social combination of labour power in the process of production and of the accumulated skill of the individual labourers […] True enough, the increase in the productive power of labour, so far as it does not imply an additional investment of capital value, augments in the first instance only the quantity of the product, not its value, except insofar as it makes it possible to reproduce more constant capital with the same labour and thus to preserve its value. But it forms at the same time new material for capital, hence the basis of increased accumulation of capital […]

Finally, we have shown in the preceding Part that a shortening of the period of turnover permits of setting in motion either the same productive capital with less money capital or more productive capital with the same money capital.

But evidently all this has nothing to do with the question of money capital itself. It shows only that the advanced capital — a given sum of values consisting in its free form, in its value form, of a certain sum of money — includes, after its conversion into productive capital, productive powers

whose limits are not set by the limits of its value, but which on the contrary may operate within certain bounds with differing degrees of extensiveness or intensiveness. If the prices of the elements of production — the means of production and labour power — are given, the magnitude of the money capital required for the purchase of a definite quantity of these elements of production existing as commodities is determined. Or the magnitude of value of the capital to be advanced is determined. But the extent to which this capital acts as a creator of values and products is elastic and variable […]

Inasmuch as the period of turnover is determined by the length of the working period, it is determined, other conditions remaining equal, by the material nature of the process of production, hence not by the specific social character of this process of production. However, on the basis of capitalist production, more extensive operations of comparatively long duration necessitate large advances of money capital for a rather long time. Production in such spheres depends therefore on the magnitude of the money capital which the individual capitalist has at his disposal. This barrier is broken down by the credit system and the associations connected with it, e.g., the stock companies. Disturbances in the money market therefore put such establishments out of business, while these same establishments, in their turn, produce disturbances in the money market […]

We see that inasmuch as the need for money capital originates in the length of the working period, it is conditioned by two things: *First*, that money in general is the form in which every individual capital (apart from credit) must make its appearance in order to transform itself into productive capital; this follows from the nature of capitalist production and commodity production in general. *Second*, the magnitude of the required money advance is due to the circumstance that labour power and means of production are continually withdrawn from society for a comparatively long time without any return to it, during that period, of products convertible into money. The first condition, that the capital to be advanced must be advanced in the form of money, is not eliminated by the form of this money itself, whether it is metal-money, credit money, token-money, etc. The second condition is in no way affected by what money medium or in what form of production labour, means of subsistence, and means of production are withdrawn without the return of some equivalent to the circulation

## CHAPTER 20: SIMPLE REPRODUCTION

[…]

### II. THE TWO DEPARTMENTS OF SOCIAL PRODUCTION

The total product, and therefore the total production, of society may

be divided into two major departments:

I. *Means of Production*, commodities having a form in which they must, or at least may, pass into productive consumption.

II. *Articles of Consumption*, commodities having a form in which they pass into the individual consumption of the capitalist and the working class […]

In each department the capital consists of two parts:

1) *Variable Capital*. This capital, so far as its value is concerned, is equal to the value of the social labour power employed in this branch of production; in other words, it is equal to the sum of the wages paid for this labour power. So far as its substance is concerned, it consists of the labour power in action, i.e., of the living labour set in motion by this capital value.

2) *Constant Capital*. This is the value of all the means of production employed for productive purposes in this branch. These, again, are divided into fixed capital, such as machines, instruments of labour, buildings, labouring animals, etc., and circulating constant capital, such as materials of production: raw and auxiliary materials, semi-finished products, etc. […]

We shall base our study of simple reproduction on the following scheme, in which c stands for constant capital, v for variable capital, and s for surplus value, assuming the rate of surplus value s/v to be 100 per cent. The figures may indicate millions of marks, francs, or pounds sterling.

I. Production of Means of Production:

Capital. . . . . $4{,}000_c + 1{,}000_v = 5{,}000$

Commodity Product $4{,}000_c + 1{,}000_v, + 1{,}000_s = 6{,}000$,

existing in means of production.

II. Production of Articles of Consumption:

Capital . . . . . $2{,}000_c + 500_v = 2{,}500$

Commodity Product . $2{,}000_c + 500_v + 500_s = 3{,}000$,

existing in articles of consumption.

Recapitulation: Total annual commodity product:

I. $4{,}000_c + 1{,}000_v + 1{,}000_s = 6{,}000$ means of production

II. $2{,}000_c + 500_v + 500_s = 3{,}000$ articles of consumption

Total value 9,000, exclusive of the fixed capital persisting in its natural form, according to our assumption.

If we were now to examine the transformations necessary on the basis of simple reproduction, where the entire surplus value is unproductively consumed, and leave aside for the present the money circulation that brings them about, we should obtain at the outset three great points of support.

1) The $500_v$, representing wages of the labourers, and $500_s$, representing surplus value of the capitalists, in department II, must be spent for articles of consumption. But their value exists in articles of consumption

worth 1,000, held by the capitalists of department II, which replace the advanced $500_v$ and represent the $500_s$. Consequently the wages and surplus value of department II are exchanged within this department for products of this same department. Thereby articles of consumption to the amount of ($500_v + 500_s$) II = 1,000, drop out of the total product.

2) The $1,000_v$ plus $1,000_s$ of department I must likewise be spent for articles of consumption; in other words, for products of department II. Hence they must be exchanged for the remainder of this product equal to the constant capital part, $2,000_c$. Department II receives in return an equal quantity of means of production, the product of I, in which the value of $1,000_v + 1,000_s$ of I is incorporated. Thereby 2,000 $II_c$ and ($1,000_v$ +$1,000_s$) I drop out of the calculation.

3) There still remain 4,000 $I_c$. These consist of means of production which can be used only in department I to replace its consumed constant capital, and are therefore disposed of by mutual exchange between the individual capitalists of I, just as the ($500_v + 500_s$) II by an exchange between the labourers and capitalists, or between the individual capitalists of II.

Let this serve for the moment to facilitate the understanding of what follows.

## III. EXCHANGE BETWEEN THE TWO DEPARTMENTS $I_{(V + S)}$ VERSUS $II_C$

We begin with the great exchange between the two classes. ($1,000_v$ + $1,000_s$) I — these values consisting, in the hands of their producers, of means of production in their natural form, are exchanged for 2,000 $II_c$, for values consisting of articles of consumption in their bodily form. The capitalist class of II thereby reconverts its constant capital of 2,000 from the form of articles of consumption into that of means of production of articles of consumption, into a form in which it can once more function as a factor of the labour process and for purposes of self-expansion of value as constant capital value. On the other hand the equivalent of the labour power of I ($1,000_v$) and the surplus value of the capitalists of I ($1,000_s$) are realised thereby in articles of consumption; both of them are converted from their bodily form of means of production into a bodily form in which they can be consumed as revenue.

Now, this mutual exchange is accomplished by means of a circulation of money, which promotes it just as much as it renders its understanding difficult, but which is of decisive importance because the variable portion of capital must ever resume the form of money, as money capital converting itself from the form of money into labour power. The variable capital must be advanced in the form of money in all branches of production carried on at the

entire periphery of society simultaneously alongside each other, regardless of whether they belong to category I or II. The capitalist buys the labour power before it enters into the process of production, but pays for it only at stipulated times, after it has been expended in the production of use values. He owns, together with the remainder of the value of the product, also that portion of it which is only an equivalent for the money expended in the payment of labour power, that portion of the value of the product which represents variable capital. In this portion of value the labourer has already supplied the capitalist with the equivalent of his wages. But it is the reconversion of commodities into money, their sale, which restores to the capitalist his variable capital in the form of money capital, which he may advance once more for the purchase of labour power.

In department I, then, the aggregate capitalist has paid £1,000 (I say £ solely to indicate that it is value in the *form of money*), equal to $1{,}000_v$, to the labourers for the value of product I already existing as the v-portion, i.e., of the means of production created by them. With these £1,000 the labourers buy articles of consumption of the same value from capitalists II, thereby converting one half of the constant capital II into money; capitalists II, in their turn, buy with these £1,000 means of production, valued at 1,000, from capitalists I; thereby, as far as the latter are concerned, the variable capital value equal to $1{,}000_v$, which, being part of their product, existed in the bodily form of means of production, is thus reconverted into money and can now function anew in the hands of capitalists I as money capital, which is transformed into labour power, hence into the most essential element of productive capital. In this way their variable capital flows back to them in the form of money, as a result of the realisation of some of their commodity capital.

As for the money required to exchange the s-portion of commodity capital I for the second half of constant capital II, it may be advanced in various ways. In reality this circulation embraces innumerable separate purchases and sales by the individual capitalists of both categories, the money coming in any event from these capitalists, since we have already accounted for the money put into circulation by the labourers. A capitalist of category II can buy, with the money capital he has besides his productive capital, means of production from capitalists of category I, and, vice versa, a capitalist of category I can buy, with money funds assigned for personal and not for capital expenditure, articles of consumption from capitalists of category II. A certain supply of money, to be used either for the advancement of capital or for the expenditure of revenue must under all circumstances be assumed to exist beside the productive capital in the hands of the capitalists, as we have shown above in parts I and II. Let us assume — the proportion is wholly immaterial for our purpose — that one half of the money is advanced

by capitalists II in the purchase of means of production for the replacement of their constant capital, while the other half is spent by capitalists I for articles of consumption. In that case department II advances £500 for the purchase of means of production from department I, thereby replacing (inclusive of the above £1,000 coming from the labourers of department I) three-quarters of its constant capital *in natura*; with the £500 so obtained department I buys articles of consumption from II, thereby completing for one half of the s-portion of its commodity capital the circulation c — m — c, and thus realising its product in the consumption fund. By means of this second process the £500 return to the hands of II as money capital existing beside its productive capital. On the other hand I expends money to the amount of £500 for the purchase of II's articles of consumption in anticipation of the sale of that half of the s-portion of its commodity capital which is still lying in store as product. With the same £500 II buys from I means of production, thereby replacing *in natura* its entire constant capital (1,000 + 500 + 500 = 2,000), while I realises its entire surplus value in articles of consumption. On the whole, the entire exchange of commodities in the amount of £4,000 would be effected with a money circulation of £2,000 which amount is attained only because the entire annual product is described as exchanged in bulk, in a few large lots. The important point here is that II has not only reconverted its constant capital reproduced in the form of articles of consumption, into the form of means of production, but has besides recovered the £500 which it had advanced to the circulation for the purchase of means of production; and that, similarly, I again possesses not only its variable capital, which it had reproduced in the form of means of production, in money form, as money capital once more directly convertible into labour power, but also the £500 expended in the purchase of articles of consumption in anticipation of the sale of the s-portion of its capital. These £500 flow back to it not because of the expenditure incurred, but because of the subsequent sale of a part of its commodity product incorporating one half of its surplus value.

In both cases it is not only that the constant capital of II is reconverted from the form of a product into the bodily form of means of production, in which alone it can function as capital; and likewise it is not only that the variable portion of the capital of I is converted into its money form, and the surplus value portion of the means of production of I into its consumable form, the form in which it can be used as revenue. It is also that the £500 of money capital, advanced by II in the purchase of means of production prior to selling the corresponding compensating portion of the value of its constant capital — existing in the form of means of consumption — flow back to II; and furthermore back to I flow the £500 which were expended *anticipando* by it for the purchase of articles of consumption. If the money advanced by II at the expense of the constant portion of its

commodity product, and by I at the expense of the surplus value portion of its commodity product, flows back to them, this is solely because the one class of capitalists throws £500 into circulation over and above the constant capital existing in the form of commodities in II, and the other class a like amount over and above the surplus value existing in the form of commodities in I. In the last analysis the two departments have mutually paid one another in full by the exchange of equivalents in the shape of their respective commodities. The money thrown into circulation by them in excess of the values of their commodities, as a means of effecting the exchange of these commodities, returns to each one of them out of the circulation in proportion to the quota which each of the two had thrown into circulation. Neither has grown a farthing richer thereby. I possessed a constant capital of 2,000 in the form of articles of consumption plus 500 in money; now it possesses 2,000 in means of production plus 500 in money, the same as before; in the same way I possesses, as before, a surplus value of 1,000 (consisting of commodities, means of production, now converted into a consumption fund) plus 500 in money. The general conclusion is this: Of the money which the industrial capitalists throw into circulation to accomplish their own commodity circulation, whether at the expense of the constant part of the commodity value or at the expense of the surplus value existing in the commodities to the extent that it is laid out as revenue, as much returns into the hands of the respective capitalists as was advanced by them for the money circulation.

As for the reconversion of the variable capital of class I into the form of money, this capital, after the capitalists of I invested it in wages, exists for them first in the form of commodities in which the labourers delivered it to them. They paid this capital in the form of money to these labourers as the price of their labour power. To this extent the capitalists have paid for that constituent part of the value of their commodity product which is equal to the variable capital expended in the form of money. They are, for this reason, the owners of this portion of the commodity product as well. But that part of the working class which is employed by them does not buy the means of production created by it; these labourers buy articles of consumption produced by II. Hence the variable capital advanced by the capitalists of I in the payment of labour power does not return to them directly. It passes by means of purchases made by the labourers into the hands of the capitalist producers of the commodities necessary for and within the reach of working folks; in other words, it passes into the hands of capitalists II. And not until these expend the money in the purchase of means of production does it return by this circuitous route into the hands of capitalists I. It follows that, on the basis of simple reproduction, the sum of the values of v + s of the commodity capital of I (and therefore a corresponding proportional part of the total commodity product of I) must be equal to the constant capital $II_c$, which is

likewise taken as a proportional part of the total commodity product of department II; or $I_{(v + s)} = II_c$.

## IV. EXCHANGE WITHIN DEPARTMENT II. NECESSITIES OF LIFE AND ARTICLES OF LUXURY

Of the value of the commodity product of department II there still remain to be studied the constituents v plus s. This analysis has nothing to do with the most important question which occupies our attention here, namely to what extent the division of the value of every individual capitalist commodity product into c + v + s — even if brought about by different forms of appearance — applies also to the value of the total annual product. This question finds its answers on the one hand in the exchange of $I_{(v + s)}$ for $II_c$, and on the other hand in the investigation, to be made later, of the reproduction of $I_c$ in the annual product of I. Since $II_{(v + s)}$ exists in the bodily form of articles of consumption; since the variable capital advanced to the labourers in payment of their labour power must generally speaking be spent by them for articles of consumption; and since the s-portion of the value of commodities, on the assumption of simple reproduction, is practically spent as revenue for articles of consumption, it is *prima facie* evident that the labourers II buy back, with the wages received from the capitalists II, a portion of their own product, corresponding to the amount of the money value received as wages. Thereby the capitalist class II reconverts the money capital advanced by it in the payment of labour power into the form of money. It is quite the same as if it had paid the labourers in mere value tokens. As soon as the labourers would realise these value tokens by the purchase of a part of the commodities produced by them but belonging to the capitalists, these tokens would return into the hands of the capitalists. Only, these tokens do not merely represent value but possess it, in golden or silver embodiment. We shall analyse in greater detail later on this sort of reflux of variable capital advanced in the form of money by means of a process in which the working class appears as the purchaser and the capitalist class as the seller. Here however a different point is at issue, which must be discussed in connection with this return of the variable capital to its point of departure.

Category II of the annual production of commodities consists of a great variety of branches of production, which may, however, be divided into two great sub-divisions by their products.

a) *Articles of consumption*, which enter into the consumption of the working class, and, to the extent that they are necessities of life — even if frequently different in quality and value from those of the labourers — also form a portion of the consumption of the capitalist class. For our purposes we

may call this entire sub-division consumer *necessities*, regardless of whether such a product as tobacco is really a consumer necessity from the physiological point of view. It suffices that it is habitually such.

b) *Articles of luxury*, which enter into the consumption of only the capitalist class and can therefore be exchanged only for spent surplus value, which never falls to the share of the labourer.

As far as the first category is concerned it is obvious that the variable capital advanced in the production of the commodities belonging in it must flow back in money form directly to that portion of the capitalist class II (i.e., the capitalists IIa) who have produced these necessities of life. They sell them to their own labourers to the amount of the variable capital paid to them in wages. This reflux is *direct* so far as this entire sub-division a of capitalist class I is concerned, no matter how numerous the transactions may be between the capitalists of the various pertinent branches of industry, by means of which the returning variable capital is distributed *pro rata*. These are processes of circulation, whose means of circulation are supplied directly by the money expended by the labourers. It is different, however, with sub-division IIb. The entire portion of the value produced in this sub-division, $IIb_{(v + s)}$, exists in the bodily form of articles of luxury, i.e., articles which the labouring class can buy no more than it can buy commodity value $I_v$ existing in the form of means of production, notwithstanding the fact that both the articles of luxury and the means of production are the products of these labourers.

Hence the reflux by which the variable capital advanced in this subdivision returns to the capitalist producers in its money form cannot be direct but must be mediated, as in the case of $I_v$.

Let us assume for instance that v = 500 and s = 500, as they did in the case of the entire class II; but that the variable capital and the corresponding surplus value are distributed as follows:

Sub-division a, Necessities of Life: v = 400; s = 400; hence a quantity of commodities in consumer necessities of the value of $400_v + 400_s = 800$, or IIa $(400_v + 400_s)$.

Sub-division b, Articles of Luxury: of the value of $100_v + l00_s = 200$, or IIb $(100_v + 100_s)$.

The labourers of IIb have received 100 in money as payment for their labour power, or say £100. With this money they buy articles of consumption from capitalists IIa to the same amount. This class of capitalists buys with the same money £100 worth of the IIb commodities, and in this way the variable capital of capitalists IIb flows back to them in the form of money.

In IIa there are available once more $400_v$ in money, in the hands of the capitalists, obtained by exchange with their own labourers. Besides, a fourth of the part of the product representing surplus value has been transferred to

the labourers of IIb, and in exchange IIb ($100_v$) have been received in the form of articles of luxury.

Now, assuming that the capitalists of IIa and IIb divide the expenditure of their revenue in the same proportion between necessities of life and luxuries — three-fifths for necessities for instance and two-fifths for luxuries — the capitalists of sub-class IIa will spend three-fifths of their revenue from surplus value, amounting to $400_s$, or 240, for their own products, necessities of life, and two-fifths, or 160, for articles of luxury. The capitalists of sub-class IIb will divide their surplus value of $100_s$ in the same way: three-fifths, or 60, for necessities, and two-fifths, or 40, for articles of luxury, the latter being produced and exchanged in their own sub-class.

The 160 in articles of luxury received by $(IIa)_s$ pass into the hands of the IIa capitalists in the following manner: As we have seen, 100 of the (IIa) $400_s$ were exchanged in the form of necessities of life for an equal amount of $(IIb)_v$, which exists as articles of luxury, and another 60, consisting of necessities of life, for (IIb) $60_s$, consisting of luxuries. The total calculation then stands as follows:

IIa: $400_v + 400_s$; IIb: $100_v + 100_s$

1) $400_v$ (a) are consumed by the labourers of IIa, a part of whose product (necessities of life) they form. The labourers buy them from the capitalist producers of their own sub-division. These capitalists thereby recover £400 in money, which is the value of their variable capital of 400 paid by them to these same labourers as wages. They can now once more buy labour power with it.

2) A part of the $400_s$ (a), equal to the $100_v$ (b), one-fourth of the surplus value (a), is realised in luxuries in the following way: The labourers (b) received from the capitalists of their sub-division (b) £100 in wages. With this amount they buy one-fourth of the surplus value (a), i.e., commodities consisting of necessities of life. With this money the capitalists of (a) buy articles of luxury to the same amount, which equals $100_v$ (b), or one half of the entire output of luxuries. In this way the b capitalists get back their variable capital in the form of money and are enabled to resume reproduction by again purchasing labour power, since the entire constant capital of the whole category II has already been replaced by the exchange of $I_{(v + s)}$ for $II_c$. The labour power of the luxury workers is therefore saleable anew only because the part of their own product created as an equivalent for their wages is drawn by capitalists IIa into their consumption fund, is turned into money. (The same applies to the sale of the labour power of I, since the $II_c$ for which $I_{(v + s)}$ is exchanged, consists of both articles of luxury and necessities of life, and that which is renewed by means of $I_{(v + s)}$ constitutes the means of production of both luxuries and necessities.)

3) We now come to the exchange between a and b, which is merely

exchange between the capitalists of the two sub-divisions. So far we have disposed of the variable capital ($400_v$) and part of the surplus value ($100_s$) in a, and the variable capital ($100_v$) in b. We have furthermore assumed that the average proportion of the expenditure of the capitalist revenue was in both classes two-fifths for luxuries and three-fifths for necessities. Apart from the 100 already expended for luxuries, the entire subdivision a still has to be allotted 60 for luxuries, and b has proportionately to be allotted 40.

$(IIa)_s$ is then divided into 240 for necessities and 160 for luxuries, or $240 + 160 = 400_s$ (IIa).

$(IIb)_s$ is divided into 60 for necessities and 40 for luxuries; $60 + 40 = 100_s$ (IIb). The last 40 are consumed by this class out of its own product (two-fifths of its surplus value); the 60 in necessities are obtained by this class through the exchange of 60 of its surplus value for $60_s$ (a).

We have, then, for the entire capitalist class II the following (v plus s in sub-division *a* consisting of necessities, in *b* of luxuries): IIa $(400_v + 400_s)$ + IIb $(100_v + 100_s) = 1{,}000$; by this movement there is thus realised: $500_v$ (a + b) // realised in $400_v$ (a) and $100_s$ (a) // + $500_s$ (a + b) // realised in $300_s$ (a) + $100_v$ (b) + $100_s$ (b) // =1,000. For *a* and *b*, each considered by itself, we obtain the following realisation:

a) v / ( $400_v$(a) ) + s / ($240_s$(a) + $100_s$(b) + $60_s$(b)) = 800
b) v / ( $100_s$(a) ) + s / ($60_s$(a) + $40_s$(b)) ... = (200 / 1000)

If, for the sake of simplicity, we assume the same proportion between the variable and constant capital (which, by the way, is not at all necessary), we obtain for $400_v$ (a) a constant capital of 1,600, and for $100_v$ (b) a constant capital of 400. We then have the following two subdivisions, a and b, in II:

IIa) $1{,}600_c + 400_v + 400_s = 2{,}400$
IIb) $400_c + 100_v + 100_s = 600$

adding up to
$2{,}000_c + 500_v + 500_s = 3{,}000$

Accordingly, 1,600 of the 2,000 $II_c$ in articles of consumption, which are exchanged for 2,000 $I_{(v+s)}$, are exchanged for means of production of necessities of life and 400 for means of production of luxuries.

The 2,000 $I_{(v+s)}$ would therefore break up into $(800_v + 800_s)$ I for a, equal to 1,600 means of production of necessities of life, and $(200_v + 200_s)$ I for b, equal to 400 means of production of luxuries.

A considerable part of the instruments of labour as such, as well as of the raw and auxiliary materials, etc., is the same for both departments. But so

far as the exchange of the various portions of value of the total product $I_{(v + s)}$ is concerned, such a division would be wholly immaterial. Both the above $800_v$ of I and the $200_v$ of I are realised because the wages are spent for articles of consumption 1,000 $II_c$; hence the money capital advanced for this purpose is distributed evenly on its return among the capitalist producers of I, their advanced variable capital is replaced *pro rata* in money. On the other hand, so far as the realisation of the 1,000 $I_s$ is concerned, the capitalists will here likewise draw uniformly (in proportion to the magnitude of their s) 600 IIa and 400 IIb in means of consumption out of the entire second half of $II_c$, equal to 1,000; consequently those who replace the constant capital of IIa will draw:

480 (three-fifths) out of $600_c$ (IIa) and 320 (two-fifths) out of $400_c$ (IIb), a total of 800;

those who replace the constant capital of IIb will draw:

120 (three-fifths) out of $600_c$ (IIa) and 80 (two-fifths) out of $400_c$ (IIb), which equals 200. Grand total = 1,000.

What is arbitrary here is the ratio of the variable to the constant capital of both I and II and so is the identity of this ratio for I and II and their sub-divisions. As for this identity, it has been assumed here merely for the sake of simplification, and it would not alter in any way the conditions of the problem and its solution if we were to assume different proportions. However, the necessary result of all this, on the assumption of simple reproduction, is the following.

1) That the new value created by the labour of one year (divisible into v + s) in the bodily form of means of production is equal to the value of the constant capital c contained in the value of the product created by the other part of the annual labour and reproduced in the form of articles of consumption. If it were smaller than $II_c$, it would be impossible for II to replace its constant capital entirely; if it were greater, a surplus would remain unused. In either case, the assumption of simple reproduction would be violated.

2) That in the case of annual product which is reproduced in the form of articles of consumption, the variable capital v advanced in the form of money can be realised by its recipients, inasmuch as they are labourers producing luxuries, only in that portion of the necessities of life which embodies for their capitalist producers *prima facie* their surplus value; hence that v, laid out in the production of luxuries, is equal in value to a corresponding portion of s produced in the form of necessities of life, and hence must be smaller than the whole of this s, namely $(IIa)_s$, and that the variable capital advanced by the capitalist producers of luxuries returns to them in the form of money only by means of the realisation of that v in this portion of s. This phenomenon is quite analogous to the realisation of

$I_{(v + s)}$ in $II_c$, except that in the second case $(IIb)_v$ realizes itself in a *part* of $(IIa)_s$ of the same value. These proportions remain qualitatively determinant in every distribution of the total annual product, since it actually enters into the process of the annual reproduction brought about by circulation. $I_{(v + s)}$ can be realised only in $II_c$, just as $II_c$ can only be renewed in function as a component part of productive capital by means of this realisation; in the same way, $(IIb)_v$ can be realised only in a portion of $(IIa)_s$ and $(IIb)_v$ can only thus be reconverted into the form of money capital. It goes without saying that this applies only to the extent that it all is really a result of the process of reproduction itself, i.e., to the extent that the capitalists of IIb, for instance, do not obtain money capital for v on credit from others. Quantitatively however the exchanges of the various portions of the annual product can take place in the proportions indicated above only so long as the scale and value relations in production remain stationary and so long as these strict relations are not altered by foreign commerce […]

In the exchange established above of $(IIb)_v$ for a portion of $(IIa)_s$ of the same value, and in the further exchanges between $(IIa)_s$, and $(IIb)_s$, it is by no means assumed that either the individual capitalists of IIa and IIb or their respective totalities divide their surplus value in the same proportion between necessary articles of consumption and articles of luxury. The one may spend more on this consumption, the other more on that. On the basis of simple reproduction it is merely assumed that a sum of values equal to the entire surplus value is realised in the consumption fund. The limits are thus given. Within each department the one may spend more in a, the other in b. But this may compensate itself mutually, so that the capitalist groups of a and b, taken as a whole, each participate in the same proportion in both. The value relations — the proportional shares of the two kinds of producers, a and b in the total value of product II — consequently also a definite quantitative relation between the branches of production supplying those products — are however necessarily given in each concrete case; only the proportion chosen as an illustration is a hypothetical one. It would not alter the qualitative aspects if another illustration were selected; only the quantitative determinations would be altered. But if on account of any circumstances there arises an actual change in the relative magnitude of a and b, the conditions of simple reproduction would also change accordingly […]

Simple reproduction is essentially directed toward consumption as an end, although the grabbing of surplus value appears as the compelling motive of the individual capitalists; but surplus value, whatever its relative magnitude may be, is after all supposed to serve here only for the individual consumption of the capitalist.

As simple reproduction is a part, and the most important one at that, of all annual reproduction on an extended scale, this motive remains as an

accompaniment of and contrast to the self-enrichment motive as such. In reality the matter is more complicated, because partners in the loot — the surplus value of the capitalist — figure as consumers independent of him.

## V. THE MEDIATION OF EXCHANGE BY THE CIRCULATION OF MONEY

So far as we have analysed circulation up to the present, it proceeded between the various classes of producers as indicated in the following scheme:

1) Between class I and class II:
I. $4{,}000_c + \underline{1{,}000_v + 1{,}000_s}$
II. ……$2{,}000_c$……+ $500_v$+ $500_s$

This disposes of the circulation of $II_c$, equal to 2,000, which is exchanged for I ($1{,}000_v + 1{,}000_s$).

Leaving aside for the present the 4,000 $I_c$ there still remains the circulation of v + s within class II. Now $II_{(v+s)}$ is divided between the sub-classes IIa and IIb in the following manner:

2) II. $500_v + 500_s$ = a ($400_v + 400_s$) + b ($100_v + 100_s$).

The $400_v$ (a) circulates within its own sub-class; the labourers paid with it buy from their employers, the capitalists IIa, necessary means of subsistence produced by themselves.

Since the capitalists of both sub-classes spend three-fifths of their surplus value in products of IIa (necessities) and two-fifths in products of IIb (luxuries), the three-fifths of the surplus value of a, or 240, are consumed within the sub-class IIa itself; likewise, two-fifths of the surplus value of b (produced and existing in the form of articles of luxury), within the sub-class IIb.

There remains to be exchanged between IIa and IIb:
On the side of IIa: $160_s$;
On the side of IIb: $100_v + 60_s$.

These cancel each other. With their 100, received in the form of money wages, the labourers of IIb buy necessities of life in that amount from IIa. The IIb capitalists likewise buy necessities from IIa to the amount of three-fifths of their surplus value, or 60. The IIa capitalists thus obtain the money required for investing, as above assumed, two-fifths of their surplus value, or $160_s$, in luxuries produced by IIb ($100_v$, held by the IIb capitalists as a product replacing the wages paid by them, and $60_s$). The scheme for this is therefore:

3) IIa. //$400_v$ // + //$240_s$// + $\underline{160_s}$
b..... $100_v + 60_s$ + //$40_s$//,

the bracketed items circulating and being consumed only within their own sub-class.

The direct reflux of the money capital advanced in variable capital, which takes place only in the case of the capitalist department IIa which produces necessities of life, is but an expression, modified by special conditions, of the previously mentioned general law that money advanced to the circulation by producers of commodities returns to them in the normal course of commodity circulation. From this it incidentally follows that if any money capitalist at all stands behind the producer of commodities and advances to the industrial capitalist money capital (in the strictest meaning of the word, i.e., capital value in the form of money), the real point of reflux for this money is the pocket of this money capitalist. Thus the mass of the circulating money belongs to that department of money capital which is organised and concentrated in the form of banks, etc., although the money circulates more or less through all hands. The way in which this department advances its capital necessitates the continual final reflux to it in the form of money, although this is once again brought about by the reconversion of the industrial capital into money capital.

The circulation of commodities always requires two things: Commodities which are thrown into circulation and money which is likewise thrown into it. “The process of circulation ... does not, like direct barter of products, become extinguished upon the use values changing places and hands. The money does not vanish on dropping out of the circuit of the metamorphosis of a given commodity. It is constantly being precipitated into new places in the arena of circulation vacated by other commodities,” etc. (Buch I, Kap. III).

For instance in the circulation between $II_c$ and $I_{(v + s)}$ we assumed that II had advanced £500 in money for it. In the innumerable processes of circulation, into which the circulation between large social groups of producers resolves itself, representatives of the various groups will at various times be the first to appear as buyers, and hence throw money into circulation. Quite apart from particular circumstances, this is necessitated by the difference, if nothing else, in the periods of production, and thus of the turnovers, of the various commodity capitals. So with these £500 II buys from I means of production of the same value and I buys from II articles of consumption valued at £500. Hence the money flows back to II, but this department does not in any way grow richer by this reflux. It had first thrown £500 in money into circulation and drew commodities of the same value out

of it; then it sells £500 worth of commodities and draws the same amount of money out of circulation; thus the £500 flow back to it. As a matter of fact, II has thrown into circulation £500 in money and £500 in commodities, which is equal to £1,000. It draws out of the circulation £500 in commodities and £500 in money. The circulation requires for the handling of £500 in I commodities and £500 in II commodities only £500 in money; hence whoever advanced the money in the purchase of commodities from other producers recovers it when selling his own. Consequently if I had at first bought commodities from II for £500, and later sold to II commodities of the value of £500, these £500 would have returned to I instead of to II.

In class I the money invested in wages, i.e., the variable capital advanced in the form of money, does not return directly in this form but indirectly, by a detour. But in II the £500 of wages return directly from the labourers to the capitalists, and this return is always direct in the case where purchase and sale take place repeatedly between the same persons in such a way that they are acting alternately as buyers and sellers of commodities. The capitalist of II pays for the labour power in money; he thereby incorporates labour power in his capital and assumes the role of an industrial capitalist in relation to his labourers as wage-earners, but does so only by means of this act of circulation, which is for him merely a conversion of money capital into productive capital. Thereupon the labourer, who in the first instance was a seller, a dealer in his own labour power, appears in the second instance as a buyer, a possessor of money, in relation to the capitalist, who now acts as a seller of commodities. In this way the capitalist recovers the money invested by him in wages. As the sale of these commodities does not imply cheating, etc., but is an exchange of equivalents in commodities and money, it is not a process by which the capitalist enriches himself. He does not pay the labourer twice, first in money and then in commodities. His money returns to him as soon as the labourer exchanges it for his commodities.

However, the money capital converted into variable capital, i.e., the money advanced for wages, plays a prominent role in the circulation of money itself, since the labourers must live from hand to mouth and cannot give the industrial capitalists credit for any length of time. For this reason variable capital must be advanced in the form of money simultaneously at innumerable territorially different points in society at certain short intervals, such as a week, etc.—in periods of time that repeat themselves rather quickly (and the shorter these periods, the smaller relatively is the total amount of money thrown at one time into circulation through this channel) — whatever the various periods of turnover of the capitals in the different branches of industry. In every country with a capitalist production the money capital so advanced constitutes a relatively decisive share of the total circulation, the more so as the same money, before its reflux to its point of departure, passes

through the most diverse channels and functions as a medium of circulation for countless other businesses.

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Now let us consider the circulation between $I_{(v + s)}$ and $II_c$ from a different angle.

Capitalists I advance £1,000 in the payment of wages. With this money the labourers buy £1,000 worth of means of subsistence from capitalists II. These in turn buy for the same money means of production from capitalists I. Capitalists I thus get back their variable capital in the form of money, while capitalists II have reconverted one half of their constant capital from the form of commodity capital into that of productive capital. Capitalists II advance another £500 in money to get means of production from I. The capitalists I spend this money on articles of consumption from II. These £500 thus return to capitalists II. They advance this amount again in order to reconvert the last quarter of their constant capital, converted into commodities, into its productive bodily form. This money flows back to I and once more withdraws articles of consumption of the same amount from II. Thus the £500 return to II. The capitalists II are now as before in possession of £500 in money and £2,000 in constant capital, the latter having been newly converted from the form of commodity capital into that of productive capital. By means of £1,500 a quantity of commodities worth £5,000 has been circulated. Namely: 1) I pays £1,000 to his labourers for their labour power of the same value; 2) With these same £1,000 the labourers buy means of subsistence from II; 3) With the same money II buys means of production from I, thereby restoring to I variable capital to the amount of £1,000 in the form of money; 4) II buys £500 worth of means of production from I; 5) With the same £500 I buys articles of consumption from II; 6) With the same £500 II buys means of production from I; 7) With the same £500 I buys means of subsistence from II. Thus £500 have returned to II, which had thrown them into circulation besides its £2,000 in commodities and for which it did not withdraw from circulation any equivalent in commodities.

The exchange therefore takes the following course:

1) I pays £1,000 in money for labour power, hence for commodities equal to £1,000.

2) The labourers buy with their wages amounting in money to £1,000 articles of consumption from II; hence commodities equal to £1,000.

3) With the £1,000 received from the labourers II buys means of production of the same value from I; hence commodities equal to £1,000.

In this way the £l.000 have returned to I as the money form of its variable capital.

4) II buys £500 worth of means of production from I, hence commodities equal to £500.

5) With the same £500 I buys articles of consumption from II; hence commodities equal to £500.

6) With the same £500 II buys means of production from I; hence commodities equal to £500.

7) With the same £500 I buys articles of consumption from II; hence commodities equal to £500.

Total amount of commodity values exchanged: £5,000.

The £500 advanced by II for the purchase have returned to it.

The result is as follows:

1) I possesses variable capital in the form of money to the amount of £1,000, which it originally advanced to the circulation. It furthermore expended £1,000 for its individual consumption, in the shape of its own products; i.e., it has spent the money which it had received for the sale of means of production to the amount of £1,000.

On the other hand the natural form into which the variable capital existing in the form of money must be transformed, i.e., labour power, has been maintained, reproduced and again made available by consumption as the sole article of trade of its owners, which they must sell in order to live. The relation of wage labourers and capitalists has likewise been reproduced.

2) The constant capital of II is replaced *in natura*, and the £500 advanced by the same II to the circulation have returned to it.

As for the labourers I, the circulation is the simple one of C—M—C:C' (labour power) —$M^2$ (£1,000, money form of variable capital I) —$C^3$ (necessities of life to the amount of £1,000); these £1,000 convert into money to the same amount of value the constant capital II existing in the form of commodities, of means of subsistence.

As for the capitalists II, the process is C— M, the transformation of a portion of their commodity product into the money form, from which it is reconverted into the constituents of productive capital, namely into a portion of the means of production required by them. In the money advance (£500) made by capitalists II for the purchase of the other parts of the means of production, the money form of that portion of $II_c$ which exists as yet in the form of commodities (articles of consumption) is anticipated; in the act M — C, in which II buys with M, and C is sold by I, the money (II) is converted into a portion of the productive capital, while C (I) passes through the act C — M, changes into money, which however does not represent any component part of capital value for I, but surplus value converted into money and expended solely for articles of consumption.

In the circuit M — C ... P ... C' — M', the first act, M — C, is that of one capitalist, the last, C' — M' (or part of it), is that of another; whether the

C, by which M is converted into productive capital, represents a component of constant capital, of variable capital, or surplus value for the seller of C (who exchanges this C for money), is wholly immaterial for the commodity circulation itself.

Class I, so far as concerns the component v + s of its commodity product, draws more money out of the circulation than it has thrown in. In the first place, the £1,000 of variable capital return to it; in the second place, it sells means of production worth £500 (see above, exchange No. 4); one half of its surplus value is thus turned into money; then (exchange No. 6) it sells once more £500 worth of means of production, the second half of its surplus value, and thus the entire surplus value is withdrawn from circulation in the shape of money. Hence in succession: 1) variable capital reconverted into money, equal to £1,000; 2) one half of the surplus value turned into money, equal to £500; 3) the other half of the surplus value, equal to £500; altogether $1{,}000_v + 1{,}000_s$ turned into money, equal to £2,000. Although I threw only £1,000 into circulation (aside from those exchanges which promote the reproduction of $I_c$ and which we shall have to analyse later), it has withdrawn double that amount from it. Of course s passes into other hands, (II), as soon as it has been converted into money, by being spent for articles of consumption. The capitalists of I withdrew only as much in money as they threw into it in value in the form of commodities; the fact that this value is surplus value, i.e., that it does not cost the capitalists anything, does not alter the value of these commodities in any way; so far as the exchange of values in commodity circulation is concerned, that fact is of no consequence at all. The existence of surplus value in money is of course transient, the same as all other forms which the advanced capital assumes in its metamorphoses. It lasts no longer than the interval between the conversion of commodities I into money and the subsequent conversion of the money I into commodities II.

If the turnovers had been assumed to be shorter — or, from the point of view of the simple circulation of commodities, the circulation of money more rapid — even less money would be ample to circulate the exchanged commodity values; the amount is always determined — if the number of successive exchanges is given — by the sum of the prices, or the sum of values, of the circulating commodities. It is immaterial in what proportion this sum of values consists of surplus value on the one hand, and of capital value on the other.

If the wages of I, in our illustration, were paid four times per year, we should have 4 times 250, or 1,000. Hence £250 in money would suffice for the circulation $I_v$ — ½ $II_c$, and for that between the variable capital $I_v$ and the labour power I. Likewise, if the circulation between $I_s$ and $II_c$ were to take place in four turnovers, it would require only £250, or in the aggregate a sum of money, or a money capital, of £500 for the circulation of commodities

amounting to £5,000. In that case the surplus value would be converted into money four times successively, one-quarter each time, instead of twice successively, one half each time [...]

If a capitalist (we have only industrial capitalists still to deal with here, who are the representatives of all others) spends money for articles of consumption, he is through with it, it goes the way of all flesh. It can flow back to him only if he fishes it out of circulation in exchange for commodities, i.e., for his commodity capital. As the value of his entire annual commodity product (his commodity capital), so that of every one of its elements, i.e., the value of every individual commodity, is divisible, as far as he is concerned, into constant capital value, variable capital value, and surplus value. The conversion into money of every individual commodity (as elements constituting the commodity product) is consequently at the same time such a conversion of a certain portion of the surplus value contained in the entire commodity product. In this case, then, it is literally true that the capitalist himself threw the money into circulation — when he spent it on articles of consumption — by which his surplus value is converted into money, or realised. Of course it is not a question of the identical coins but of a certain amount of hard cash equal to the one (or to a portion of the one) which he had previously thrown into circulation to satisfy his personal wants.

In practice this occurs in two ways. If the business has just been opened, in the current year, it will take quite a while, at least a few months, before the capitalist is able to use any portion of the receipts of his business for his personal consumption. But for all that he does not suspend his consumption for a single moment. He advances to himself (immaterial whether out of his own pocket or by means of credit from the pocket of somebody else) money in anticipation of surplus value still to be snatched by him; but in doing so he also advances a circulating medium for the realisation of surplus value to be realised later. If, on the contrary, the business has been running regularly for a longer period, payments and receipts are distributed over different terms throughout the year. But one thing continues uninterruptedly, namely, the consumption of the capitalist, which anticipates, and whose volume is computed on a definite proportion of, the customary or estimated revenue. With every portion of commodities sold, a portion of the surplus value to be produced annually is also realised. But if during the entire year only as much of the produced commodities is sold as is required to replace the constant and variable capital values contained in them, or if prices were to fall to such an extent that only the advanced capital value contained in the entire annual commodity product should be realised on its sale, then the anticipatory character of the expenditure of money in expectation of future surplus value would be clearly revealed. If our capitalist fails, his creditors and the court investigate whether his anticipated private

expenditures were in proper proportion to the volume of his business and to the receipt of surplus value usually or normally corresponding to it.

So far as the entire capitalist class is concerned, the proposition that it must itself throw into circulation the money required for the realisation of its surplus value (correspondingly also for the circulation of its capital, constant and variable) not only fails to appear paradoxical, but stands forth as a necessary condition of the entire mechanism. For there are here only two classes: the working class disposing only of its labour power, and the capitalist class, which has a monopoly of the social means of production and money. It would rather be a paradox if the working class were to advance in the first instance from its own resources the money required for the realisation of the surplus value contained in the commodities. But the individual capitalist makes this advance only by acting as a buyer, *expending* money in the purchase of articles of consumption or *advancing* money in the purchase of elements of his productive capital, whether of labour power or means of production. He never parts with his money unless he gets an equivalent for it. He advances money to the circulation only in the same way as he advances commodities to it. He acts in both instances as the initial point of their circulation.

The actual process is obscured by two circumstances:

1) The appearance in the process of circulation of industrial capital of *merchant's capital* (the first form of which is always money, since the merchant as such does not create any "product" or "commodity") and of *money capital* as an object of manipulation by a special kind of capitalists.

2) The division of surplus value – which must always be first in the hands of the industrial capitalist – into various categories, as vehicles of which there appear, aside from the industrial capitalist, the landlord (for ground rent), the usurer (for interest), etc., furthermore the government and its employees, rentiers, etc. These gentry appear as buyers vis-à-vis the industrial capitalist and to that extent as converters of his commodities into money; they too throw "money" *pro parte* into the circulation and he gets it from them. But it is always forgotten from what source they derived it originally, and continue deriving it ever anew […]

## VII. VARIABLE CAPITAL AND SURPLUS VALUE IN BOTH DEPARTMENTS

The total value of the annually produced articles of consumption is thus equal to the variable capital value II reproduced during the year plus the newly produced surplus value II (i.e., equal to the value produced by II during the year) plus the variable capital value I reproduced during the year

and the newly produced surplus value I (i.e., plus the value created by I during the year).

On the assumption of simple reproduction the total value of the annually produced articles of consumption is therefore equal to the annual value product, i.e., equal to the total value produced during the year by social labour, and this must be so, because in simple reproduction this entire value is consumed.

The total social working day is divided into two parts: 1) Necessary labour which creates in the course of the year a value of $1{,}500_v$; 2) surplus labour, which creates an additional value, or surplus value, of $1{,}500_s$. The sum of these values, 3,000, is equal to the value of the annually produced articles of consumption — 3,000. The total value of the articles of consumption produced during the year is therefore equal to the total value produced by the total social working day during the year, equal to the value of the social variable capital plus the social surplus value, equal to the total new product of the year.

But we know that even if these two magnitudes of value are equal, this in no way means that the total value of commodities II, the articles of consumption, has been produced in this department of social production. They are equal because the constant capital value re-appearing in II is equal to the value newly produced by I (value of variable capital plus surplus value); therefore $I_{(v + s)}$ can buy the part of the product of II which represents the constant capital value for its producers (in department II). This shows, then, why the value of the product of capitalists II, from the point of view of society, may be resolved into v + s although for these capitalists it is divided into c + v + s. This is so only because $II_c$ is here equal to $I_{(v + s)}$, and because these two components of the social product interchange their natural forms by exchange, so that after this transformation $II_c$ exists once more in means of production and $I_{(v + s)}$ in articles of consumption.

And it is this circumstance which induced Adam Smith to maintain that the value of the annual product resolves itself into v + s. This is true 1) only for that part of the annual product which consists of articles of consumption; and 2) it is not true in the sense that this total value is produced in II and that the value of its product is equal to the value of the variable capital advanced in II plus the surplus value produced in II. It is true only in the sense that $II_{(c + v + s)}$ is equal to $II_{(v + s)} + I_{(v + s)}$, or because $II_c$ is equal to $I_{(v + s)}$.

It follows furthermore:

The social working day (i.e., the labour expended by the entire working class during the whole year), like every individual working day, breaks up into only two parts, namely into necessary labour and surplus labour, and the value produced by this working day consequently likewise

resolves itself into only two parts, namely into the value of the variable capital, or that portion of the value with which the labourer buys the means of his own reproduction, and the surplus value which the capitalist may spend for his own individual consumption. Nevertheless, from the point of view of society, one part of the social working day is spent exclusively on the *production of new constant capital*, namely of products exclusively intended to function as means of production in the labour process and hence as constant capital in the accompanying process of self-expansion of value. According to our assumption the total social working day presents itself as a money value of 3,000, only one-third of which, or 1,000, is produced in department II which manufactures articles of consumption, that is, the commodities in which the entire value of the variable capital and the entire surplus value of society are ultimately realised. Thus, according to this assumption, two-thirds of the social working day are employed in the production of new constant capital. Although from the standpoint of the individual capitalists and labourers of department I these two-thirds of the social working day serve merely for the production of variable capital value plus surplus value, the same as the last third of the social working day in department II, still from the point of view of society and likewise of the use value of the product, these two-thirds of the social working day produce only replacement of constant capital in the process of productive consumption or already so consumed. Also when viewed individually these two-thirds of the working day, while producing a total value equal only to the value of the variable capital plus surplus value for the producer, nevertheless do not produce any use values of a kind on which wages or surplus value could be expended; for their products are means of production.

It must be noted in the first place that no portion of the social working day, whether in I or in II, serves for the production of the value of the constant capital employed and functioning in these two great spheres of production. They produce only additional value, 2,000 $I_{(v + s)}$ + 1,000 $II_{(v + s)}$, in addition to the value of the constant capital equal to 4,000 $I_c$ + 2,000 $II_c$. The new value produced in the form of means of production is not yet constant capital. It merely is intended to function as such in the future.

The entire product of II — the articles of consumption — viewed concretely as a use value, in its natural form, is a product of the one-third of the social working day spent by II. It is the product of labour in its concrete form — such as the labour of weaving, baking, etc., performed in this department — the product of this labour, inasmuch as it functions as the subjective element of the labour process. As to the constant portion of the value of this product II, it re-appears only in a new use value, in a new natural form, the form of articles of consumption, while it existed previously in the form of means of production. Its value has been transferred by the

labour process from its old natural form to its new natural form. But the *value* of these two-thirds of the product-value, equal to 2,000, has not been produced in this year's self-expansion process of II.

Just as from the point of view of the labour process, the product of II is the result of newly functioning living labour and of the assumed means of production assigned to it, in which that labour materialises itself as in its objective conditions, so, from the point of view of the process of self-expansion, the value of the product of II, equal to 3,000, is composed of a new value ($500_v + 500_s = 1{,}000$) produced by the newly added one-third of the social working day and of a constant value in which are embodied two-thirds of a past social working day that had elapsed before the present process of production of II here under consideration. This portion of the value of the II product finds expression in a portion of the product itself. It exists in a quantity of articles of consumption worth 2,000, or two-thirds of a social working day. This is the new use form in which this value-portion re-appears. The exchange of part of the articles of consumption equal to 2,000 $II_c$ for means of production of I equal to I ($1{,}000_v + 1{,}000_s$) thus really represents an exchange of two-thirds of an aggregate working day — which do not constitute any portion of this year's labour, and elapsed before this year — for two-thirds of the working day newly added this year. Two-thirds of this year's social working day could not be employed in the production of constant capital and at the same time constitute variable capital value plus surplus value for their own producers unless they were to be exchanged for a portion of the value of the annually consumed articles of consumption, in which are incorporated two-thirds of a working day spent and realised before this year. It is an exchange of two-thirds of this year's working day for two-thirds of a working day spent before this year, an exchange of this year's labour time for last year's. This explains the riddle of how the value product of an entire social working day can resolve itself into variable capital value plus surplus value, although two-thirds of this working day were not expended in the production of articles in which variable capital or surplus value can be realised, but rather in the production of means of production for the replacement of the capital consumed during the year. The explanation is simply that two-thirds of the value of the product of II, in which the capitalists and labourers of I realise the variable capital value plus surplus value produced by them (and which constitute two-ninths of the value of the entire annual product), are, so far as their value is concerned, the product of two-thirds of a social working day of a year prior to the current one […]

## VIII. THE CONSTANT CAPITAL IN BOTH DEPARTMENTS

The analysis of the total value of the product of 9,000, and of the categories into which it is divided, does not present any greater difficulty than that of the value produced by an individual capital. On the contrary, they are identical.

The entire annual social product here contains three social working days, each of one year. The value expressed by each one of these working days is 3,000, so that the value expressed by the total product is equal to 3 x 3,000, or 9,000.

Furthermore, the following portions of this working time have elapsed *prior* to the one-year process of production, the product of which we are now analysing: In department I four-thirds of a working day (with a product worth 4,000), and in department II two-thirds of a working day (with a product worth 2,000), making a total of two social working days with a product worth 6,000. For this reason 4,000 $I_c$ + 2,000 $II_c$ = 6,000$_c$ figure as the value of the means of production, or the constant capital value re-appearing in the total value of the social product.

Furthermore one-third of the social working day of one year newly added in department I is necessary labour, or labour replacing the value of the variable capital of 1,000 $I_v$ and paying the price of the labour employed by I. In the same way one-sixth of a social working day in II is necessary labour with a value of 500. Hence 1,000 $I_v$ + 500 $II_v$ = 1,500$_v$, expressing the value of one half of the social working day, is the value-expression of the first half of the aggregate working day added this year and consisting of necessary labour.

Finally, in department I one-third of the aggregate working day, with a product worth 1,000, is surplus labour, and in department II one-sixth of the working day, with a product worth 500, is surplus labour. Together they constitute the other half of the added aggregate working day. Hence the total surplus value produced is equal to l,000 $I_s$ + 500 $II_s$, or 1,500$_s$.

Thus:

The constant capital portion of the value of the social product (c):

Two working days expended prior to the process of production; value expression = 6,000.

Necessary labour (v) expended during the year:

One half of a working day expended on the annual production; value expression = 1,500.

Surplus labour (s) expended during the year:

One half of a working day expended on the annual production; value expression = 1,500.

Value produced by annual labour (v + s) = 3,000.

Total value of product (c + v + s) = 9,000.

[...]

## CHAPTER 21: ACCUMULATION AND REPRODUCTION ON AN EXTENDED SCALE

It has been shown in Book I how accumulation works in the case of the individual capitalist. By the conversion of the commodity capital into money the surplus product, in which the surplus value is represented, is also turned into money. The capitalist reconverts the so metamorphosed surplus value into additional natural elements of his productive capital. In the next cycle of production the increased capital furnishes an increased product. But what happens in the case of the individual capital must also show in the annual reproduction as a whole, just as we have seen it happen on analysing simple reproduction, namely, that the successive precipitation — in the case of individual capital — of its used-up fixed component parts in money which is being hoarded, also finds expression in the annual reproduction of society.

If a certain individual capital is equal to $400_c + l00_v$, and the annual surplus value is equal to 100, then the commodity product amounts to $400_c + 100_v + 100_s$. These 600 are converted into money. Of this money, again, $400_c$ are converted into the natural form of constant capital, $100_v$ into labour power, and – provided the entire surplus value is being accumulated – $100_s$ are converted besides into additional constant capital by transformation into natural elements of the productive capital. It is assumed in this case: 1) that this amount is sufficient under the given technical conditions either to expand the functioning constant capital or to establish a new industrial business. But it may also happen that surplus value must be converted into money and this money hoarded for a much longer time before this process, i.e., before real accumulation, expansion of production, can take place; 2) that production on an extended scale has actually been in process previously. For in order that the money (the surplus value hoarded in money form) may be converted into elements of productive capital, one must be able to buy these elements on the market as commodities. It makes no difference if they are not bought as finished products but made to order. They are not paid for until they are in existence and at any rate not until actual reproduction on an extended scale, an expansion of hitherto normal production, has taken place so far as they are concerned. They had to exist potentially, i.e., in their elements, as it requires only the impulse of an order, that is, the purchase of commodities before they actually exist and their anticipated sale, for their production really to take place. The money on the one side then calls forth extended reproduction on the other, because the possibility of it exists without money. For money in itself is not an element of real reproduction.

For instance capitalist A, who sells during one year or during a number of years certain quantities of commodities successively produced by

him, thereby converts into money also that portion of the commodities which is the vehicle of surplus value – the surplus product – or in other words the very surplus value produced by him in commodity form, accumulates it gradually, and thus forms for himself new potential money capital – potential because of its capacity and mission to be converted into elements of productive capital. But in actual fact he only engages in simple hoarding, which is not an element of actual reproduction. His activity at first consists only in successively withdrawing circulating money out of the circulation. Of course it is not impossible that the circulating money thus kept under lock and key by him was itself, before it entered into circulation, a portion of some other hoard. This hoard of A, which is potentially new money capital, is not additional social wealth, any more than it would be if it were spent in articles of consumption. But money withdrawn from circulation, which therefore previously existed in circulation, may have been stored up at some prior time as a component part of a hoard, may have been the money form of wages, may have converted means of production or other commodities into money or may have circulated portions of constant capital or the revenue of some capitalist. It is no more new wealth than money, considered from the standpoint of the simple circulation of commodities, is the vehicle not only of its actual value but also of its ten-fold value, because it was turned over ten times a day, realised ten different commodity values. The commodities exist without it, and it itself remains what it is (or becomes even less by depreciation) whether in one turnover or in ten. Only in the production of gold — inasmuch as the gold product contains a surplus product, a depository of surplus value — is new wealth (potential money) created, and it increases the money material of new potential money capitals only so far as the entire money product enters into circulation.

Although this surplus value hoarded in the form of money is not additional new social wealth, it represents new potential money capital, on account of the function for which it is hoarded. (We shall see later that new money capital may arise also in a way other than the gradual conversion of surplus value into money.)

Money is withdrawn from circulation and stored up as a hoard by selling commodities without subsequent buying. If this operation is therefore conceived as a general process, it seems inexplicable where the buyers are to come from, since in that process everybody would want to sell in order to hoard, and none would want to buy. And it must be conceived generally, since every individual capital may be in the process of accumulation.

If we were to conceive the process of circulation between the various parts of the annual reproduction as taking place in a straight line — which would be wrong as it always consists with a few exceptions of mutually opposite movements — then we should have to start from the producer of

gold (or silver) who buys without selling, and to assume that all others sell to him. In that case the entire yearly social surplus product (the bearer of the entire surplus value) would pass into his hands, and all the other capitalists would distribute among themselves *pro rata* his surplus product, which naturally exists in the form of money, the natural embodiment in gold of his surplus value. For that portion of the product of the gold producer which has to make good his active capital is already tied up and disposed of. The surplus value of the gold producer, created in the form of gold, would then be the sole fund from which all other capitalists would draw the material for the conversion of their annual surplus product into money. The magnitude of its value would then have to be equal to the entire annual surplus value of society, which must first assume the guise of a hoard. Absurd as these assumptions would be, they would do nothing more than explain the possibility of a universal simultaneous formation of a hoard, and would not get reproduction itself one step further, except on the part of the gold producer.

Before we resolve this seeming difficulty we must distinguish between the accumulation in department I (production of means of production) and in department II (production of articles of consumption). We shall start with I […]

## I. ACCUMULATION IN DEPARTMENT I

### 1. THE FORMATION OF A HOARD

[…] For instance, let A sell 600 (equal to $400_c + 100_v + 100_s$) to B (who may represent more than one buyer). A sells 600 in commodities for 600 in money, of which 100 are surplus value which he withdraws from circulation and hoards in the form of money. But these 100 in money are but the money form of the surplus product, which was the bearer of a value of 100. The formation of a hoard is no production at all, hence not an increment of production, either. The action of the capitalist consists here merely in withdrawing from circulation the 100 in money he grabbed by the sale of his surplus product, holding on to it and impounding it. This operation is carried on not alone by A, but at numerous points along the periphery of circulation by other capitalists, A', A", A'", all of them working with equal zeal at this sort of hoard formation […]

One can understand the pleasure experienced when all these potential capitals within the credit system, by their concentration in the hands of banks, etc., become disposable, "loanable capital," money capital, which indeed is no longer passive and music of the future, but active capital growing rank […]

It must be noted at this point first and foremost that although withdrawing money to the amount of his surplus value from circulation and hoarding it, A on the other hand throws commodities into it without withdrawing other commodities in return. The capitalists B, B', B", etc., are thereby enabled to throw money into circulation and withdraw only commodities from it. In the present case these commodities, according to their bodily form and their destination, enter into the constant capital of B, B', etc., as fixed or circulating element. We shall hear more about this anon when we deal with the buyer of the surplus product, with B, B', etc.

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[… In] the exchange of $I_v$ for a corresponding amount of value of $II_c$, there takes place in the end, precisely for $II_c$, a replacement of commodities II by an equivalent commodity value I, that therefore on the part of aggregate capitalist II the sale of his own commodities is subsequently supplemented by the purchase of commodities from I of the same amount of value. This replacement takes place. But what does not take place is an exchange between capitalists I and II of their respective goods. $II_c$ sells its commodities to working class I. The latter confronts it one-sidedly, as a buyer of commodities, and it confronts that class one-sidedly as a seller of commodities. With the money proceeds so obtained $II_c$ confronts aggregate capitalist I one-sidedly as a buyer of commodities, and aggregate capitalist I confronts it one-sidedly as a seller of commodities up to the amount of $I_v$. It is only by means of this sale of commodities that I finally reproduces its variable capital in the form of money capital. If capital I faces that of II one-sidedly as a seller of commodities to the amount of $I_v$, it faces working class I as a buyer of commodities purchasing their labour power. And if working class I faces capitalist II one-sidedly as a buyer of commodities (namely, as a buyer of means of subsistence), it faces capitalist I one-sidedly as a seller of commodities, namely, as a seller of its labour power.

The constant supply of labour power on the part of working class I, the reconversion of a portion of commodity capital I into the money form of variable capital, the replacement of a portion of commodity capital II by natural elements of constant capital $II_c$ — all these necessary premises demand one another, but they are brought about by a very complicated process, including three processes of circulation which occur independently of one another but intermingle. This process is so complicated that it offers ever so many occasions for running abnormally.

## 2. THE ADDITIONAL CONSTANT CAPITAL

The surplus product, the bearer of surplus value, does not cost its appropriators, capitalists I, anything. They are by no manner of means obliged to advance any money or commodities in order to obtain it. Even among the physiocrats an advance was the general form of value embodied in elements of productive capital. Hence what capitalists I advance is nothing but their constant and variable capital. The labourer not only preserves by his labour their constant capital; he not only replaces the value of their variable capital by a corresponding newly created portion of value in the form of commodities; by his surplus labour he supplies them with a surplus value existing in the form of surplus product. By the successive sale of this surplus product they form a hoard, additional potential money capital. In the case under consideration, this surplus product consists from the outset of means of production of means of production. It is only when it reaches the hands of B, B', B", etc. (I) that this surplus product functions as additional constant capital. But it is this *virtualiter* even before it is sold, even in the hands of the accumulators of hoards, A, A', A" (I). If we consider merely the amount of value of the reproduction on the part of I, we are still moving within the bounds of simple reproduction, for no additional capital has been set in motion to create this *virtualiter* additional constant capital (the surplus product), nor has any greater amount of surplus labour been expended than that on the basis of simple reproduction. The difference is here only in the form of the surplus labour performed, in the concrete nature of its particular useful character. It has been expended in means of production for $I_c$ instead of $II_c$, in means of production of means of production instead of means of production of articles of consumption. In the case of simple reproduction it was assumed that the entire surplus value I is spent as revenue, hence in commodities II. Hence the surplus value consisted only of such means of production as have to replace constant capital $II_c$ in its natural form. In order that the transition from simple to extended reproduction may take place, production in department I must be in a position to fabricate fewer elements of constant capital for II and so many the more for I. This transition, which does not always take place without difficulties, is facilitated by the fact that some of the products of I may serve as means of production in either department.

It follows, then, that, considering the matter merely from the angle of volume of values, the material substratum of extended reproduction is produced within simple reproduction. It is simply surplus labour of working class I expended directly in the production of means of production, in the creation of virtual additional capital I. The formation of virtual additional money capital on the part of A, A' and A" (I) — by the successive sale of their surplus product which was formed without any capitalist expenditure of money — is therefore simply the money form of additionally produced

means of production I […]

The production of additional virtual money capital on a large scale, at numerous points of the periphery of circulation, is therefore but a result and expression of multifarious production of virtually additional productive capital, whose rise does not itself require additional expenditure of money on the part of the industrial capitalist. The successive transformation of this virtually additional productive capital into virtual money capital (hoard) on the part of A, A', A", etc. (I), occasioned by the successive sale of their surplus product — hence by repeated one-sided sale of commodities without a supplementing purchase — is accomplished by a repeated withdrawal of money from circulation and a corresponding formation of a hoard. Except in the case where the buyer is a gold producer, this hoarding does not in any way imply additional wealth in precious metals, but only a change in the function of money previously circulating. A while ago it functioned as a medium of circulation, now it functions as a hoard, as virtually new money capital in the process of formation. Thus the formation of additional money capital and the quantity of the precious metals existing in a country are not in any causal relation to each other […]

Whereas the surplus product, directly produced and appropriated by the capitalists A, A', A" (I), is the real basis of the accumulation of capital, i.e., of extended reproduction, although it does not actually function in this capacity until it reaches the hands of B, B', B", etc. (I), it is on the contrary absolutely unproductive in its chrysalis stage of money — as a hoard and virtual money capital in process of gradual formation — runs parallel with the process of production in this form, but lies outside of it. It is a dead weight of capitalist production. The eagerness to utilise this surplus value accumulating as virtual money capital for the purpose of deriving profits or revenue from it finds its object accomplished in the credit system and "papers" […]

While the sellers of the surplus product, A, A', A", etc. (I), have obtained it as a direct outcome of the process of production, which does not envisage any additional acts of circulation except the advance of constant and variable capital required also in simple reproduction; and while they thereby construct the real basis for reproduction on an extended scale, and in actual fact manufacture virtually additional capital, the attitude of B, B', B", etc. (I), is different. 1) Not until it reaches the hands of B, B', B", etc. (I), will the surplus product of A, A', A", etc., actually function as additional constant capital (we leave out of consideration for the present the other element of productive capital, the additional labour power, in other words, the additional variable capital).

[… It] should be noted here that a large portion of the surplus product (virtually additional constant capital), although produced by A, A', A" (I) in a

given year, may not function as industrial capital in the hands of B, B', B" (I) until the following year or still later. [… The] question arises: Whence comes the money needed for the process of circulation?

Since the products created by B, B', B", etc. (I), re-enter *in natura* into their own process, it goes without saying that *pro tanto* a portion of their own surplus product is transferred directly (without any intervention of circulation) to their productive capital and becomes an additional element of constant capital. And *pro tanto* they do not effect the conversion of the surplus product of A, A', etc. (I), into money. Aside from this, where does the money come from? We know that B, B', B", etc. (I) have formed their hoard in the same way as A, A', etc., by the sale of their respective surplus products. Now they have arrived at the point where their hoarded, only virtual, money capital is to function effectively as additional money capital. But this is merely going round in circles. The question still remains: Where does the money come from which the B's (I) before withdrew from circulation and accumulated?

We know from the analysis of simple reproduction that capitalists I and II must have a certain amount of money at hand in order to be able to exchange their surplus product. In that case the money which served only as revenue to be spent for articles of consumption returned to the capitalists in the same measure in which they had advanced it for the exchange of their respective commodities. Here the same money re-appears, but performing a different function. The A's and B's (I) supply one another alternately with the money for converting surplus product into additional virtual money capital, and throw the newly formed money capital alternately back into circulation as a means of purchase.

The only assumption made in this case is that the amount of money in the country in question (the velocity of circulation, etc., being constant) should suffice for both the active circulation and the reserve hoard. As we have seen this is the same assumption as had to be made in the case of the simple circulation of commodities. Only the function of the hoards is different in the present case. Furthermore, the available amount of money must be larger, first, because under capitalist production all the products (with the exception of newly produced precious metals and the few products consumed by the producer himself) are created as commodities and must therefore pass through the pupation stage of money; secondly, because on a capitalist basis the quantity of the commodity capital and the magnitude of its value is not only absolutely greater but also grows with incomparably greater rapidity; thirdly, because an ever expanding variable capital must always be converted into money capital; fourthly, because the formation of new money capitals keeps pace with the extension of production, so that the material for corresponding hoard formation must be available.

The different B's, B"s, B"'s, etc. (I), whose virtual new money capital enters upon its function as active capital, may have to buy their products (portions of their surplus product) from one another, or to sell them to one another. *Pro tanto* the money advanced by them for the circulation of their surplus product flows back under normal conditions to the different B's in the same proportion in which they had advanced it for the circulation of their respective commodities. If the money circulates as a means of payment, then only balances are to be squared so far as the mutual purchases and sales do not cover one another. But it is important first and foremost to assume here, as everywhere, metallic circulation in its simplest, most primitive form, because then the flux and reflux, the squaring of balances, in short all elements appearing under the credit system as consciously regulated processes present themselves as existing independently of the credit system, and the matter appears in primitive form instead of the later, reflected form […]

### 3. THE ADDITIONAL VARIABLE CAPITAL

Hitherto we have been dealing only with additional constant capital. Now we must direct our attention to a consideration of the additional variable capital […]

## II. ACCUMULATION IN DEPARTMENT II

We have hitherto assumed that A, A', A" (I) sell their surplus product to B, B', B", etc., who belong to the same department I. But supposing A (I) converts his surplus product into money by selling it to one B in department II. This can be done only by A (I) selling means of production to B (II) without subsequently buying articles of consumption, i.e., only by a one-sided sale on A's part. Now whereas $II_c$ cannot be converted from the commodity capital form into the bodily form of productive constant capital unless not only $I_v$ but also at least a portion of $I_s$, is exchanged for a portion of $II_c$, which $II_c$ exists in the form of articles of consumption; but now A converts his $I_s$ into money by not making this exchange but rather withdrawing from circulation the money obtained from II on the sale of his $I_s$ instead of exchanging it in the purchase of articles of consumption $II_c$ – then what we have on the part of A (I) is indeed a formation of additional virtual money capital, but on the other hand a portion of the constant capital of B (II) of equal magnitude of value is tied up in the form of commodity capital, unable to transform itself into the natural form of productive, constant capital. In other words, a portion of the commodities of B (II), and indeed *prima facie* a portion without the sale of which he cannot reconvert his

constant capital entirely into its productive form, has become unsaleable. As far as this portion is concerned there is therefore an overproduction, which, likewise as far as the same portion is concerned, clogs reproduction, even on the same scale […]

Let us now take a closer look at the accumulation in department II.

The first difficulty with reference to $II_c$, i.e., its reconversion from a component part of commodity capital II into the natural form of constant capital II, concerns simple reproduction. Let us take the former scheme: $(1{,}000_v + 1{,}000_s)$ I are exchanged for 2,000 $II_c$.

Now, if for instance one half of the surplus product of I, hence $1{,}000/2_s$ or 500 $I_s$ is reincorporated in department I as constant capital, then this portion of the surplus product, being detained in I, cannot replace any part of $II_c$. Instead of being converted into articles of consumption (and here in this section of the circulation between I and II the exchange is actually mutual, that is, there is a double change of position of the commodities, unlike the replacement of 1,000 $II_c$ by 1,000 $I_v$ effected by the labourers of I), it is made to serve as an additional means of production in I itself. It cannot perform this function simultaneously in I and II. The capitalist cannot spend the value of his surplus product for articles of consumption and at the same time consume the surplus product itself productively, i.e., incorporate it in his productive capital. Instead of 2,000 $I_{(v+s)}$, only 1,500, namely $(1{,}000_v + 500_s)$ I, are therefore exchangeable for 2,000 $II_c$ ; 500 $II_c$ cannot be reconverted from the commodity form into productive (constant) capital II. Hence there would be an overproduction in II, exactly equal in volume to the expansion of production in I. This overproduction in II might react to such an extent on I that even the reflux of the 1,000 spent by the labourers of I for articles of consumption of II might take place but partially, so that these 1,000 would not return to the hands of capitalists I in the form of variable money capital. These capitalists would thus find themselves hampered even in reproduction on an unchanging scale, and this by the bare attempt to expand it. And in this connection it must be taken into consideration that in I only simple reproduction had actually taken place and that its elements, as represented in our scheme, are only differently grouped with a view to expansion in the future, say, next year […]

## III. SCHEMATIC PRESENTATION OF ACCUMULATION

We shall now study reproduction according to the following scheme.

Scheme a) I. $4{,}000_c + 1{,}000_v + 1{,}000_s = 6{,}000$

II. $1{,}500_c + 376_v + 376_s = 2{,}252$

= 8,252 Total

We note in the first place that the sum total of the annual social product, or 8,252, is smaller than that of the first scheme, where it was 9,000. We might just as well assume a much larger sum, for instance one ten times larger. We have chosen a smaller sum than in our scheme I in order to make it conspicuously clear that reproduction on an enlarged scale (which is here regarded merely as production carried on with a larger investment of capital) has nothing to do with the absolute volume of the product, that for a given quantity of commodities it implies merely a different arrangement or a different definition of the functions of the various elements of a given product, so that it is but a simple reproduction so far as the value of the product is concerned. It is not the quantity but the qualitative determination of the given elements of simple reproduction which is changed, and this change is the material premise of a subsequent reproduction on an extended scale.

We might vary the scheme by changing the ratio between the variable and constant capital. For instance as follows:

Scheme b) I. $4{,}000_c + 875_v + 875_s = 5{,}750$

II. $1{,}750_c + 376_v + 376_s = 2{,}502$

$= 8{,}252$ Total

This scheme seems arranged for reproduction on a simple scale, the surplus value being entirely consumed as revenue and not accumulated. In either case, both a) and b), we have an annual product of the same magnitude of value, only under b) functionally its elements are grouped in such a way that reproduction is resumed on the same scale, while under a) the functional grouping forms the material basis of reproduction on an extended scale. Under b) ($875_v + 875_s$) I, or 1,750 $I_{(v + s)}$, are exchanged without any surplus for 1,750 $II_c$ while under a) the exchange of ($1{,}000_v + 1{,}000_s$) I, equal to 2,000 $I_{(v + s)}$, for 1,000 $II_c$ leaves a surplus of 500 $I_s$ for accumulation in class I.

Now let us analyse scheme a) more closely. Let us suppose that both I and II accumulate one half of their surplus value, that is to say, convert it into an element of additional capital, instead of spending it as revenue. As one half of 1,000 $I_s$, or 500, are to be accumulated in one form or another, invested as additional money capital, i.e., converted into additional productive capital, only ($l{,}000_v + 500_s$) I are spent as revenue. Hence only 1,500 figures here as the normal size of $II_c$. We need not further examine the exchange between 1,500 $I_{(v + s)}$ and 1,500 $II_c$, because this has already been done under the head of process of simple reproduction. Nor does 4,000 $I_c$ require any attention, since its re-arrangement for the newly commencing reproduction (which this time will occur on an extended scale) was likewise discussed as a process of simple reproduction.

The only thing that remains to be examined by us is 500 $I_s$ and ($376_v + 376_s$) II, inasmuch as it is a matter on the one hand of the internal relations of both I and II and on the other of the movement between them. Since we have assumed that in II likewise one half of the surplus value is to be accumulated, 188 are to be converted here into capital, of which one-fifth, or 47, or, to round it off, 48, are to be variable capital, so that 140 remain to be converted into constant capital.

Here we come across a new problem, whose very existence must appear strange to the current view that commodities of one kind are exchanged for commodities of another kind, or commodities for money and the same money again for commodities of another kind. The 140 $II_s$ can be converted into productive capital only by replacing them with commodities of $I_s$ of the same value. It is a matter of course that that portion of $I_s$ which must be exchanged for $II_s$ must consist of means of production, which may enter either into the production of both I and II, or exclusively into that of II. This replacement can be made feasible only by means of a one-sided purchase on the part of II, as the entire surplus product of 500 $I_s$, which we still have to examine, is to serve the purposes of accumulation within I, hence cannot be exchanged for commodities II; in other words, it cannot be simultaneously accumulated and consumed by I. Therefore II must buy 140 $I_s$ for cash without recovering this money by a subsequent sale of its commodities to I. And this is a process which is continually repeating itself in every new annual production, so far as it is reproduction on an extended scale. Where in II is the source of the money for this? […]

There seem to be only two ways by which this money can be withdrawn from circulation to form virtually additional money capital. Either one part of capitalists II cheats the other and thus robs them of their money […]

Or a part of II represented by necessities of life is directly converted into new variable capital within department II. How that is done we shall examine at the close of this chapter (under No. IV).

## 1. FIRST ILLUSTRATION

*A. Scheme of Simple Reproduction*

I. $4{,}000_c + 1{,}000_v + 1{,}000_s$ = 6,000

II. $2{,}000_c + 500_v + 500_s$ =3,000

= 9,000 Total

*B. Initial Scheme for Reproduction on an Extended Scale*

I. $4{,}000_c + 1{,}000_v + 1{,}000_s$ = 6,000

II. $1{,}500_c + 750_v + 750_s$ = 3,000

= 9,000 Total

Assuming that in scheme B one half of surplus value I, i.e., 500, is accumulated, we first receive ($1{,}000_v + 500_s$) I, or 1,500 $I_{(v + s)}$ to be replaced by 1,500 $II_c$. There then remains in I:$4{,}000_c$ and $500_s$, the latter having to be accumulated. The replacement of ($1{,}000_v + 500_s$) I by 1,500 $II_c$ is a process of simple reproduction, which has been examined previously.

Let us now assume that 400 of the 500 $I_s$ are to be converted into constant capital, and 100 into variable capital. The exchange within I of the $400_s$, which are thus to be capitalised, has already been discussed. They can therefore be annexed to $I_c$, without more ado and in that case we get for I:

$4{,}400_c + 1{,}000_v + 100_s$ (the latter to be converted into $100_v$).

II in turn buys from I for the purpose of accumulation the 100 $I_s$ (existing in means of production) which now form additional constant capital II, while the 100 in money which it pays for them are converted into the money form of the additional variable capital of I. We then have for I a capital of $4{,}400_c + 1{,}100_v$ (the latter in money), equaling 5,500.

II has now $1{,}600_c$ for its constant capital. In order to put them to work, it must advance a further $50_v$ in money for the purchase of new labour power, so that its variable capital grows from 750 to 800. This expansion of the constant and variable capital of II by a total of 150 is supplied out of its surplus value. Hence only $600_s$ of the 750 $II_s$ remain as a consumption fund for capitalists II, whose annual product is now distributed as follows:

II. $1{,}600_c + 800_v + 600_s$ (consumption fund), equal to 3,000.

The $150_s$ produced in articles of consumption, which have been converted here into ($100_c + 50_v$) II, go entirely in their natural form for the consumption of the labourers, 100 being consumed by the labourers of I (100 $I_v$), and 50 by the labourers of II (50 $II_v$), as explained above. As a matter of fact in II, where its total product is prepared in a form suitable for accumulation, a part greater by 100 of the surplus value in the form of *necessary* articles of consumption must be reproduced. If reproduction really starts on an extended scale, then the 100 of variable money capital I flow back through the hands of its working class to II, while II transfers $100_s$ in commodity supply to I and at the same time 50 in commodity supply to its own working class.

The arrangement changed for the purpose of accumulation is now as follows:

I. $4{,}400_c + 1{,}100_v + 500$ consumption fund = 6,000
II. $1{,}600_c + 800_v + 600$ consumption fund = 3,000
= 9,000 Total, as before

Of these amounts, the following are capital:

I. $4{,}400_c + 1{,}100_v$ (money) = 5,500
II. $1{,}600_c + 800_v$ (money) = 2,400
= 7,900

while production started out with

I. $4{,}000_c + 1{,}000_v$ = 5,000
II. $1{,}500_c + 750_v$ = 2,250
= 7,250

Now, if actual accumulation takes place on this basis, that is to say, if production really goes on with this augmented capital, we obtain at the end of the following year:

I. $4{,}400_c + 1{,}100_v + 1{,}100_s$ = 6,600
II. $1{,}600_c + 800_v + 800_s$ = 3,200
= 9,800

Then let accumulation in I continue in the same proportion, so that $550_s$ are spent as revenue and $550_s$ accumulated. In that case 1,100 $I_v$ are first replaced by 1,100 $II_c$, and 550 $I_s$ must be realised in an equal amount of commodities of II, making a total of 1,650 $I_{(v + s)}$. But the constant capital II, which is to be replaced, is equal to only 1,600; hence the remaining 50 must be supplemented out of 800 $II_s$. Leaving aside the money aspect for the present, we have as a result of this transaction:

I. $4{,}400_c + 550_s$ (to be capitalised); furthermore, realised in commodities $II_c$, the consumption fund of the capitalists and labourers $1{,}650_{(v + s)}$.
II. $1{,}650_c$ (50 added from $II_s$ as indicated above) + $800_v + 750_s$ (consumption fund of the capitalists).

But if the old ratio of v:s is maintained in II, then additional $25_v$ must be laid out for $50_c$, and these are to be taken from the $750_s$. Then we have

II. $1{,}650_c + 825_v + 725_s$.

In I, $550_s$ must be capitalised. If the former ratio is maintained, 440 of this amount form constant capital and 110 variable capital. These 110 might be taken out of the 725 $II_s$, i.e., articles of consumption to the value of 110 are consumed by labourers I instead of capitalists II, so that the latter are

compelled to capitalise these $110_s$ which they cannot consume. This leaves 615 $II_s$ of the 725 $II_s$. But if II thus converts these 110 into additional constant capital, it requires an additional variable capital of 55. This again must be supplied by its surplus value. Subtracting this amount from 615 $II_s$ leaves 560 for the consumption of capitalists II, and we now obtain the following capital value after accomplishing all actual and potential transfers:

I. $(4{,}400_c + 440_c) + (1{,}100_v + 110_v) = 4{,}840_c + 1{,}210_v = 6{,}050$
II. $(1{,}600_c + 50_c + 110_c) + (800_v + 25_v + 55_v) = 1760_c + 880_v = 2{,}640/8{,}690$

**If things are to proceed normally, accumulation in II must take place more rapidly than in I**, because otherwise the portion $I_{(v + s)}$ which must be converted into commodities $II_c$ will grow more rapidly than $II_c$, for which alone it can be exchanged.

If reproduction is continued on this basis and conditions otherwise remain unchanged we obtain at the end of the succeeding year:

I. $4{,}840_c + 1{,}210_v + 1{,}210_s = 7{,}260$
II. $1{,}760_c + 880_v + 880_s = 3{,}520$
$= 10{,}780$

If the rate of division of the surplus value remains unchanged, there is first to be expended as revenue by I: $1{,}210_v$ and one half of s, or 605, a total of 1,815. This consumption fund is again larger than $II_c$ by 55. These 55 must be deducted from $880_s$, leaving 825. Furthermore, the conversion of 55 $II_s$ into $II_c$ implies another deduction from $II_s$ for a corresponding variable capital of 27½, leaving for consumption 797½ $II_s$.

It has now to capitalise $605_s$. Of these 484 are constant and 121 variable. The last named are to be deducted from $II_s$, which is still equal to 797½, leaving 676½ $II_s$. II, then, converts another 121 into constant capital and requires another variable capital of 60½ for it, which likewise comes out of 676½, leaving 616 for consumption.
Then we have the following capital:

I. Constant: 4,840 + 484 = 5,324
Variable: 1,210 + 121 = 1,331
II. Constant: 1,760 + 55 + 121 = 1,936
Variable: 880 + 27½ + 60½ = 968

Totals: I. $5{,}324_c + 1{,}331_v = 6{,}655$

$$\text{II. } 1{,}936_c + 968_v = 2{,}904$$
$$= 9{,}559$$

And at the end of the year the product is

$$\text{I. } 5{,}324_c + 1{,}331_v + 1{,}331_s = 7{,}986$$
$$\text{II. } 1{,}936_c + 968_v + 968_s = 3{,}872$$
$$= 11{,}858$$

Repeating the same calculation and rounding off the fractions, we get at the end of the succeeding year the following product:

$$\text{I. } 5{,}856_c + 1{,}464_v + 1{,}464_s = 8{,}784$$
$$\text{II. } 2{,}129_c + 1{,}065_v + 1{,}065_s = 4{,}259$$
$$= 13{,}043$$

And at the end of the next succeeding year:

$$\text{I. } 6{,}442_c + 1{,}610_v + 1{,}610_s = 9{,}662$$
$$\text{II. } 2{,}342_c + 1{,}172_v + 1{,}172_s = 4{,}686$$
$$= 14{,}348$$

In the course of five years of reproduction on an extended scale the aggregate capital of I and II has risen from $5{,}500_c + 1{,}750_v = 7{,}250$ to $8{,}784_c + 2{,}782_v = 11{,}566$; in other words in the ratio of 100:160. The total surplus value was originally 1,750; it is now 2,782. The consumed surplus value was originally 500 for I and 600 for II, a total of 1,100. The previous year it was 732 for I and 745 for II, a total of 1,477. It has therefore grown in the ratio of 100:134.

## 2. SECOND ILLUSTRATION

Now take the annual product of 9,000, which is altogether a commodity capital in the hands of the class of industrial capitalists in a form in which the general average ratio of the variable to the constant capital is that of 1:5. This presupposes a considerable development of capitalist production and accordingly of the productivity of social labour, a considerable previous increase in the scale of production, and finally a development of all the circumstances which produce a relative surplus population among the working class. The annual product will then be divided as follows, after rounding off the various fractions:

$$\text{I. } 5{,}000_c + 1{,}000_v + 1{,}000_s = 7{,}000$$
$$\text{II. } 1{,}430_c + 285_v + 285_s = 2{,}000$$
$$= 9{,}000$$

Now take it that capitalist class I consumes one half of its surplus

value, or 500, and accumulates the other half. In that case ($1{,}000_v + 500_s$) I, or 1,500, would have to be converted into 1,500 $II_c$. Since $II_c$ here amounts to only 1,430, it is necessary to add 70 from the surplus value. Subtracting this sum from 285 $II_s$ leaves 215 $II_s$. Then we have:

I. $5{,}000_c + 500_s$ (to be capitalised) + $1{,}500_{(v+s)}$
in the consumption fund of the capitalists and labourers.

II. $1{,}430_c + 70_s$ (to be capitalised) + $285_v + 215_s$

As 70 $II_s$ are directly annexed here to $II_c$, a variable capital of 70/5, or 14, is required to set this additional constant capital in motion. These 14 must also come out of the 215 $II_s$, so that 201 $II_s$ remain, and we have:

$$II.\ (1{,}430_c + 70_c) + (285_v + l4_v) + 201_s.$$

The exchange of 1,500 $I_{(v + ½s)}$ for 1,500 $II_c$ is a process of simple reproduction, and nothing further need be said about it. However a few peculiarities remain to be noted here, which arise from the fact that in accumulating reproduction $I_{(v + ½s)}$ is not replaced solely by $II_c$, but by $II_c$ plus a portion of $II_s$.

It goes without saying that as soon as we assume accumulation, $I_{(v + s)}$ is greater than $II_c$, not equal to $II_c$, as in simple reproduction. For in the first place, I incorporates a portion of its surplus product in its own productive capital and converts five-sixths of it into constant capital, therefore cannot replace these five-sixths simultaneously by articles of consumption II. In the second place I has to supply out of its surplus product the material for the constant capital required for accumulation within II, just as II has to supply I with the material for the variable capital, which is to set in motion the portion of I's surplus product employed by I itself as additional constant capital. We know that the actual, and therefore also the additional, variable capital consists of labour power. It is not capitalist I who buys from II a supply of necessities of life or accumulates them for the additional labour power to be employed by him, as the slaveholder had to do. It is the labourers themselves who trade with II. But this does not prevent the articles of consumption of his additional labour power from being viewed by the capitalist as only so many means of production and maintenance of his eventual additional labour power, hence as the natural form of his variable capital. His own immediate operation, in the present case that of I, consists in merely storing up the new money capital required for the purchase of additional labour power. As soon as he has incorporated this in his capital, the money becomes a means of purchase of commodities II for this labour power, which must find these articles of consumption at hand […]

The product of 9,000 in the second illustration must, as we have seen, be distributed in the following manner for the purpose of reproduction, if 500 $I_s$ is to be capitalised. In doing so we merely consider the commodities and neglect the money circulation.

I. $5{,}000_c + 500_s$ (to be capitalised) + $1{,}500_{(v + s)}$ consumption fund equals 7,000 in commodities.
II. $1{,}500_c + 299_v + 201_s$ equals 2,000 in commodities.
Grand total: 9,000 in commodities.

Capitalisation takes place in the following manner:

In I the $500_s$ which are being capitalised divide into five-sixths, or $417_c$ plus one-sixth, or $83_v$. The $83_v$ draw an equal amount out of $II_s$, which buys elements of constant capital and adds them to $II_c$. An increase of $II_c$ by 83 implies an increase of $II_v$ by one-fifth of 83, or 17.

We have, then, after this exchange

I. $(5{,}000_c + 417_s)_c + (1{,}000_v + 83_s)_v = 5{,}417_c + 1{,}083_v = 6{,}500$
II. $(1{,}500_c + 83_s)_c + (299_v + 17_s)_v = 1{,}583_c + 316_v = 1{,}899$
Grand total: 8,399.

The capital in I has grown from 6,000 to 6,500, or by 1/12. That of II has grown from 1,715 to 1,899, or by not quite 1/9.

The reproduction on this basis in the second year brings the capital at the end of that year to

I. $(5{,}417_c + 452_s)_c + (1{,}083_v + 90_s)_v = 5{,}869_c + 1{,}173_v = 7{,}042$
II. $(1{,}583_c + 42_s + 90_s)_c + (316_v + 8_s + 18_s)_v = 1{,}715_c + 342_v = 2{,}057$.

And at the end of the third year, we have a product of

I. $5{,}869_c + 1{,}173_v + 1{,}173_s$
II. $1{,}715_c + 342_v + 342_s$.

If I accumulates one half of its surplus value, as before, we find that $I_{(v + ½s)}$ yields $1{,}173_v + 587_{(½s)}$, equal to 1,760, more than the entire 1,715 $II_c$, an excess of 45. This must again be balanced by transferring an equal amount of means of production to $II_c$, which thus grows by 45, necessitating an addition of one-fifth, or 9, to $II_v$. Furthermore, the capitalised 587 $I_s$ divide into five-sixths and one-sixth, i.e., $489_c$ and $98_v$. The 98 imply in II a new addition of 98 to the constant capital, and this again an increase of variable capital II by one-fifth, or 20. Then we have:

I. $(5{,}869_c + 489_s)_c + (1{,}173_v + 98_s)_v = 6{,}358_s + 1{,}271_v = 7{,}629$
II. $(1{,}715_c + 45_s + 98_s)_c + (342_v + 9_s + 20_s)_v = 1{,}858_c + 371_v = 2{,}229$
Total capital = 9,858.

In three years of growing reproduction the total capital of I has increased from 6,000 to 7,629 and that of II from 1,715 to 2,229, the aggregate social capital from 7,715 to 9,858.

## 3. REPLACEMENT OF $II_c$ IN ACCUMULATION

In the exchange of $I_{(v + s)}$ for $II_c$ we thus meet with various cases. In simple reproduction both of them must be equal and replace one another, since otherwise simple reproduction cannot proceed without disturbance, as we have seen above.

In accumulation it is above all the rate of accumulation that must be considered. In the preceding cases we assumed that the rate of accumulation in I was equal to ½s I, and also that it remained constant from year to year. We changed only the proportion in which this accumulated capital was divided into variable and constant capital. We then had three cases:

1) $I_{(v + ½s)}$ equals $II_c$, which is therefore smaller than $I_{(v + s)}$. This must always be so, otherwise I does not accumulate.

2) $I_{(v + ½s)}$ is greater than $II_c$. In this case the replacement is effected by adding a corresponding portion of $II_s$ to $II_c$, so that this sum becomes equal to $I_{(v + ½s)}$. Here the replacement for II is not a simple reproduction of its constant capital, but accumulation, an augmentation of its constant capital by that portion of its surplus product which it exchanges for means of production of I. This augmentation implies at the same time a corresponding addition to variable capital II out of its own surplus product.

3) $I_{(v + ½s)}$ is smaller than $II_c$. In this case II does not fully reproduce its constant capital by means of exchange and must make good the deficit by purchase from I. But this does not entail any further accumulation of variable capital II, since its constant capital is fully reproduced only by this operation. On the other hand that part of capitalists I who accumulate only additional money capital, have already accomplished a portion of this accumulation by this transaction.

The premise of simple reproduction, that $I_{(v + s)}$ is equal to $II_c$, is not only incompatible with capitalist production, although this does not exclude the possibility that in an industrial cycle of 10-11 years some year may show a smaller total production than the preceding year, so that not even simple reproduction takes place compared to the preceding year. Besides that, considering the natural annual increase in population simple reproduction could take place only to the extent that a correspondingly larger number of

unproductive servants would partake of the 1,500 representing the aggregate surplus value. But accumulation of capital, real capitalist production, would be impossible under such circumstances. The fact of capitalist accumulation therefore excludes the possibility of $II_c$ being equal to $I_{(v + s)}$. Nevertheless it might occur even with capitalist accumulation that in consequence of the course taken by the processes of accumulation during a preceding series of periods of production $II_c$ might become not only equal but even bigger than $I_{(v + s)}$. This would mean an overproduction in II and could not be adjusted in any other way than by a great crash, in consequence of which some capital of II would get transferred to I […]

It must be noted that in this exposition of accumulation the value of the constant capital is not presented accurately so far as that capital is a part of the value of the commodity capital it helped to produce. The fixed portion of the newly accumulated constant capital enters into the commodity capital only gradually and periodically, according to the different natures of these fixed elements. Therefore whenever raw materials, semi-finished goods, etc., enter in huge quantities into the production of commodities, the commodity capital consists for the most part of replacements of the circulating constant components and of the variable capital. (On account of the specific turnover of the circulating component parts this way of presenting the matter may nevertheless be adopted. It is then assumed that the circulating portion together with the portion of value of the fixed capital transferred to it is turned over so often during the year that the aggregate sum of the commodities supplied is equal in value to all the capital entering into the annual production.) But wherever only auxiliary materials are used for mechanical industry, and no raw material, there the labour element, equal to v, must reappear in the commodity capital as its larger constituent. While in the calculation of the rate of profit the surplus value is figured on the total capital, regardless of whether the fixed components periodically transfer much or little value to the product, the fixed portion of constant capital is to be included in the calculation of the value of any periodically created commodity capital only to the extent that on an average it yields value to the product on account of wear and tear.

## IV. SUPPLEMENTARY REMARKS

The original source of the money for II is v + s of the gold industry I exchanged for a part of $II_c$. The v + s of the producer of gold does not enter into II only to the extent that he accumulates surplus value or converts it into means of production I, i.e., to the extent that he expands his production. On the other hand, since the accumulation of money on the part of the gold producer himself leads ultimately to reproduction on an extended scale, a

portion of the surplus value of gold production not spent as revenue passes as additional variable capital of the gold producer into II, promotes here the formation of new hoards or supplies new means with which to buy from I without selling to it direct. From the money derived from this $I_{(v + s)}$ of the production of gold that portion of the gold must be deducted which certain branches of production II need as raw material, etc., in short as an element for the replacement of their constant capital. An element for the preliminary formation of hoards — for the purpose of future extended reproduction — exists in the exchange between I and II: for I only if part of $I_s$ is sold one-sidedly, without a balancing purchase, to II and serves there as additional constant capital II; for II, when the same is the case on the part of I for additional variable capital; furthermore, if a part of the surplus value spent by I as revenue is not covered by $II_c$, hence a part of $II_s$ is bought with it and thus converted into money. If $I_{(v + s/x)}$ is greater than $II_c$, then $II_c$ need not for its simple reproduction replace in commodities from I what I consumed out of $II_s$. The question arises to what extent hoarding can take place within the sphere of exchange of capitalists II among themselves, an exchange which can consist only of a mutual exchange of $II_s$. We know that direct accumulation takes place within II by the direct conversion of a portion of $II_s$ into variable capital (just as in I a portion of $I_s$ is directly converted into constant capital). In the various age categories of accumulation within the various lines of business of II, and for the individual capitalists in each line of business, the matter is explained *mutatis mutandis* in the same way as in I. Some are still in the stage of hoarding, and sell without buying; the others are on the point of actual expansion of reproduction, and buy without selling. The additional variable money capital is, true enough, first invested in additional labour power, but this buys means of subsistence from the hoarding owners of the additional articles of consumption entering into the consumption of the labourers. From these owners, *pro rata* to their hoard formation, the money does not return to its point of departure. They hoard it [...]

# CAPITAL

## BOOK 3:
## THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

# PART 1: THE CONVERSION OF SURPLUS VALUE INTO PROFIT AND OF THE RATE OF SURPLUS VALUE INTO THE RATE OF PROFIT

## CHAPTER 1: COST PRICE AND PROFIT

In Book I we analysed the phenomena which constitute the capitalist *process of production* as such, as the immediate productive process, with no regard for any of the secondary effects of outside influences. But this immediate process of production does not exhaust the life span of capital. It is supplemented in the actual world by the *process of circulation*, which was the object of study in Book II. In the latter, namely in Part III, which treated the process of circulation as a medium for the process of social reproduction, it developed that the capitalist process of production taken as a whole represents a synthesis of the processes of production and circulation. Considering what this third book treats, it cannot confine itself to general reflection relative to this synthesis. On the contrary, it must locate and describe the concrete forms which grow out of the *movements of capital as a whole*. In their actual movement capitals confront each other in such concrete shape, for which the form of capital in the immediate process of production, just as its form in the process of circulation, appear only as special instances. The various forms of capital, as evolved in this book, thus approach step by step the form which they assume on the surface of society, in the action of different capitals upon one another, in competition, and in the ordinary consciousness of the agents of production themselves.

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The value of every commodity produced in the capitalist way is represented in the formula: C = c + v + s. If we subtract surplus values from this value of the product there remains a bare equivalent or a substitute value in goods, for the capital value c + v expended in the elements of production.

For example, if the production of a certain article requires a capital outlay of £500, of which £20 are for the wear and tear of instruments of production, £380 for the materials of production, and £100 for labour power, and if the rate of surplus value is 100%, then the value of the product = $400_c + 100_v + 100_s$ = £600.

After deducting the surplus value of £100, there remains a commodity value of £500 which only replaces the expended capital of £500. This portion

of the value of the commodity, which replaces the price of the consumed means of production and labour power, only replaces what the commodity costs the capitalist himself. For him it, therefore, represents the **cost price** of the commodity.

What the commodity costs the capitalist and its actual production cost are two quite different magnitudes. That portion of the commodity value making up the surplus value does not cost the capitalist anything simply because it costs the labourer unpaid labour. Yet, on the basis of capitalist production, after the labourer enters the production process he himself constitutes an ingredient of operating productive capital, which belongs to the capitalist. Therefore, the capitalist is the actual producer of the commodity. For this reason the cost price of the commodity necessarily appears to the capitalist as the actual cost of the commodity. **If we take k to be the cost price, the formula C = c + v + s turns into the formula C = k + s, that is, the commodity value = cost price + surplus value.**

The grouping of the various value portions of a commodity which only replace the value of the capital expended in its production under the head of cost price expresses, on the one hand, the specific character of capitalist production. The capitalist cost of the commodity is measured by the expenditure of capital, while the actual cost of the commodity is measured by the expenditure of labour. Thus, the capitalist cost price of the commodity differs in quantity from its value, or its actual cost price. It is smaller than the value of the commodity, because, with C = k + s, it is evident that k = C - s. On the other hand, the cost price of a commodity is by no means simply a category which exists only in capitalist bookkeeping. The individualisation of this portion of value is continually manifest in practice in the actual production of the commodity, because it has ever to be reconverted from its commodity form by way of the process of circulation into the form of productive capital, so that the cost price of the commodity always must repurchase the elements of production consumed in its manufacture.

The category of cost price, on the other hand, has nothing to do with the formation of commodity value, or with the process of self-expansion of capital. When I know that of the value of a commodity worth £600, five-sixths, or £500, represent no more than an equivalent of the capital of £500 consumed in its production and that it can therefore suffice only to repurchase the material elements of this capital, I know nothing as yet either of the way in which these five-sixths of the value of the commodity, which represent its cost price, are produced, or about the way in which the last sixth, which constitutes its surplus value, was produced. The investigation will show, however, that in capitalist economics the cost price assumes the false appearance of a category of value production itself.

To return to our example. Suppose the value produced by one

labourer during an average social working day is represented by a money sum of 6s. = 6M. Then the advanced capital of £500 = $400_c + 100_v$ represents a value produced in 1,666⅔ ten-hour working days, of which 1,333⅓ working days are crystallised in the value of the means of production = $400_c$, and 333⅓ are crystallised in the value of labour power = $100_v$. Having assumed a rate of surplus value of 100%, the production of the commodity to be newly formed entails a labour expenditure = $100_v + 100_s$ = 666⅔ ten-hour working days.

We know [...] that the value of the newly created product of £600 is composed of 1) the reappearing value of the constant capital of £400 expended for means of production, and 2) a newly produced value of £200. The cost price of the commodity = £500 comprises the reappearing $400_c$ and one-half of the newly produced value of £200 (= $100_v$), that is, two elements of the commodity value which are of entirely different origin [...]

The fact that the various components of the value of the advanced capital have been expended for materially different elements of production, namely for instruments of labour, raw materials, auxiliary materials, and labour, requires only that the cost price of the commodity must buy back these materially different elements of production. So far as the formation of the cost price is concerned, however, only one distinction is appreciable, namely that between fixed and circulating capital. In our example we have set down £20 for wear and tear of instruments of labour ($400_c$ = £20 for depreciation of instruments of labour + £380 for materials of production). Before the productive process the value of these instruments of labour was, say, £1,200. After the commodities have been produced it exists in two forms, the £20 as part of the value of the commodity, and 1,200 - 20, or £1,180, as the remaining value of the instruments of labour which, as before, are in the possession of the capitalist; in other words, as an element of his productive, not of his commodity capital. Materials of production and wages, as distinct from means of labour, are entirely consumed in the production of the commodity and thus their entire value goes into that of the produced commodity. We have seen how these various components of the advanced capital assume the forms of fixed and circulating capital in relation to the turnover.

Accordingly, the capital advanced = £1,680: fixed capital = £1,200 + circulating capital = £480 ( = £380 in materials of production plus £100 in wages).

But the cost price of the commodity only = £500 (£20 for the wear and tear of the fixed capital, and £480 for circulating capital) [...]

So far we have considered just one element of the value of commodities, namely the cost price. We must now turn also to the other component of the value of commodities, namely the excess over the cost

price, or the surplus value. In the first place, then, surplus value is the excess value of a commodity over and above its cost price. But since the cost price equals the value of the consumed capital, into whose material elements it is continually reconverted, this excess value is an accretion in the value of the capital expended in the production of the commodity and returning by way of its circulation.

However, surplus value forms an increment not only of the portion of the advanced capital which goes into the self-expansion process, but also of the portion which does not go into it. In other words, it is an accretion not only to the consumed capital made good out of the cost price of the commodity, but to all the capital invested in production. Before the production process we had a capital valued at £1,680, namely £1,200 of fixed capital invested in means of production, only £20 of which go into the value of the commodity for wear and tear, plus £480 of circulating capital in materials of production and wages. After the production process we have £1,180 as the constituent element of the value of the productive capital plus a commodity capital of £600. By adding these two sums of value we find that the capitalist now has a value of £1,780. After deducting his advanced total capital of £1,680 there remains a value increment of £100. The £100 of surplus value thus form as much of an increment in relation to the invested £1,680 as to its fraction of £500 expended during production [... To the capitalist, the] surplus value seems to spring equally from all its different elements of value consisting of means of production and labour. For all these elements contribute equally to the formation of the cost price [...] In its assumed capacity of offspring of the aggregate advanced capital, surplus value takes the converted form of *profit*. Hence, a certain value is capital when it is invested with a view to producing profit, or, there is profit because a certain value was employed as capital. Suppose profit is p. Then the formula C = c + v + s = k + s turns into the formula C = k + p, or the *value of a commodity = cost price + profit*. The profit, such as it is represented here, is thus the same as surplus value, only in a mystified form [...]

We have seen that the cost price of a commodity is smaller than its value. Since C = k + s, it follows that k = C - s. The formula C = k + s reduces itself to C = k, or commodity value = commodity cost price only if s = 0, a case which never occurs on the basis of capitalist production, although peculiar market conditions may reduce the selling price of commodities to the level of, or even below, their cost price.

Hence, if a commodity is sold at its value, a profit is realised which is equal to the excess of its value over its cost price, and therefore equal to the entire surplus value incorporated in the value of the commodity. But the capitalist may sell a commodity at a profit even when he sells it below its value. So long as its selling price is higher than its cost price, though it may

be lower than its value, a portion of the surplus value incorporated in it is always realised, thus always yielding a profit [...] The minimal limit of the selling price of a commodity is its cost price. If it is sold under its cost price, the expended constituent elements of productive capital cannot be fully replaced out of the selling price. If this process continues, the value of the advanced capital disappears [...]

## CHAPTER 2: THE RATE OF PROFIT

[...] The surplus value, whatever its origin, is thus a surplus over the advanced total capital. The proportion of this surplus to the total capital is therefore expressed by the fraction s/C, in which **C stands for total capital**. **We thus obtain the *rate of profit* s/C = s/(c+v), as distinct from the *rate of surplus value* s/v.** The rate of surplus value measured against the variable capital is called rate of surplus value. The rate of surplus value measured against the total capital is called rate of profit. These are two different measurements of the same entity [...]

The transformation of surplus value into profit must be deduced from the transformation of the rate of surplus value into the rate of profit, not vice versa. And in fact it was rate of profit which was the historical point of departure. Surplus value and rate of surplus value are, relatively, the invisible and unknown essence that wants investigating, while rate of profit and therefore the appearance of surplus value in the form of profit are revealed on the surface of the phenomenon. So far as the individual capitalist is concerned, it is evident that he is only interested in the relation of the surplus value, or the excess value at which he sells his commodities, to the total capital advanced for the production of the commodities, while the specific relationship and inner connection of this surplus with the various components of capital fail to interest him, and it is, moreover, rather in his interests to draw the veil over this specific relationship and this intrinsic connection [...]

Although the excess value of a commodity over its cost price is shaped in the immediate process of production, it is realised only in the process of circulation, and appears all the more readily to have arisen from the process of circulation, since in reality, under competition, in the actual market, it depends on market conditions whether or not and to what extent this surplus is realised. There is no need to waste words at this point about the fact that if a commodity is sold above or below its value, there is merely another kind of division of surplus value, and that this different division, this changed proportion in which various persons share in the surplus value, does not in any way alter either the magnitude or the nature of that surplus value [...]

If the rate of surplus value is known and its magnitude given, the rate

of profit expresses nothing but what it actually is, namely a different way of measuring surplus value, its measurement according to the value of the total capital instead of the value of the portion of capital from which surplus value directly originates by way of its exchange for labour [...] What the rate of profit actually shows is rather a uniform relation of the surplus to equal portions of the total capital, which, from this point of view, does not show any inner difference at all, unless it be between the fixed and circulating capital. And it shows this difference, too, only because the surplus is calculated in two ways; namely, first, as a simple magnitude — as excess over the cost price. In this, its initial, form, the entire circulating capital goes into the cost price, while of the fixed capital only the wear and tear goes into it. Second, the relation of this excess in value to the total value of the advanced capital. In this case, the value of the total fixed capital enters into the calculation, quite the same as the circulating capital. Therefore, the circulating capital goes in both times in the same way, while the fixed capital goes in differently the first time, and in the same way as circulating capital the second time. Under the circumstances the difference between fixed and circulating capital is the only one which obtrudes itself [...]

Although the **rate of profit thus differs numerically from the rate of surplus value**, while **surplus value and profit are actually the same thing and numerically equal**, profit is nevertheless a converted form of surplus value, a form in which its origin and the secret of its existence are obscured and extinguished [...]

## CHAPTER 3: THE RELATION OF THE RATE OF PROFIT TO THE RATE OF SURPLUS VALUE

Here, as at the close of the preceding chapter, and generally in this entire first part, we presume the amount of profit falling to a given capital to be equal to the total amount of surplus value produced by means of this capital during a certain period of circulation. We thus leave aside for the present the fact that, on the one hand, this surplus value may be broken up into various sub-forms, such as interest on capital, ground rent, taxes, etc., and that, on the other, it is not, as a rule, identical with profit as appropriated by virtue of a general rate of profit, which will be discussed in the second part.

So far as the quantity of profit is assumed to be equal to that of surplus value, its magnitude, and that of the rate of profit, is determined by ratios of simple figures given or ascertainable in every individual case. The analysis, therefore, first is carried on purely in the mathematical field.

We retain the designations used in Books I and II. **Total capital C consists of constant capital c and variable capital v, and produces a**

**surplus value s. The ratio of this surplus value to the advanced variable capital, or s/v, is called the rate of surplus value and designated s'. Therefore s/v = s', and consequently s = s'v. If this surplus value is related to the total capital instead of the variable capital, it is called profit, p, and the ratio of the surplus value s to the total capital C, or s/C, is called the rate of profit, p'. Accordingly,**

**p' = s/C = s/(c + v)**

Now, substituting for s its equivalent s'v, we find

p' = s' (v/C) = s' v/(c + v)

which equation may also be expressed by the proportion

p' : s' = v : C ;

the rate of profit is related to the rate of surplus value as the variable capital is to the total capital.

It follows from this proportion that **the rate of profit, p', is always smaller than s', the rate of surplus value**, because v, the variable capital, is always smaller than C, the sum of v + c, or the variable plus the constant capital; the only, practically impossible case excepted, in which v = C, that is, no constant capital at all, no means of production, but only wages are advanced by the capitalist.

However, our analysis also considers a number of other factors which have a determining influence on the magnitude of c, v, and s, and must therefore be briefly examined.

First, the value of money. We may assume this to be constant throughout.

Second, the turnover. We shall leave this factor entirely out of consideration for the present, since its influence on the rate of profit will be treated specially in a later chapter. [Here we anticipate just one point, that the formula p' = s' (v/C) is strictly correct only for one period of turnover of the variable capital. But we may correct it for an annual turnover by substituting for the simple rate of surplus value, s', the annual rate of surplus value, s'n. In this, n is the number of turnovers of the variable capital within one year [...]

Third, due consideration must be given to productivity of labour, whose influence on the rate of surplus value has been thoroughly discussed in Book I [...] Productivity of labour may also exert a direct influence on the rate of profit, at least of an individual capital, if, as has been demonstrated in Book I [, ...] this individual capital operates with a higher than the average social productivity and produces commodities at a lower value than their average social value, thereby realising an extra profit. However, this case will not be considered for the present, since in this part of the work we also proceed from the premise that commodities are produced under normal social conditions and are sold at their values. Hence, we assume in each case that the productivity of labour remains constant. In effect, the day labourer of a

capital invested in a branch of industry, that is, a certain proportion between the variable and constant capital, always expresses a definite degree of labour productivity. As soon, therefore, as this proportion is altered by means other than a mere change in the value of the material elements of the constant capital, or a change in wages, the productivity of labour must likewise undergo a corresponding change, and we shall often enough see, for this reason, that changes in the factors c, v, and s also imply changes in the productivity of labour.

The same applies to the three remaining factors — the length of the working day, intensity of labour, and wages. Their influence on the quantity and rate of surplus value has been exhaustively discussed in Book I [...] It will be understood, therefore, that notwithstanding the assumption, which we make for the sake of simplicity, that these three factors remain constant, the changes that occur in v and s may nevertheless imply changes in the magnitude of these, their determining elements. In this respect we must briefly recall that the wage influences the quantity of surplus value and the rate of surplus value in inverse proportion to the length of the working day and the intensity of labour; that an increase in wages reduces the surplus value, while a lengthening of the working day and an increase in the intensity of labour add to it.

Suppose a capital of 100 produces a surplus value of 20 employing 20 labourers working a 10-hour day for a total weekly wage of 20. Then we have:

$80_c + 20_v + 20_s$; s' = 100%, p' = 20%.

Now the working day is lengthened to 15 hours without raising the wages. The total value produced by the 20 labourers will thereby increase from 40 to 60 (10 : 15 = 40 : 60). Since v, the wages paid to the labourers, remains the same, the surplus value rises from 20 to 40, and we have:

$80_c + 20_v + 40_s$; s' = 200%, p' = 40%.

If, conversely, the ten-hour working day remains unchanged, while wages fall from 20 to 12, the total value product amounts to 40 as before, but is differently distributed; v falls to 12, leaving a remainder of 28 for s. Then we have:

$80_c + 12_v + 28_s$; s' = 233⅓%, p' = 28/92 = 30 10/23 %.

Hence, we see that a prolonged working day (or a corresponding increase in the intensity of labour) and a fall in wages both increase the amount, and thus the rate, of surplus value. Conversely, a rise in wages, other things being equal, would lower the rate of surplus value. Hence, if v rises through a rise in wages, it does not express a greater, but only a dearer quantity of labour, in which case s' and p' do not rise, but fall.

This indicates that changes in the working day, intensity of labour and wages cannot take place without a simultaneous change in v and s and their

ratio, and therefore also p', which is the ratio of s to the total capital c + v. And it is also evident that changes in the ratio of s to v also imply corresponding changes in at least one of the three above-mentioned labour conditions [...]

Let us now go on to apply the above-mentioned equation of the rate of profit, p' = s' (v/C), to the various possible cases. We shall successively change the value of the individual factors of s' (v/C) and determine the effect of these changes on the rate of profit. In this way we shall obtain different series of cases, which we may regard either as successive altered conditions of operation for one and the same capital, or as different capitals existing side by side and introduced for the sake of comparison, taken, as it were, from different branches of industry or different countries [...]

Hence, we now separate the product s' (v/C) into its two factors s' and v/C. At first we shall treat s' as constant and analyse the effect of the possible variations of v/C. After that we shall treat the fraction v/C as constant and let s' pass through its possible variations. Finally we shall treat all factors as variable magnitudes and thereby exhaust all the cases from which laws concerning the rate of profit may be derived.

## I. s' CONSTANT, v/C VARIABLE

This case, which embraces a number of subordinate cases, may be covered by a general formula. Take two capitals, C and $C_1$, with their respective variable components, v and $v_1$, with a common rate of surplus value, s', and rates of profit p' and p'1. Then:

$p' = s' (v/C)$ ; $p'_1 = s' (v_1/C_1)$

Now let us make a proportion of C and $C_1$, and of v and $v_1$. For instance, **let the value of the fraction $C_1/C = E$, and that of $v_1/v = e$**. Then $C_1 = EC$, and $v_1 = ev$. Substituting in the above equation these values for $p_1$, $C_1$ and $v_1$, we obtain

$p'_1 = s' ev/EC$

Again, we may derive a second formula from the above two equations by transforming them into the proportion:

$p' : p'_1 = s' (v/C) : s' (v_1/C_1) = (v/C) : v_1/C_1$ .

Since the value of a fraction is not changed if we multiply or divide its numerator and denominator by the same number, we may reduce v/C and $v_1/C_1$ to percentages, that is, we may make C and $C_1$ both = 100. Then we have v/C = v/100 and $v_1/C_1$ = v1/100, and may then drop the denominators in the above proportion, obtaining:

$p' : p'_1 = v : v_1'$, or:

Taking any two capitals operating with the same rate of surplus value, the rates of profit are to each other as the variable portions of the capitals

calculated as percentages of their respective total capitals.

These two formulas embrace all the possible variations of v/C.

One more remark before we analyse these various cases singly. Since C is the sum of c and v, of the constant and variable capitals, and since the rates of surplus value, as of profit, are usually expressed in percentages, it is convenient to assume that the sum of c + v is also equal to 100, i.e., to express c and v in percentages. For the determination of the rate of profit, if not of the amount, it is immaterial whether we say that a capital of 15,000, of which 12,000 is constant and 3,000 is variable, produces a surplus value of 3,000, or whether we reduce this capital to percentages:

$15{,}000\ C = 12{,}000_c + 3{,}000_v\ (+ 3{,}000_s)$

$100\ C = 80_c + 20_v\ (+ 20_s)$.

In either case the rate of surplus value s' = 100%, and the rate of profit = 20%.

The same is true when we compare two capitals, say, the foregoing capital with another, such as

$12{,}000\ C = 10{,}800_c + 1{,}200_v\ (+ 1{,}200_s)$

$100\ C = 90_c + 10_v\ (+ 10_s)$.

in both of which s' = 100%, p' = 10%, and in which the comparison with the foregoing capital is clearer in percentage form.

On the other hand, if it is a matter of changes taking place in one and the same capital, the form of percentages is rarely to be used, because it almost always obscures these changes. If a capital expressed in the form of percentages:

$80_c + 20_v + 20_s$

assumes the form of percentages:

$90_c + 10_v + 10_s$,

we cannot tell whether the changed composition in percentages, $90_v + 10_c$, is due to an absolute decrease of v or an absolute increase of c, or to both. We would need the absolute magnitudes in figures to ascertain this. In the analysis of the following individual cases of variation, however, everything depends on how these changes have come about; whether $80_v + 20_c$ changed into $90_c + 10_v$ through an increase of the constant capital without any change in the variable capital, for instance through $12{,}000_c + 3{,}000_v$ changing into $27{,}000_c + 3{,}000_v$ (corresponding to a percentage of $90_c + 10_v$); or whether they took this form through a reduction of the variable capital, with the constant capital remaining unchanged, that is, through a change into $12{,}000_c + 1{,}333\frac{1}{3}_v$ (also corresponding to a percentage of $90_c + 10_v$); or, lastly, whether both of the terms changed into $13{,}500_c + 1{,}500_v$ (corresponding once more to a percentage of $90_c + 10_v$). But it is precisely these cases which we shall have to successively analyse, and in so doing dispense with the convenient form of percentages, or at least employ these only as a secondary

alternative.

*1) s' and C constant, v variable.*

If v changes in magnitude, C can remain unaltered only if c, the other component of C, that is, the constant capital, changes by the same amount as v, but in the opposite direction.

If C originally = $80_c + 20_v = 100$, and if v is then reduced to 10, then C can = 100 only if c is increased to 90; $90_c + 10_v = 100$. Generally speaking, if v is transformed into v ± d, into v increased or decreased by d, then c must be transformed into c ± d, into c varying by the same amount, but in the opposite direction, so that the conditions of the present case are satisfied.

Similarly, if the rate of surplus value s' remains the same, while the variable capital v changes, the amount of surplus value s must change, since s = s'v, and since one of the factors of s'v, namely v, is given another value.

The assumptions of the present case produce, alongside the original equation,

p' = s' (v/C) ,

still another equation through the variation of v:

p'1 = s' (v1/C)

in which v has become v1 and p'1, the resultant changed rate of profit, is to be found.

It is determined by the following proportion:

p' : p'1 = s' (v/C) : s' (v1/C) = v : v1

Or: with the rate of surplus value and total capital remaining the same, the original rate of profit is to the new rate of profit produced by a change in the variable capital as the original variable capital is to the changed variable capital.

If the original capital was, as above:

I. 15,000 C = $12{,}000_c + 3{,}000_v$ ( + $3{,}000_s$), and if it is now:

II. 15,000 C = $13{,}000_c + 2{,}000_v$ ( + $2{,}000_s$), then C = 15,000 and s' = 100% in either case, and the rate of profit of I, 20%, is to that of II, 13⅓%, as the variable capital of I, 3,000, is to that of II, 2,000, i. e., 20% : 13⅓% = 3,000 : 2,000.

Now, the variable capital may either rise or fall. Let us first take an example in which it rises. Let a certain capital be originally constituted and employed as follows:

I. $100_c + 20_v + 10_s$; C = 120, s' = 50%, p' = 8⅓%.

Now let the variable capital rise to 30. In that case, according to our assumption, the constant capital must fall from 100 to 90 so that total capital remains unchanged at 120. The rate of surplus value remaining constant at 50%, the surplus value produced will then rise from 10 to 15. We shall then

have:

II. 90c + 30v + 15s; C = 120, s' = 50%, p' = 12½%.

Let us first proceed from the assumption that wages remain unchanged. Then the other factors of the rate of surplus value, i.e., the working day and the intensity of labour, must also remain unchanged. In that event the rise of v (from 20 to 30) can signify only that another half as many labourers are employed. Then the total value produced also rises one-half, from 30 to 45, and is distributed, just as before, ⅔ for wages and ⅓ for surplus value. But at the same time, with the increase in the number of labourers, the constant capital, the value of the means of production, has fallen from 100 to 90. We have, then, a case of decreasing productivity of labour combined with a simultaneous shrinkage of constant capital. Is such a case economically possible?

In agriculture and the extractive industries, in which a decrease in labour productivity and, therefore, an increase in the number of employed labourers is quite comprehensible, this process is on the basis and within the scope of capitalist production attended by an increase, instead of a decrease, of constant capital. Even if the above fall of c were due merely to a fall in prices, an individual capital would be able to accomplish the transition from I to II only under very exceptional circumstances. But in the case of two independent capitals invested in different countries, or in different branches of agriculture or extractive industry, it would be nothing out of the ordinary if in one of the cases more labourers (and therefore more variable capital) were employed and worked with less valuable or scantier means of production than in the other case.

But let us drop the assumption that the wage remains the same, and let us explain the rise of the variable capital from 20 to 30 through a rise of wages by one-half. Then we shall have an entirely different case. The same number of labourers — say, twenty — continue to work with the same or only slightly reduced means of production. If the working day remains unchanged — say, 10 hours — then the total value produced also remains unchanged. It was and remains = 30. But all of this 30 is now required to make good the advanced variable capital of 30; the surplus value would disappear. We have assumed, however, that the rate of surplus value should remain constant, that is, the same as in I, at 50%. This is possible only if the working day is prolonged by one-half to 15 hours. Then the 20 labourers would produce a total value of 45 in 15 hours, and all conditions would be satisfied:

II. $90_c + 30_v + 15_s$; C = 120, s' = 50%, p' = 12½%.

In this case, the 20 labourers do not require any more means of labour, tools, machines, etc., than in case I. Only the raw materials or auxiliary materials would have to be increased by one-half. In the event of a

fall in the prices of these materials, the transition from I to II might be more possible economically, even for an individual capital in keeping with our assumption. And the capitalist would be somewhat compensated by increased profits for any loss incurred through the depreciation of his constant capital.

Now let us assume that the variable capital falls, instead of rising. Then we have but to reverse our example, taking II as the original capital, and passing from II to I.

II. $90_c + 30_v + 15_s$, then changes into

I. $100_c + 20_v + 10_s$, and it is evident that this transposition does not in the least alter any of the conditions regulating the respective rates of profit and their mutual relation.

If v falls from 30 to 20 because ⅓ fewer labourers are employed with the growing constant capital, then we have before us the normal case of modern industry, namely, an increasing productivity of labour, and the operation of a larger quantity of means of production by fewer labourers. That this movement is necessarily connected with a simultaneous drop in the rate of profit will be developed in the third part of this book.

If, on the other hand, v falls from 30 to 20, because the same number of labourers is employed at lower wages, the total value produced would, with the working day unchanged, as before = $30_v + 15_s = 45$. Since v fell to 20, the surplus value would rise to 25, the rate of surplus value from 50% to 125%, which would be contrary to our assumption. To comply with the conditions of our case, the surplus value, with its rate at 50%, must rather fall to 10, and the total value produced must, therefore, fall from 45 to 30, and this is possible only if the working day is reduced by ⅓. Then, as before, we have:

$100_c + 20_v + 10_s$; s' = 50%, p' = 8⅓%.

It need hardly be said that this reduction of the working time, in the case of a fall in wages, would not occur in practice. But that is immaterial. The rate of profit is a function of several variable magnitudes, and if we wish to know how these variables influence the rate of profit, we must analyse the individual effect of each in turn, regardless of whether such an isolated effect is economically practicable with one and the same capital [...]

*2) s' constant, v variable, C changes through the variation of v.*

[...]

*3) s' and v constant, c and therefore C variable.*

[...]

*4) s' constant, v, c and C all variable.*

[...]

We have herewith exhausted all the possible cases of variation of v, c, and C in our equation. We have seen that the rate of profit may fall, remain

unchanged, or rise, while the rate of surplus value remains the same, with the least change in the proportion of v to c or to C, being sufficient to change the rate of profit as well.

We have seen, furthermore, that in variations of v there is a certain limit everywhere beyond which it is economically impossible for s' to remain constant. Since every one-sided variation of c must also reach a certain limit where v can no longer remain unchanged, we find that there are limits for every possible variation of v/C, beyond which s' must likewise become variable. In the variations of s' which we shall now discuss, this interaction of the different variables of our equation will stand out still clearer.

## II. s' VARIABLE

We obtain a general formula for the rates of profit with different rates of surplus value, no matter whether v/C remains constant or not, by converting the equation:

$p' = s' (v/C)$

into

$p'_1 = s'_1 (v_1/C_1)$ ,

in which $p'_1$, $s'_1$, $v_1$ and $C_1$ denote the changed values of p', s', v and C. Then we have:

$p' : p'_1 = s' (v/C) : s'_1 (v_1/C_1)$ ,

and hence:

$p'_1 = (s'_1/s_1) \times v_1/v \times C/C_1 \times p'$.

*1) s' variable, v/C constant.*

In this case we have the equations:

$p' = s' (v/C)$; $p'_1 = s' (v/C)$ ,

in both of which v/C is equal. Therefore:

$p' : p'_1 = s' : s'_1$

The rates of profit of two capitals of the same composition are to each other as the two corresponding rates of surplus value. Since in the fraction v/C it is not a question of the absolute magnitudes of v and C, but only of their ratio, this applies to all capitals of equal composition whatever their absolute magnitude.

$80_c + 20_v + 20_s$; C = 100, s' = 100%, p' = 20%

$160_c + 40_v + 20_s$; C = 200, s' = 50%, p' = 10%

100% : 50% = 20% : 10%.

If the absolute magnitudes of v and C are the same in both cases, the rates of profit are moreover also related to one another as the amounts of surplus value:

$p' : p'_1 = s'v : s'_1v = s : s_1$.

For instance:
$80_c + 20_v + 20_s$; s' = 100%, p' = 20%
$80_c + 20_v + 10_s$; s' = 50%, p' = 10%
20% : 10% = 100 × 20 : 50 × 20 = 20s : 10s.
It is now clear that with capitals of equal absolute or percentage composition the rate of surplus value can differ only if either the wages, or the length of the working day, or the intensity of labour, differ. In the following three cases:
I. $80_c + 20_v + 10_s$; s' = 50%, p' = 10%
II. $80_c + 20_v + 20_s$; s' = 100%, p' = 20%
III. $80_c + 20_v + 40_s$; s' = 200%, p' = 40%
the total value produced in I is 30 ($20_v + 10_s$); in II it is 40; in III it is 60. This may come about in three different ways.

*First*, if the wages are different, and $20_v$ stands for a different number of labourers in every individual case [...] Or *second*, if the intensity of labour varies [...] Or *third*, the working day differs in length [...]

*2) s' and v variable, C constant.*
[...]
*3) s', v and C variable.*

This case offers no new aspects and is solved by the general formula given under II, in which s' is variable.

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The effect of a change in the magnitude of the rate of surplus value on the rate of profit hence yields the following [5] cases:

1) p' increases or decreases in the same proportion as s' if v/C remains constant.
$80_c + 20_v + 20_s$; s' = 100%, p' = 20%
$80_c + 20_v + 10_s$; s' = 50%, p' = 10%
100% : 50% = 20% : 10%.

2) p' rises or falls at a faster rate than s' if v/C moves in the same direction as s', that is, if it increases or decreases when s' increases or decreases.
$80_c + 20_v + 10_s$; s' = 50%, p' = 10%
$70_c + 30_v + 20_s$; s' = 66⅔%, p' = 10%
50% : 66⅔% < 10% : 20%.

3) p' rises or falls at a slower rate than s' if v/C changes inversely to s', but at a slower rate.

$80_c + 20_v + 10_s$; s' = 50%, p' = 10%
$90_c + 10_v + 15_s$; s' = 150%, p' = 15%
50% : 150% > 10% : 15%.

4) p' rises while s' falls, or falls while s' rises if v/C changes inversely to, and at, a faster rate than, s'.
$80_c + 20_v + 20_s$; s' = 100%, p' = 20%
$90_c + 10_v + 15_s$; s' = 150%, p' = 15%.
s' has risen from 100% to 150%, p' has fallen from 20% to 15%.

5) Finally, p' remains constant whereas s' rises or falls, while v/C changes inversely to, but in exactly the same proportion as, s'.

It is only this last case which still requires some explanation. We have observed earlier in the variations of v/C that one and the same rate of surplus value may be expressed in very much different rates of profit. Now we see that one and the same rate of profit may be based on very much different rates of surplus value. But while any change in the proportion of v to C is sufficient to produce a difference in the rate of profit so long as s is constant, a change in the magnitude of s must lead to a corresponding inverse change of v/C in order that the rate of profit remains the same. In the case of one and the same capital, or in that of two capitals in one and the same country this is possible but in exceptional cases. Assume, for example, that we have a capital of
$80_c + 20_v + 20_s$; C = 100, s' = 100%, p' = 20%;
and let us suppose that wages fall to such an extent that the same number of labourers is obtainable for 16v instead of 20v. Then, other things being equal, and 4v being released, we shall have:
$80_c + 16_v + 24_s$; C = 96, s' = 150%, p' = 25%.

In order that p' may now = 20% as before, the total capital would have to increase to 120, the constant capital therefore rising to 104:
$104_c + 16_v + 24_s$; C = 120, s' = 150%, p' = 20%.

This would only be possible if the fall in wages were attended simultaneously by a change in the productivity of labour which required such a change in the composition of capital. Or, if the value in money of the constant capital increased from 80 to 104. In short, it would require an accidental coincidence of conditions such as occurs in exceptional cases. In fact, a variation of s' that does not call for the simultaneous variation of v, and thus of v/C, is conceivable only under very definite conditions, namely in such branches of industry in which only fixed capital and labour are employed, while the materials of labour are supplied by Nature [...]

It follows from all of these five cases, therefore, that a rising rate of profit may correspond to a falling or rising rate of surplus value, a falling rate

of profit to a rising or falling rate of surplus value, and a constant rate of profit to a rising or falling rate of surplus value. And we have seen in I that a rising, falling, or constant rate of profit may also accord with a constant rate of surplus value.

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**The rate of profit, therefore, depends on two main factors — the rate of surplus value and the day labourer of capital**. The effects of these two factors may be briefly summed up as follows, by giving the composition in per cent, for it is immaterial which of the two portions of the capital causes the variation:

The rates of profit of two different capitals, or of one and the same capital in two successive different conditions,

*are equal*

1) if the per cent composition of the capitals is the same and their rates of surplus value are equal;

2) if their per cent composition is not the same, and the rates of surplus value are unequal, provided the products of the rates of surplus value by the percentages of the variable portions of capitals (s' by v) are the same, i.e., if the *masses* of surplus value (s = s'v) calculated in per cent of the total capital are equal; in other words, if the factors s' and v are inversely proportional to one another in both cases.

*They are unequal*

1) if the per cent composition is equal and the rates of surplus value are unequal, in which case they are related as the rates of surplus value;

2) if the rates of surplus value are the same and the per cent composition is unequal, in which case they are related as the variable portions of the capitals;

3) if the rates of surplus value are unequal and the per cent composition not the same, in which case they are related as the products s'v, i.e., as the quantities of surplus value calculated in per cent of the total capital.

## CHAPTER 4: THE EFFECT OF THE TURNOVER ON THE RATE OF PROFIT

The effect of the turnover on the production of surplus value, and consequently of profit, has been discussed in Book II. Briefly summarised it signifies that owing to the time span required for turnover, not all the capital can be employed all at once in production; some of the capital always lies idle, either in the form of money capital, of raw material supplies, of finished but still unsold commodity capital, or of outstanding claims; that the capital

in active production, i.e., in the production and appropriation of surplus value, is always short by this amount, and that the produced and appropriated surplus value is always curtailed to the same extent. The shorter the period of turnover, the smaller this idle portion of capital as compared with the whole, and the larger, therefore, the appropriated surplus value, provided other conditions remain the same.

It has already been shown in detail in Book II how the quantity of produced surplus value is augmented by reductions in the period of turnover, or of one of its two sections, in the time of production and the time of circulation. But since the rate of profit only expresses the relation of the produced quantity of surplus value to the total capital employed in its production, it is evident that any such reduction increases the rate of profit. Whatever has been said earlier in Part II of Book II in regard to surplus value, applies equally to profit [...]

The chief means of reducing the time of production is higher labour productivity, which is commonly called industrial progress. If this does not involve a simultaneous considerable increase in the outlay of total capital resulting from the installation of expensive machinery, etc., and thus a reduction of the rate of profit, which is calculated on the total capital, this rate must rise [...]

The chief means of reducing the time of circulation is improved communications [and transportation ...].

[For] capitals with an equal per cent composition, with equal rates of surplus value and equal working days, the rates of profit of the two capitals are related inversely as their periods of turnover. If either the composition, the rates of surplus value, the working day, or the wages, are unequal in the two compared cases, this would naturally produce further differences in the rates of profit; but these are independent of the turnover and, for this reason, do not concern us at this point. They have already been discussed in Chapter III.

The direct effect of a reduced period of turnover on the production of surplus value, and consequently of profit, consists of an increased efficiency imparted thereby to the variable portion of capital, as shown in Book II, Chapter XVI, "The Turnover of Variable Capital". This chapter demonstrated that a variable capital of 500 turned over ten times a year produces as much surplus value in this time as a variable capital of 5,000 with the same rate of surplus value and the same wages, turned over just once a year [...]

The quantity of surplus value appropriated in one year is [...] equal to the quantity of surplus value appropriated in one turnover of the variable capital multiplied by the number of such turnovers per year. **Suppose we call the surplus value, or profit, appropriated in one year S, the surplus value appropriated in one period of turnover s, the number of turnovers of the**

**variable capital in one year n, then S = sn, and the annual rate of surplus value S' = s'n**, as already demonstrated in Book II, Chapter XVI, I.

It goes without saying that the formula p' = s' (v/C) = s' v/(c + v) is correct only so long as the v in the numerator is the same as that in the denominator. In the denominator v stands for the entire portion of the total capital used on an average as variable capital for the payment of wages. The v of the numerator is primarily only determined by the fact that a certain quantity of surplus value = s is produced and appropriated by it, whose relation to it s/v, is s', the rate of surplus value. It is only along these lines that the formula p' = s/(c + v) is transformed into the other: p' = s' v/(c + v). The v of the numerator will now be more accurately determined by the fact that it must equal the v of the denominator, that is, the entire variable portion of capital C. In other words, the equation p' = (s/C) may be correctly transformed into the equation p' = s' v/(c + v) only if s stands for surplus value produced in one turnover of the variable capital. Should s be only a portion of this surplus value, then s = s'v is still correct, but this v is then smaller than the v in C = c + v, because it is smaller than the entire variable capital expended for wages. But should s stand for more than the surplus value of one turnover of v, then a portion of this v, or perhaps the whole of it, serves twice, namely in the first and in the second turnover, and eventually in subsequent turnovers. The v which produces the surplus value and represents the sum of all paid wages, is therefore greater than the v in c + v and the calculation falls into error.

To make the formula precise for the annual rate of profit, we must substitute the annual rate of surplus value for the simple rate of surplus value, that is, substitute S' or s'n for s'. In other words, we must multiply the rate of surplus value s', or, what amounts to the same thing, the variable capital v contained in C, by n, the number of turnovers of this variable capital in one year. Thus we obtain **p' = s'n (v/C), which is the formula for the annual rate of profit** [...]

## CHAPTER 5: ECONOMY IN THE EMPLOYMENT OF CONSTANT CAPITAL

### I. IN GENERAL

The increase of absolute surplus value, or the prolongation of surplus labour, and thus of the working day, while the variable capital remains the same and thus employs the same number of labourers at the same nominal wages, regardless of whether overtime is paid or not, reduces the relative value of the constant capital as compared to the total and the variable capital, and thereby increases the rate of profit, again irrespective of the growth of the

quantity of surplus value and a possibly rising rate of surplus value. The volume of the fixed portion of constant capital, such as factory buildings, machinery, etc., remains the same, no matter whether these serve the labour process 16 or 12 hours. A prolongation of the working day does not entail any fresh expenditures in this, the most expensive portion of constant capital. Furthermore, the value of the fixed capital is thereby reproduced in a smaller number of turnover periods, so that the time for which it must be advanced to make a certain profit is abbreviated. A prolongation of the working day therefore increases the profit, even if overtime is paid, or even if, up to a certain point, it is better paid than the normal hours of labour [...]

The same conditions do not obtain if the working day is constant. Then it is necessary either to increase the number of labourers, and with them to a certain extent the amount of fixed capital, the buildings, machinery, etc., in order to exploit a greater quantity of labour (for we leave aside deductions from wages or the depression of wages below their normal level), or, if the intensity and, consequently, the productivity of labour, increase and, generally, more relative surplus value is produced, the magnitude of the circulating portion of constant capital increases in such industrial branches which use raw materials, since more raw material, etc., is processed in a given time; and, secondly, the amount of machinery set in motion by the same number of labourers, therefore also this part of constant capital, increases as well. Hence, an increase in surplus value is accompanied by an increase in constant capital, and the growing exploitation of labour by greater outlays of the means of production through which labour is exploited, i.e., by a greater investment of capital. Therefore, the rate of profit is thereby reduced on the one hand while it increases on the other.

Quite a number of current expenses remain almost or entirely the same whether the working day is longer or shorter. [For example, the] cost of supervision is less for 500 working-men during 18 working hours than for 750 working-men during 12 working hours [...] State and municipal taxes, fire insurance, wages of various permanent employees, depreciation of machinery, and various other expenses of a factory, remain unchanged whether the working time is long or short [...]

Whatever reduces the wear of machinery, and of fixed capital in general, for any given period of production, cheapens not only the individual commodity, in view of the fact that in its price every individual commodity reproduces its aliquot share of this depreciation, but reduces also the aliquot portion of the invested capital for this period. Repair work, etc., to the extent that it becomes necessary, is added to the original cost of the machinery. A reduction in repair costs, due to greater durability of the machinery, lowers *pro tanto* the price of this machinery [...]

Another rise in the rate of profit is produced, not by savings in the

labour creating the constant capital, but by savings in the application of this capital itself. On the one hand, the concentration of labourers, and their large-scale co-operation, saves constant capital. The same buildings, and heating and lighting appliances, etc., cost relatively less for the large-scale than for small-scale production. The same is true of power and working machinery. Although their absolute value increases, it falls in comparison to the increasing extension of production and the magnitude of the variable capital, or the quantity of labour power set in motion [...]

We must make a distinction in economy as regards use of constant capital. If the quantity, and consequently the sum of the value of employed capital, increases, this is primarily only a concentration of more capital in a single hand. Yet it is precisely this greater quantity applied by a single source — attended, as a rule, by an absolutely greater but relatively smaller amount of employed labour — which permits economy of constant capital. To take an individual capitalist, the volume of the necessary investment of capital, especially of its fixed portion, increases. But its value decreases relative to the mass of worked-up materials and exploited labour.

This is now to be briefly illustrated by a few examples. We shall begin at the end — the economy in the conditions of production, in so far as these also constitute the living conditions of the labourer.

### II. SAVINGS IN LABOUR CONDITIONS AT THE EXPENSE OF THE LABOURERS

[...]

### III. ECONOMY IN THE GENERATION AND TRANSMISSION OF POWER, AND IN BUILDINGS

[...]

### IV. UTILISATION OF THE EXCRETIONS OF PRODUCTION

[...]

### V. ECONOMY THROUGH INVENTIONS

[...]

## CHAPTER 6: THE EFFECT OF PRICE FLUCTUATIONS

### I. FLUCTUATIONS IN THE PRICE OF RAW MATERIALS, AND THEIR DIRECT EFFECTS ON THE RATE OF PROFIT

The assumption in this case, as in previous ones, is that no change takes place in the rate of surplus value. It is necessary to analyse the case in its pure form. However, it might be possible for a specific capital, whose rate of surplus value remains unchanged, to employ an increasing or decreasing number of labourers, in consequence of contraction or expansion caused by

such fluctuations in the price of raw materials as we are to analyse here. In that case the quantity of surplus value might vary, while the rate of surplus value remains the same. Yet this should also be disregarded here as a side-issue. If improvements of machinery and changes in the price of raw materials simultaneously influence either the number of labourers employed by a definite capital, or the level of wages, one has but to put together 1) the effect caused by the variations of constant capital on the rate of profit, and 2) the effect caused by variations in wages on the rate of profit. The result is then obtained of itself.

But in general, it should be noted here, as in the previous case, that if variations take place, either due to savings in constant capital, or due to fluctuations in the price of raw materials, they always affect the rate of profit, even if they leave the wage, hence the rate and amount of surplus value, untouched. They change the magnitude of C in s' (v/C), and thus the value of the whole fraction. It is therefore immaterial, in this case as well — in contrast to what we found in our analysis of surplus value — in which sphere of production these variations occur; whether or not the production branches affected by them produce necessities for labourers, or constant capital for the production of such necessities. The deductions made here are equally valid for variations occurring in the production of luxury articles, and by luxury articles we here mean all production that does not serve the reproduction of labour power.

The raw materials here include auxiliary materials as well, such as indigo, coal, gas, etc. Furthermore, so far as machinery is concerned under this head, its own raw material consists of iron, wood, leather, etc. Its own price is therefore affected by fluctuations in the price of raw materials used in its construction. To the extent that its price is raised through fluctuations, either in the price of the raw materials of which it consists, or of the auxiliary materials consumed in its operation, the rate of profit falls *pro tanto*. And vice versa.

In the following analysis we shall confine ourselves to fluctuations in the price of raw materials, not so far as they go to make up the raw materials of machinery serving as means of labour or as auxiliary materials applied in its operation, but in so far as they enter the process in which commodities are produced. There is just one thing to be noted here: the natural wealth in iron, coal, wood, etc., which are the principal elements used in the construction and operation of machinery, presents itself here as a natural fertility of capital and is a factor determining the rate of profit irrespective of the high or low level of wages [...]

Since the rate of profit is s/C, or s/(c + v), it is evident that every thing causing a variation in the magnitude of c, and thereby of C, must also bring about a variation in the rate of profit, even if s and v, and their mutual

relation, remain unaltered. Now, raw materials are one of the principal components of constant capital. Even in industries which consume no actual raw materials, these enter the picture as auxiliary materials or components of machinery, etc., and their price fluctuations thus accordingly influence the rate of profit. Should the price of raw material fall by an amount = d, then s/C, or s/(c + v) becomes s/(C - d), or s/((c - d) + v). Thus, the rate of profit rises. Conversely, if the price of raw material rises, then s/C, or s/(c + v), becomes s/(C + d), or s/((c + d) + v), and the rate of profit falls. Other conditions being equal, the rate of profit, therefore, falls and rises inversely to the price of raw material [...] It follows furthermore that foreign trade influences the rate of profit, regardless of its influence on wages through the cheapening of the necessities of life [...]

The value of raw and auxiliary materials passes entirely and all at one time into the value of the product in the manufacture of which they are consumed, while the elements of fixed capital transfer their value to the product only gradually in proportion to their wear and tear. It follows that the price of the product is influenced far more by the price of raw materials than by that of fixed capital, although the rate of profit is determined by the total value of the capital applied no matter how much of it is consumed in the making of the product. But it is evident — although we merely mention it in passing, since we here still assume that commodities are sold at their values, so that price fluctuations caused by competition do not as yet concern us — that the expansion or contraction of the market depends on the price of the individual commodity and is inversely proportional to the rise or fall of this price. It actually develops, therefore, that the price of the product does not rise in proportion to that of the raw material, and that it does not fall in proportion to that of raw material. Consequently, the rate of profit falls lower in one instance, and rises higher in the other than would have been the case if products were sold at their value.

Further, the quantity and value of the employed machinery grows with the development of labour productivity but not in the same proportion as this productivity, i. e., not in the proportion in which this machinery increases its output. In those branches of industry, therefore, which do consume raw materials, i. e., in which the subject of labour is itself a product of previous labour, the growing productivity of labour is expressed precisely in the proportion in which a larger quantity of raw material absorbs a definite quantity of labour, hence in the increasing amount of raw material converted in, say, one hour into products, or processed into commodities. The value of raw material, therefore, forms an ever-growing component of the value of the commodity product in proportion to the development of the productivity of labour, not only because it passes wholly into this latter value, but also because in every aliquot part of the aggregate product the portion

representing depreciation of machinery and the portion formed by the newly added labour — both continually decrease. Owing to this falling tendency, the other portion of the value representing raw material increases proportionally, unless this increase is counterbalanced by a proportionate decrease in the value of the raw material arising from the growing productivity of the labour employed in its own production.

Further, raw and auxiliary materials, just like wages, form parts of the circulating capital and must, therefore, be continually replaced in their entirety through the sale of the product, while only the depreciation is to be renewed in the case of machinery, and first of all in the form of a reserve fund. It is, moreover, in no way essential for each individual sale to contribute its share to this reserve fund, so long as the total annual sales contribute their annual share. This shows again how a rise in the price of raw material can curtail or arrest the entire process of reproduction if the price realised by the sale of the commodities should not suffice to replace all the elements of these commodities. Or, it may make it impossible to continue the process on the scale required by its technical basis, so that only a part of the machinery will remain in operation, or all the machinery will work for only a fraction of the usual time [...]

## II. APPRECIATION, DEPRECIATION, RELEASE AND TIE-UP OF CAPITAL

The phenomena analysed in this chapter require for their full development the credit system and competition on the world market, the latter being the basis and the vital element of capitalist production. These more definite forms of capitalist production can only be comprehensively presented, however, after the general nature of capital is understood. Furthermore, they do not come within the scope of this work and belong to its eventual continuation. Nevertheless the phenomena listed in the above title may be discussed in a general way at this stage. They are interrelated, first with one another and, secondly, also with the rate and amount of profit. They are to be briefly discussed here if only because they create the impression that not only the rate, but also the amount of profit — which is actually identical with the amount of surplus value — could increase or decrease independently of the movements of the quantity or rate of surplus value.

Are we to consider release and tie-up of capital, on the one hand, and its appreciation and depreciation, on the other, as different phenomena?

The question is what we mean by release and tie-up of capital? Appreciation and depreciation are self-explanatory. All they mean is that a given capital increases or decreases in value as a result of certain general

economic conditions, for we are not discussing the particular fate of an individual capital. All they mean, therefore, is that the value of a capital invested in production rises or falls, irrespective of its self-expansion by virtue of the surplus labour employed by it.

**By tie-up of capital we mean that certain portions of the total value of the product must be reconverted into elements of constant and variable capital if production is to proceed on the same scale. By release of capital we mean that a portion of the total value of the product which had to be reconverted into constant or variable capital up to a certain time, becomes disposable and superfluous, should production continue on the previous scale. This release or tie-up of capital is different from the release or tie-up of revenue**. If the annual surplus value of an individual capital C is, let us say, equal to x, then a reduction in the price of commodities consumed by the capitalists would make x — a sufficient to procure the same enjoyments, etc., as before. A portion of the revenue = a is released, therefore, and may serve either to increase consumption or to be reconverted into capital (for the purpose of accumulation). Conversely, if x + a is needed to continue to live as before, then this standard of living must either be reduced or a portion of the previously accumulated income = a, expended as revenue.

Appreciation and depreciation may affect either constant or variable capital, or both, and in the case of constant capital it may, in turn, affect either the fixed, or the circulating portion, or both [...]

Under constant capital we must consider the raw and auxiliary materials, including semi-finished products, all of which we here include under the term of raw materials, machinery, and other fixed capital.

In the preceding analysis we referred especially to variations in the price, or the value, of raw materials in respect to their influence on the rate of profit, and determined the general law that with other conditions being equal, the rate of profit is inversely proportional to the value of the raw materials. This is absolutely true for capital newly invested in a business enterprise, in which the investment, i. e., the conversion of money into productive capital, is only just taking place.

But aside from this capital, which is being newly invested, a large portion of the already functioning capital is in the sphere of circulation, while another portion is in the sphere of production. One portion is in the market in the shape of commodities waiting to be converted into money; another is on hand as money, in whatever form, waiting to be reconverted into elements of production; finally, a third portion is in the sphere of production, partly in its original form of means of production such as raw and auxiliary materials, semi-finished products purchased in the market, machinery and other fixed capital, and partly in the form of products which are in the process of

manufacture. The effect of appreciation or depreciation depends here to a great extent on the relative proportion of these component parts. Let us, for the sake of simplicity, leave aside all fixed capital and consider only that portion of constant capital which consists of raw and auxiliary materials, and semi-finished products, and both finished commodities in the market and commodities still in the process of production.

If the price of raw material, for instance of cotton, rises, then the price of cotton goods — both semi-finished goods like yarn and finished goods like cotton fabrics — manufactured while cotton was cheaper, rises also. So does the value of the unprocessed cotton held in stock, and of the cotton in the process of manufacture. The latter because it comes to represent more labour time in retrospect and thus adds more than its original value to the product which it enters, and more than the capitalist paid for it.

Hence, if the price of raw materials rises, and there is a considerable quantity of available finished commodities in the market, no matter what the stage of their manufacture, the value of these commodities rises, thereby enhancing the value of the existing capital. The same is true for the supply of raw materials, etc., in the hands of the producer. This appreciation of value may compensate, or more than compensate, the individual capitalist, or even an entire separate sphere of capitalist production, for the drop in the rate of profit attending a rise in the price of raw materials. Without entering into the detailed effects of competition, we might state for the sake of thoroughness that 1) if available supplies of raw material are considerable, they tend to counteract the price increase which occurred at the place of their origin; 2) if the semi-finished and finished goods press very heavily upon the market, their price is thereby prevented from rising proportionately to the price of their raw materials.

The reverse takes place when the price of raw material falls. Other circumstances remaining the same, this increases the rate of profit. The commodities in the market, the articles in the process of production, and the available supplies of raw material, depreciate in value and thereby counteract the attendant rise in the rate of profit [...]

We proceed in this entire analysis from the assumption that the rise or fall in prices expresses actual fluctuations in value. But since we are here concerned with the effects such price variations have on the rate of profit, it matters little what is at the bottom of them. The present statements apply equally if prices rise or fall under the influence of the credit system, competition, etc., and not on account of fluctuations in value.

Since the rate of profit equals the ratio of the excess over the value of the product to the value of the total capital advanced, a rise caused in the rate of profit by a depreciation of the advanced capital would be associated with a loss in the value of capital. Similarly, a drop caused in the rate of profit by an

appreciation of the advanced capital might possibly be associated with a gain.

As for the other portion of constant capital, such as machinery and fixed capital in general, the appreciation of value taking place in it with respect mainly to buildings, real estate, etc., cannot be discussed without the theory of ground rent, and does not therefore belong in this chapter [...]

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There is still variable capital to be considered.

Inasmuch as the value of labour power rises because there is a rise in the value of the means of subsistence required for its reproduction, or falls because there is a reduction in their value — and the appreciation and depreciation of variable capital are really nothing more than expressions of these two cases — a drop in surplus value corresponds to such appreciation and an increase in surplus value to such depreciation, provided the length of the working day remains the same. But other circumstances — the release and tie-up of capital — may also be associated with such cases, and since we have not analysed them so far, we shall briefly mention them now.

If wages fall in consequence of a depreciation in the value of labour power (which may even be attended by a rise in the real price of labour), a portion of the capital hitherto invested in wages is released. Variable capital is set free. In the case of new investments of capital, this has simply the effect of its operating with a higher rate of surplus value. It takes less money than before to set in motion the same amount of labour, and in this way the unpaid portion of labour increases at the expense of the paid portion. But in the case of already invested capital, not only does the rate of surplus value rise but a portion of the capital previously invested in wages is also released. Until this time it was tied up and formed a regular portion which had to be deducted from the proceeds for the product and advanced for wages, acting as variable capital if the business were to continue on its former scale. Now this portion is set free and may be used as a new investment, be it to extend the same business or to operate in some other sphere of production.

Let us assume, for instance, that £500 per week were required at first to employ 500 labourers, and that now only £400 are needed for the same purpose. If the quantity of value produced in either case = £1,000, the amount of weekly surplus value in the first case = £500 and the rate of surplus value 500/500 = 100%. But after the wage reduction the quantity of surplus value £1,000 - £400 = £600, and its rate 600/400 = 150%. And this increase in the rate of surplus value is the only effect for one who starts a new enterprise in this sphere of production with a variable capital of £400 and a corresponding constant capital. But when this takes place in a business already in operation, the depreciation of the variable capital does not only increase the quantity of

surplus value from £500 to £600, and the rate of surplus value from 100 to 150%, but releases £100 of the variable capital for the further exploitation of labour. Hence, the same amount of labour is exploited to greater advantage, and, what is more, the release of £100 makes it possible to exploit more labourers than before at the higher rate with the same variable capital of £500.

Now the reverse situation. Suppose, with 500 employed labourers, the original proportion in which the product is divided = $400_v + 600_s = 1{,}000$, making the rate of surplus value = 150%. In that case, the labourer receives £4/5 or 16 shillings per week. Should 500 labourers cost £500 per week, due to an appreciation of variable capital, each one of them will receive a weekly wage = £1, and £400 can employ only 400 labourers. If the same number of labourers as before is put to work, therefore, we have $500_v + 500_s = 1{,}000$. The rate of surplus value would fall from 150 to 100%, which is ⅓. In the case of new capital the only effect would be this lower rate of surplus value. Other conditions being equal, the rate of profit would also have fallen accordingly, although not in the same proportion. For instance, if c = 2,000, we have in the one case $2{,}000_c + 400_v + 600_s = 3{,}000$. The rate of surplus value = 150%, the rate of profit = 600/2,400 = 25%. In the second case, $2{,}000_c + 500_v + 500_s = 3{,}000$. The rate of surplus value = 100%, the rate of profit = 500/2,500 = 20%. In the case of already invested capital, however, there would be a dual effect. Only 400 labourers could be employed with a £400 variable capital, and that at a rate of surplus value of 100%. They would therefore produce an aggregate surplus value of only £400. Furthermore, since a constant capital of £2,000 requires 500 labourers for its operation, 400 labourers can put into motion only a constant capital of £1,600. For production to continue on the same scale, so that 1/5 of the machinery does not stand idle, £100 must be added to the variable capital in order to employ 500 labourers as before. And this can be accomplished only by tying up hitherto disposable capital, so that part of the accumulation intended to extend production serves merely to stop a gap, or a portion reserved for revenue is added to the old capital. Then a variable capital increased by £100 produces £100 less surplus value. More capital is required to employ the same number of labourers, and at the same time the surplus value produced by each labourer is reduced.

The advantages resulting from a release and the disadvantages resulting from a tie-up of variable capital both exist only for capital already engaged and reproducing itself under certain given conditions. For newly invested capital the advantages on the one hand, and the disadvantages on the other, are confined to an increase or drop in the rate of surplus value, and to a corresponding, if in no way proportionate, change in the rate of profit.

The release and tie-up of variable capital, just analysed, is the result

of a depreciation or appreciation of the elements of variable capital, that is, of the cost of reproducing labour power.

But variable capital could also be released if, with the wage rate unchanged, fewer labourers were required due to the development of labour productivity to set in motion the same amount of constant capital. In like manner, there may reversely be a tie-up of additional variable capital if more labourers are required for the same quantity of constant capital due to a drop in productivity. If, on the other hand, a portion of capital formerly employed as variable capital is employed in the form of constant capital, so that merely a different distribution exists between the components of the same capital, this has an influence on both the rate of surplus value and the rate of profit, but does not belong under the heading of tie-up and release of capital, which is here being discussed.

We have already seen that constant capital may also be tied up or released by the appreciation or depreciation of its component elements. Aside from this, it can be tied up only if the productive power of labour increases (provided a portion of the variable is not converted into constant capital), so that the same amount of labour creates a greater product and therefore sets in motion a larger constant capital. The same may occur under certain circumstances if productivity decreases, for instance in agriculture, so that the same quantity of labour requires more means of production, such as seeds or manure, drainage, etc., in order to produce the same output. Constant capital may be released without depreciation if improvements, utilisation of the forces of Nature, etc., enable a constant capital of smaller value to technically perform the same services as were formerly performed by a constant capital of greater value [...]

## CHAPTER 7: SUPPLEMENTARY REMARKS

Suppose, as is assumed in this part, the amount of profit in any particular sphere of production equals the sum of the surplus value produced by the total capital invested in that sphere. Even then the bourgeois will not consider his profit as identical with surplus value, i. e., with unpaid surplus labour, and, to be sure, for the following reasons:

1) In the process of circulation he forgets the process of production. He thinks that surplus value is made when he realises the value of commodities, which includes realisation of their surplus value [...]

2) Assuming a uniform degree of exploitation, we have seen that regardless of all modifications originating in the credit system, regardless of the capitalists' efforts to outwit and cheat one another, and, lastly, regardless of any favourable choice of the market — the rate of profit may differ considerably, depending on the low or high prices of raw materials and the

experience of the buyer, on the relative productivity, efficiency and cheapness of the machinery, on the greater or lesser efficiency of the aggregate arrangement in the various stages of the productive process, elimination of waste, the simplicity and efficiency of management and supervision, etc. In short, given the surplus value for a certain variable capital, it still depends very much on the individual business acumen of the capitalist, or of his managers and salesmen, whether this same surplus value is expressed in a greater or smaller rate of profit, and accordingly yields a greater or smaller amount of profit. Let the same surplus value of £1,000, the product of £1,000 in wages, obtain in enterprise A for a constant capital of £9,000, and in enterprise B for £11,000. In case A we have p' = 1,000/10,000 or 10%. In case B we have p' = 1,000/12,000, or 8⅓%. The total capital produces relatively more profit in enterprise A than in B, because of a higher rate of profit, although the variable capital advanced in both cases = £1,000 and the surplus value produced by each likewise = £1,000, so that in both cases there exists the same degree of exploitation of the same number of labourers. This difference in the presentation of the same mass of surplus value, or the difference in the rates of profit, and therefore in the profit itself, while the exploitation of labour is the same, may also be due to other causes. Still, it may also be due wholly to a difference in the business acumen with which both establishments are run. And this circumstance misleads the capitalist, convinces him that his profits are not due to exploiting labour, but, at least in part, to other independent circumstances, and particularly his individual activity [...]

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A rise in the rate of profit is always due to a relative or absolute increase of the surplus value in relation to its cost of production, i. e., to the advanced total capital, or to a decrease in the difference between the rate of profit and the rate of surplus value.

Fluctuations in the rate of profit may occur irrespective of changes in the organic components of the capital, or of the absolute magnitude of the capital, through a rise or fall in the value of the fixed or circulating advanced capital caused by an increase or a reduction of the working time required for its reproduction, this increase or reduction taking place independently of the already existing capital. The value of every commodity – thus also of the commodities making up the capital – is determined not by the necessary labour time contained in it, but by the *social* labour time required for its reproduction. This reproduction may take place under unfavourable or under propitious circumstances, distinct from the conditions of original production. If, under altered conditions, it takes double or, conversely, half the time, to

reproduce the same material capital, and if the value of money remains unchanged, a capital formerly worth £100 would be worth £200, or £50 respectively. Should this appreciation or depreciation affect all parts of capital uniformly, then the profit would also be accordingly expressed in double, or half, the amount of money. But if it involves a change in the organic composition of the capital, if the ratio of the variable to the constant portion of capital rises or falls, then, other circumstances remaining the same, the rate of profit will rise with a relatively rising variable capital and fall with a relatively falling one. If only the money value of the advanced capital rises or falls (in consequence of a change in the value of money), then the money expression of the surplus value rises, or falls, in the same proportion. The rate of profit remains unchanged.

## PART 2: CONVERSION OF PROFIT INTO AVERAGE PROFIT

### CHAPTER 8: DIFFERENT COMPOSITIONS OF CAPITALS IN DIFFERENT BRANCHES OF PRODUCTION AND RESULTING DIFFERENCES IN RATES OF PROFIT

In the preceding part we demonstrated, among other things, that the rate of profit may vary — rise or fall — while the rate of surplus value remains the same. In the present chapter we assume that the intensity of labour exploitation, and therefore the rate of surplus value and the length of the working day, are the same in all the spheres of production into which the social labour of a given country is divided. Adam Smith has already comprehensively shown that the numerous differences in the exploitation of labour in various spheres of production balance one another by means of all kinds of existing compensations, or compensations accepted as such on the basis of current prejudice, so that they are merely evanescent distinctions and are of no moment in a study of the general relations. Other differences, for instance those in the wage scale, rest largely on the difference between simple and complicated labour mentioned in the beginning of Book I […], and have nothing to do with the intensity of exploitation in the different spheres of production, although they render the lot of the labourer in those spheres very unequal. For instance, if the labour of a goldsmith is better paid than that of a day labourer, the former's surplus labour produces proportionately more surplus value than the latter's. And although the equalizing of wages and working days, and thereby of the rates of surplus value, among different spheres of production, and even among different investments of capital in the same sphere of production, is checked by all kinds of local obstacles, it is nevertheless taking place more and more with the advance of capitalist production and the subordination of all economic

conditions to this mode of production. The study of such frictions, while important to any special work on wages, may be dispensed with as incidental and irrelevant in a general analysis of capitalist production. In a general analysis of this kind it is usually always assumed that the actual conditions correspond to their conception, or, what is the same, that actual conditions are represented only to the extent that they are typical of their own general case.

The difference in the rates of surplus value in different countries, and consequently the national differences in the degree of exploitation of labour, are immaterial for our present analysis. What we want to show in this part is precisely the way in which a general rate of profit takes shape in any given country. It is evident, however, that a comparison of the various national rates of profit requires only a collation of the previously studied with that which is here to be studied. First one should consider the differences in the national rates of surplus value, and then, on the basis of these given rates, a comparison should be made of the differences in the national rates of profit. In so far as those differences are not due to differences in the national rates of surplus value, they must be due to circumstances in which the surplus value is assumed, just as in the analysis of this chapter, to be universally the same, i. e., constant.

We demonstrated in the preceding chapter that, assuming the rate of surplus value to be constant, the rate of profit obtaining for a given capital may rise or fall in consequence of circumstances which raise or lower the value of one or the other portion of constant capital, and so affect the proportion between the variable and constant components of capital. We further observed that circumstances which prolong or reduce the time of turnover of an individual capital may similarly influence the rate of profit. Since the mass of the profit is identical with the mass of the surplus value, and with the surplus value itself, it was also seen that the mass of the profit — as distinct from the rate of profit — is not affected by the aforementioned fluctuations of value. They only modify the rate in which a given surplus value, and therefore a profit of a given magnitude, express themselves; in other words, they modify only the relative magnitude of profit, i. e., its magnitude compared with the magnitude of the advanced capital. Inasmuch as capital was tied up or released by such fluctuations of value, it was not only the rate of profit, but the profit itself, which was likely to be affected in this indirect manner. However, this has then always applied only to such capital as was already invested, and not to new investments. Besides, the increase or reduction of profit always depended on the extent to which the same capital could, in consequence of such fluctuation of value, set in motion more or less labour; in other words, it depended on the extent to which the same capital could, with the rate of surplus value remaining the same, obtain a larger or smaller amount of surplus value. Far from contradicting the

general rule, or from being an exception to it, this seeming exception was really but a special case in the application of the general rule.

It was seen in the preceding part that, the degree of exploitation remaining constant, changes in the value of the component parts of constant capital and in the time of turnover of capital are attended by changes in the rate of profit. The obvious conclusion is that the rates of profit in different spheres of production existing side by side have to differ when, other circumstances remaining unchanged, the time of turnover of capitals employed in the different spheres differs, or when the value relation of the organic components of these capitals differs in the various branches of production. What we previously regarded as changes occurring successively with one and the same capital is now to be regarded as simultaneous differences among capital investments existing side by side in different spheres of production.

In these circumstances we shall have to analyze: 1) the difference in the organic composition of capitals, and 2) the difference in their period of turnover.

The premise in this entire analysis is naturally that by speaking of the composition or turnover of a capital in a certain line of production we always mean the average normal proportions of capital invested in this sphere, and generally the average in the total capital employed in that particular sphere, and not the accidental differences of the individual capitals.

Since it is further assumed that the rate of surplus value and the working day are constant, and since this assumption also implies constant wages, a certain quantity of variable capital represents a definite quantity of labour power set in motion, and therefore a definite quantity of materialized labour. If, therefore, £100 represent the weekly wage of 100 labourers, indicating 100 actual labour powers, then n times £100 indicate the labour powers of n times 100 labourers, and £100/n those of 100/n labourers. The variable capital thus serves here (as is always the case when the wage is given) as an index of the amount of labour set in motion by a definite total capital. Differences in the magnitude of the employed variable capitals serve, therefore, as indexes of the difference in the amount of employed labour power. If £100 indicate 100 labourers per week, and represent 6,000 working hours at 60 working hours per week, then £200 represent 12,000, and £50 only 3,000 working hours.

By composition of capital we mean, as stated in Book I, the proportion of its active and passive components, i. e., of variable and constant capital. Two proportions enter into consideration under this heading. They are not equally important, although they may produce similar effects under certain circumstances.

The first proportion rests on a technical basis, and must be regarded

as given at a certain stage of development of the productive forces. A definite quantity of labour power represented by a definite number of labourers is required to produce a definite quantity of products in, say, one day, and — what is self-evident — thereby to consume productively, i. e., to set in motion, a definite quantity of means of production, machinery, raw materials, etc. A definite number of labourers corresponds to a definite quantity of means of production, and hence a definite quantity of living labour to a definite quantity of labour materialized in means of production. This proportion differs greatly in different spheres of production, and frequently even in different branches of one and the same industry, although it may by coincidence be entirely or approximately the same in entirely separate lines of industry.

This proportion forms the technical composition of capital and is the real basis of its organic composition.

However, it is also possible that this first proportion may be the same in different lines of industry, provided variable capital is merely an index of labour power and constant capital merely an index of the mass of means of production set in motion by this labour power. For instance, certain work in copper and iron may require the same ratio of labour power to mass of means of production. But since copper is more expensive than iron, the value relation between variable and constant capital is different in each case, and hence also the day labourer of the two total capitals. The difference between the technical composition and the value composition is manifested in each branch of industry in that the value relation of the two portions of capital may vary while the technical composition is constant, and the value relation may remain the same while the technical composition varies. The latter case will, of course, be possible only if the change in the ratio of the employed masses of means of production and labour power is compensated by a reverse change in their values.

The day labourer of capital, inasmuch as it is determined by, and reflects, its technical composition, is called the organic composition of capital.

In the case of variable capital, therefore, we assume that it is the index of a definite quantity of labour power, or of a definite number of labourers, or a definite quantity of living labour set in motion. We have seen in the preceding part that a change in the magnitude of the value of variable capital might eventually indicate nothing but a higher or lower price of the same mass of labour. But here, where the rate of surplus value and the working day are taken to be constant, and the wages for a definite working period are given, this is out of the question. On the other hand, a difference in the magnitude of the constant capital may likewise be an index of a change in the mass of means of production set in motion by a definite quantity of labour

power. But it may also stem from a difference in value between the means of production set in motion in one sphere and those of another. Both points of view must therefore be examined here.

Finally, we must take note of the following essential facts:

Let £100 be the weekly wage of 100 labourers. Let the weekly working hours = 60. Furthermore, let the rate of surplus value = 100%. In this case, the labourers work 30 of the 60 hours for themselves and 30 hours gratis for the capitalist. In fact, the £100 of wages represent just the 30 working hours of 100 labourers, or altogether 3,000 working hours, while the other 3,000 hours worked by the labourers are incorporated in the £100 of surplus value, or in the profit pocketed by the capitalist. Although the wage of £100 does not, therefore, express the value in which the weekly labour of the 100 labourers is materialized, it indicates nevertheless (since the length of the working day and the rate of surplus value are given) that this capital sets in motion 100 labourers for 6,000 working hours. The capital of £100 indicates this, first, because it indicates the number of labourers set in motion, with £1 = 1 labourer per week, hence £100 = 100 labourers; and, secondly, because, since the rate of surplus value is given as 100%, each of these labourers performs twice as much work as is contained in his wages, so that £1, i. e., his wage, which is the expression of half a week of labour, actuates a whole week's labour, just as £100 sets in motion 100 weeks of labour, although it contains only 50. A very essential distinction is thus to be made in regard to variable capital laid out in wages. Its value as the sum of wages, i. e., as a certain amount of materialised labour, is to be distinguished from its value as a mere index of the mass of living labour which it sets in motion. The latter is always greater than the labour which it incorporates, and is, therefore, represented by a greater value than that of the variable capital. This greater value is determined, on the one hand, by the number of labourers set in motion by the variable capital and, on the other, by the quantity of surplus labour performed by them.

It follows from this manner of looking upon variable capital that:

When a capital invested in production sphere A expends only 100 in variable capital for each 700 of total capital, leaving 600 for constant capital, while a capital invested in production sphere B expends 600 for variable and only 100 for constant capital, then capital A of 700 sets in motion only 100 of labour power, or, in the terms of our previous assumption, 100 weeks of labour, or 6,000 hours of living labour, while the same amount of capital B will set in motion 600 weeks of labour, or 36,000 hours of living labour. The capital in A would then appropriate only 50 weeks of labour, or 3,000 hours of surplus labour, while the same amount of capital in B would appropriate 300 weeks of labour, or 18,000 hours. Variable capital is not only the index of the labour embodied in it. When the rate of surplus value is known it is also

an index of the amount of labour set in motion over and above that embodied in itself, i. e., of surplus labour. Assuming the same intensity of exploitation, the profit in the first case would be 100/700 = 1/7 = 14 2/7%, and in the second case, 600/700 = 6/7 = 85 5/7%, or a six-fold rate of profit. In this case, the profit itself would actually be six times as great, 600 in B as against 100 in A, because the same capital set in motion six times as much living labour, which at the same level of exploitation means six times as much surplus value, and thus six times as much profit.

But if the capital invested in A were not 700 but £7,000, while that invested in B were only £700, and the organic composition of both were to remain the same, then the capital in A would employ £1,000 of the £7,000 as variable capital, that is, 1,000 labourers per week = 60,000 hours of living labour, of which 30,000 would be surplus labour. Yet each £700 of the capital in A would continue to set in motion only 1/6 as much living labour, and hence only 1/6 as much surplus labour, as the capital in B, and would produce only 1/6 as much profit. If we consider the rate of profit, then in A 1000/7000 = 100/700 = 14 2/7%, as compared with 600/700, or 85 5/7%, in B. Taking equal amounts of capital, the rates of profit differ because, owing to the different masses of living labour set in motion, the masses of surplus value, and thus of profit, differ, although the rates of surplus value are the same.

We get practically the same result if the technical conditions are the same in both spheres of production, but the value of the elements of the employed constant capital is greater or smaller in the one than in the other. Let us assume that both invest £100 as variable capital and therefore employ 100 labourers per week to set in motion the same quantity of machinery and raw materials. But let the latter be more expensive in B than in A. For instance, let the £100 of variable capital set in motion £200 of constant capital in A, and £400 in B. With the same rate of surplus value, of 100%, the surplus value produced is in either case equal to £100. Hence, the profit is also equal to £100 in both. But the rate of profit in A is $100/(200_c + 100_v)$ = ⅓ = 33⅓%, while in B it is $100/(400_c + 100_v)$ = 1/5 = 20%. In fact, if we select a certain aliquot part of the total capital in either case, we find that in every £100 of B only £20, or 1/5, constitute variable capital, while in every £100 of A £33⅓, or ⅓, form variable capital. B produces less profit for each £100, because it sets in motion less living labour than A. The difference in the rates of profit thus resolves itself once more, in this case, into a difference of the masses of profit, because of the masses of surplus value, produced by each 100 of invested capital.

The difference between this second example and the first is just this: The equalisation between A and B in the second case would require only a change in the value of the constant capital of either A or B, provided the technical basis remained the same. But in the first case the technical

composition itself is different in the two spheres of production and would have to be completely changed to achieve an equalisation.

The different organic composition of various capitals is thus independent of their absolute magnitude. It is always but a question of how much of every 100 is variable and how much constant capital.

Capitals of different magnitude, calculated in percentages, or, what amounts to the same in this case, capitals of the same magnitude operating for the same working time and with the same degree of exploitation may produce very much different amounts of profit, because of surplus value, for the reason that a difference in the organic composition of capital in different spheres of production implies a difference in their variable part, thus a difference in the quantities of living labour set in motion by them, and therefore also a difference in the quantities of surplus labour appropriated by them. And this surplus labour is the substance of surplus value, and thus of profit. In different spheres of production equal portions of the total capital comprise unequal sources of surplus value, and the sole source of surplus value is living labour. Assuming the same degree of labour exploitation, the mass of labour set in motion by a capital of 100, and consequently the mass of surplus labour appropriated by it, depend on the magnitude of its variable component. If a capital, consisting in per cent of $90_c + 10_v$, produced as much surplus value, or profit, at the same degree of exploitation as a capital consisting of $10_c + 90_v$, it would be as plain as day that the surplus value, and thus value in general, must have an entirely different source than labour, and that political economy would then be deprived of every rational basis. If we are to assume all the time that £1 stands for the weekly wage of a labourer working 60 hours, and that the rate of surplus value is 100%, then it is evident that the total value product of one labourer in a week, is £2. Ten labourers would then produce no more than £20. And since £10 of the £20 replace the wages, the ten labourers cannot produce more surplus value than £10. On the other hand, 90 labourers, whose total product is £180, and whose wages amount to £90, would produce a surplus value of £90. The rate of profit in the first case would thus be 10%, and in the other 90%. If this were not so, then value and surplus value would be something else than materialised labour. Since capitals in different spheres of production viewed in percentages — or as capitals of equal magnitude — are divided differently into variable and constant capital, setting in motion unequal quantities of living labour and producing different surplus values, and therefore profits, it follows that the rate of profit, which consists precisely of the ratio of surplus value to total capital in per cent, must also differ.

Now, if capitals in different spheres of production, calculated in per cent, i. e., capitals of equal magnitude, produce unequal profits in consequence of their different organic composition, then it follows that the

profits of unequal capitals in different spheres of production cannot be proportional to their respective magnitudes, or that profits in different spheres of production are not proportional to the magnitude of the respective capitals invested in them. For if profits were to grow *pro rata* to the magnitude of invested capital, it would mean that in per cent the profits would be the same, so that in different spheres of production capitals of equal magnitude would have equal rates of profit, in spite of their different organic composition. It is only in the same sphere of production, where we have a given organic composition of capital, or in different spheres with the same organic composition of capital, that the amounts of profits are directly proportional to the amounts of invested capitals. To say that the profits of unequal capitals are proportional to their magnitudes would only mean that capitals of equal magnitude yield equal profits, or that the rate of profit is the same for all capitals, whatever their magnitude and organic composition.

These statements hold good on the assumption that the commodities are sold at their values. The value of a commodity is equal to the value of the constant capital contained in it, plus the value of the variable capital reproduced in it, plus the increment — the surplus value produced — of this variable capital. At the same rate of surplus value, its quantity evidently depends on the quantity of the variable capital. The value of the product of an individual capital of 100 is, in one case, $90_c + 10_v + 10_s = 110$; and in the other, $10_c + 90_v + 90_s = l90$. If the commodities go at their values, the first product is sold at 110, of which 10 represent surplus value, or unpaid labour, and the second at 190, of which 90 represent surplus value, or unpaid labour.

This is particularly important in comparing rates of profit in different countries. Let us assume that the rate of surplus value in one European country is 100%, so that the labourer works half of the working day for himself and the other half for his employer. Let us further assume that the rate of surplus value in an Asian country is 25%, so that the labourer works 4/5 of the working day for himself, and 1/5 for his employer. Let $84_c + l6_v$ be the composition of the national capital in the European country, and $16_c + 84_v$ in the Asian country, where little machinery, etc., is used, and where a given quantity of labour power consumes relatively little raw material productively in a given time. Then we have the following calculation:

In the European country the value of the product = $84_c + 16_v + 16_s = 116$; rate of profit = 16/100 = 16%.

In the Asian country the value of the product = $16_c + 84_v + 21_s = 121$; rate of profit = 21/100 = 21%.

The rate of profit in the Asian country is thus more than 25% higher than in the European country, although the rate of surplus value in the former is one-fourth that of the latter. Men like Carey, Bastiat, and *tutti quanti*, would arrive at the very opposite conclusion.

By the way, different national rates of profit are mostly based on different national rates of surplus value. But in this chapter we compare unequal rates of profit derived from the same rate of surplus value.

Aside from differences in the organic composition of capitals, and therefore aside from the different masses of labour — and consequently, other circumstances remaining the same, from different masses of surplus labour set in motion by capitals of the same magnitude in different spheres of production, there is yet another source of inequality in rates of profit. This is the different period of turnover of capital in different spheres of production. We have seen in Chapter IV that, other conditions being equal, the rates of profit of capitals of the same organic composition are inversely proportional to their periods of turnover. We have also seen that the same variable capital turned over in different periods of time produces different quantities of annual surplus value. The difference in the periods of turnover is therefore another reason why capitals of equal magnitude in different spheres of production do not produce equal profits in equal periods, and why, consequently, the rates of profit in these different spheres differ.

As far as the ratio of the fixed and circulating capital in the composition of capitals is concerned, however, it does not in itself affect the rate of profit in the least. It can affect the rate of profit only if in one case, this difference in composition coincides with a different ratio of the variable and constant parts, so that the difference in the rate of profit is due to this latter difference, and not to the different ratio of fixed and circulating capital; and, in the other case, if the difference in the ratio of the fixed and circulating parts of capital is responsible for a difference in the period of turnover in which a certain profit is realised. If capitals are divided into fixed and circulating capital in different proportions, this will naturally always influence the period of turnover and cause differences in it. But this does not imply that the period of turnover, in which the same capitals realise certain profits, is different. For instance, A may continually have to convert the greater part of its product into raw materials, etc., while B may use the same machinery, etc., for a longer time, and may need less raw material, but both A and B, being occupied in production, always have a part of their capital engaged, the one in raw materials, i. e., in circulating capital, and the other in machinery, etc., or in fixed capital. A continually converts a portion of its capital from the form of commodities into that of money, and the latter again into the form of raw material, while B employs a portion of its capital for a longer time as an instrument of labour without any such conversions. If both of them employ the same amount of labour, they will indeed sell quantities of products of unequal value in the course of the year, but both quantities of products will contain equal amounts of surplus value, and their rates of profit, calculated on the entire capital invested, will be the same, although their

composition of fixed and circulating capital, and their periods of turnover, are different. Both capitals realise equal profits in equal periods, although their periods of turnover are different. The difference in the period of turnover is in itself of no importance, except so far as it affects the mass of surplus labour appropriated and realised by the same capital in a given time. If, therefore, a different division into fixed and circulating capital does not necessarily imply a different period of turnover, which would in its turn imply a different rate of profit, it is evident that if there is any such difference in the rates of profit, it is not due to a different ratio of fixed to circulating capital as such, but rather to the fact that this different ratio indicates an inequality in the periods of turnover affecting the rate of profit.

It follows, therefore, that the different composition of constant capital in respect to its fixed and circulating portions in various branches of production has in itself no bearing on the rate of profit, since it is the ratio of variable to constant capital which decides this question, while the value of the constant capital, and therefore also its magnitude in relation to the variable is entirely unrelated to the fixed or circulating nature of its components. Yet it may be found — and this often leads to incorrect conclusions — that wherever fixed capital is considerably advanced this but expresses the fact that production is on a large scale, so that constant capital greatly outweighs the variable, or that the living labour power it employs is small compared to the mass of the means of production which it operates.

We have thus demonstrated that different lines of industry have different rates of profit, which correspond to differences in the organic composition of their capitals and, within indicated limits, also to their different periods of turnover; given the same time of turnover, the law (as a general tendency) that profits are related to one another as the magnitudes of the capitals, and that, consequently, capitals of equal magnitude yield equal profits in equal periods, applies only to capitals of the same organic composition, even with the same rate of surplus value. These statements hold good on the assumption which has been the basis of all our analyses so far, namely that the commodities are sold at their values. There is no doubt, on the other hand, that aside from unessential, incidental and mutually compensating distinctions, differences in the average rate of profit in the various branches of industry do not exist in reality, and could not exist without abolishing the entire system of capitalist production. It would seem, therefore, that here the theory of value is incompatible with the actual process, incompatible with the real phenomena of production, and that for this reason any attempt to understand these phenomena should be given up.

It follows from the first part of this volume that the cost prices of products in different spheres of production are equal if equal portions of capital have been advanced for their production, however different the

organic composition of such capitals. The distinction between variable and constant capital escapes the capitalist in the cost price. A commodity for whose production he must advance £100 costs him just as much, whether he invests $90_c + 10_v$, or $10_c + 90_v$. It costs him £100 in either case — no more and no less. The cost prices are the same for equal capitals in different spheres, no matter how much the produced values and surplus values may differ. The equality of cost prices is the basis for competition among invested capitals, whereby an average profit is brought about.

## CHAPTER 9: FORMATION OF A GENERAL RATE OF PROFIT (AVERAGE RATE OF PROFIT) AND TRANSFORMATION OF THE VALUES OF COMMODITIES INTO PRICES OF PRODUCTION

The organic composition of capital depends at any given time on two circumstances: first, on the technical relation of labour power employed to the mass of the means of production employed; secondly, on the price of these means of production. This composition, as we have seen, must be examined on the basis of percentage ratios. We express the organic composition of a certain capital consisting 4/5 of constant and 1/5 of variable capital, by the formula $80_c + 20_v$. It is furthermore assumed in this comparison that the rate of surplus value is unchangeable. Let it be any rate picked at random; say, 100%. The capital of $80_c + 20_v$ then produces a surplus value of $20_s$, and this yields a rate of profit of 20% on the total capital. The magnitude of the actual value of its product depends on the magnitude of the fixed part of the constant capital, and on the portion which passes from it through wear and tear into the product. But since this circumstance has absolutely no bearing on the rate of profit, and hence, in the present analysis, we shall assume, for the sake of simplicity, that the constant capital is everywhere uniformly and entirely transferred to the annual product of the capitals. It is further assumed that the capitals in the different spheres of production annually realise the same quantities of surplus value proportionate to the magnitude of their variable parts. For the present, therefore, we disregard the difference which may be produced in this respect by variations in the duration of turnovers. This point will be discussed later.

Let us take five different spheres of production, and let the capital in each have a different organic composition as follows:

| Capitals | Rate of Surplus value | Surplus Value | Value of Product | Rate of Profit |
|---|---|---|---|---|
| I. $80_c + 20_v$ | 100% | 20 | 120 | 20% |
| II. $70_c + 30_v$ | 100% | 30 | 130 | 30% |
| III. $60_c + 40_v$ | 100% | 40 | 140 | 40% |
| IV. $85_c + 15_v$ | 100% | 15 | 115 | 15% |
| V. $95_c + 5_v$ | 100% | 5 | 105 | 5% |

Here, in different spheres of production with the same degree of exploitation, we find considerably different rates of profit corresponding to the different organic composition of these capitals.

The sum total of the capitals invested in these five spheres of production = 500; the sum total of the surplus value produced by them = 110; the aggregate value of the commodities produced by them = 610. If we consider the 500 as a single capital, and capitals I to V merely as its component parts (as, say, different departments of a cotton mill, which has different ratios of constant to variable capital in its carding, preparatory spinning, spinning, and weaving shops, and in which the average ratio for the factory as a whole has still to be calculated), the mean composition of this capital of 500 would = $390_c + 110_v$, or, in per cent, = $78_c + 22_v$. Should each of the capitals of 100 be regarded as 1/5 of the total capital, its composition would equal this average of $78_c + 22_v$; for every 100 there would be an average surplus value of 22; thus, the average rate of profit would = 22%, and, finally, the price of every fifth of the total product produced by the 500 would = 122. The product of each fifth of the advanced total capital would then have to be sold at 122.

But to avoid entirely erroneous conclusions it must not be assumed that all cost prices = 100.

With $80_c + 20_v$ and a rate of surplus value = 100%, the total value of commodities produced by capital I = 100 would be $80_c + 20_v + 20_s = 120$, provided the entire constant capital went into the annual product. Now, this may under certain circumstances be the case in some spheres of production. But hardly in cases where the proportion of c : v = 4 : 1. We must, therefore, remember in comparing the values produced by each 100 of the different capitals, that they will differ in accordance with the different composition of c as to its fixed and circulating parts, and that, in turn, the fixed portions of each of the different capitals depreciate slowly or rapidly as the case may be, thus transferring unequal quantities of their value to the product in equal periods of time. But this is immaterial to the rate of profit. No matter whether the $80_c$ give up a value of 80, or 50, or 5, to the annual product, and the annual product consequently = $80_c + 20_v + 20_s = 120$, or $50_c + 20_v + 20_s = 90$, or $5_c + 20_v + 20_s = 45$; in all these cases the redundance of the product's value

over its cost price = 20, and in calculating the rate of profit these 20 are related to the capital of 100 in all of them. The rate of profit of capital I, therefore, is 20% in every case. To make this still plainer, we let different portions of constant capital go into the value of the product of the same five capitals in the following table:

| Capitals | Rate of Surplus value | Surplus Value | Rate of Profit | Used up c | Value of commodities | Cost Price | |
|---|---|---|---|---|---|---|---|
| I. $80_c + 20_v$ | 100% | 20 | 20% | 50 | 90 | 70 | |
| II. $70_c + 30_v$ | 100% | 30 | 30% | 51 | 111 | 81 | |
| III. $60_c + 40_v$ | 100% | 40 | 40% | 51 | 131 | 91 | |
| IV. $85_c + 15_v$ | 100% | 15 | 15% | 40 | 70 | 55 | |
| V. $95_c + 5_v$ | 100% | 5 | 5% | 10 | 20 | 15 | |
| $390_c + 110_v$ | — | 110 | — | — | — | — | Total |
| $78_c + 22_v$ | — | 22 | 22% | — | — | — | Average |

If we now again consider capitals I to V as a single total capital, we shall see that, in this case as well, the composition of the sums of these five capitals = 500 = $390_c + 110_v$, so that we get the same average composition = $78_c + 22_v$, and, similarly, the average surplus value remains 22. If we divide this surplus value uniformly among capitals I to V, we get the following commodity prices:

| Capitals | Surplus Value | Value of Commodities | Cost Price of Commodities | Price of Commodities | Rate of Profit | Deviation of Price from Value |
|---|---|---|---|---|---|---|
| I. $80_c + 20_v$ | 20 | 90 | 70 | 92 | 22% | +2 |
| II. $70_c + 30_v$ | 30 | 111 | 81 | 103 | 22% | -8 |
| III. $60_c + 40_v$ | 40 | 131 | 91 | 113 | 22% | -18 |
| IV. $85_c + 15_v$ | 15 | 70 | 55 | 77 | 22% | +7 |
| V. $95_c + 5_v$ | 5 | 20 | 15 | 37 | 22% | +17 |

Taken together, the commodities are sold at 2 + 7 + 17 = 26 above, and 8 + 18 = 26 below their value, so that the deviations of price from value balance out one another through the uniform distribution of surplus value, or through addition of the average profit of 22 per 100 units of advanced capital to the respective cost prices of the commodities I to V. One portion of the commodities is sold above its value in the same proportion in which the other is sold below it. And it is only the sale of the commodities at such prices that enables the rate of profit for capitals I to V to be uniformly 22%, regardless of their different organic composition. **The prices which obtain as the average of the various rates of profit in the different spheres of**

**production added to the cost prices of the different spheres of production, constitute the *prices of production*.** They have as their prerequisite the existence of a general rate of profit, and this, again, presupposes that the rates of profit in every individual sphere of production taken by itself have previously been reduced to just as many average rates. These particular rates of profit = s/c in every sphere of production, and must, as occurs in Part I of this book, be deduced out of the values of the commodities. Without such deduction the general rate of profit (and consequently the price of production of commodities) remains a vague and senseless conception. Hence, the **price of production** of a commodity is equal to its cost price plus the profit, allotted to it in per cent, in accordance with the general rate of profit, or, in other words, to its **cost price plus the average profit**.

Owing to the different organic compositions of capitals invested in different lines of production, and, hence, owing to the circumstance that — depending on the different percentage which the variable part makes up in a total capital of a given magnitude — capitals of equal magnitude put into motion very different quantities of labour, they also appropriate very different quantities of surplus labour or produce very different quantities of surplus value. Accordingly, the rates of profit prevailing in the various branches of production are originally very different. These different rates of profit are equalized by competition to a single general rate of profit, which is the average of all these different rates of profit. The **profit accruing in accordance with this general rate of profit to any capital of a given magnitude**, whatever its organic composition, is called the **average profit**. The price of a commodity, which is equal to its cost price plus the share of the annual average profit on the total capital invested (not merely consumed) in its production that falls to it in accordance with the conditions of turnover, is called its price of production. Take, for example, a capital of 500, of which 100 is fixed capital, and let 10% of this wear out during one turnover of the circulating capital of 400. Let the average profit for the period of turnover be 10%. In that case the cost price of the product created during this turnover will be $10_c$ for wear plus 400 (c + v) circulating capital = 410, and its price of production will be 410 cost price plus (10% profit on 500) 50 = 460.

Thus, although in selling their commodities **the capitalists of the various spheres of production recover the value of the capital consumed in their production, they do not secure the surplus value, and consequently the profit, created in their own sphere by the production of these commodities. What they secure is only as much surplus value, and hence profit, as falls, when uniformly distributed, to the share of every aliquot part of the total social capital from the total social surplus value, or profit, produced in a given time by the social capital in all spheres of**

**production. Every 100 of an invested capital, whatever its composition, draws as much profit in a year, or any other period of time, as falls to the share of every 100, the Nth part of the total capital, during the same period**. **So far as profits are concerned, the various capitalists are just so many stockholders in a stock company in which the shares of profit are uniformly divided per 100, so that profits differ in the case of the individual capitalists only in accordance with the amount of capital invested by each in the aggregate enterprise, i. e., according to his investment in social production as a whole, according to the number of his shares**. Therefore, the portion of the price of commodities which replaces the elements of capital consumed in the production of these commodities, the portion, therefore, which will have to be used to buy back these consumed capital values, i. e., their cost price, depends entirely on the outlay of capital within the respective spheres of production. But the other element of the price of commodities, the profit added to this cost price, does not depend on the amount of profit produced in a given sphere of production by a given capital in a given period of time. It depends on the mass of profit which falls as an average for any given period to each individual capital as an aliquot part of the total social capital invested in social production.

When a capitalist sells his commodities at their price of production, therefore, he recovers money in proportion to the value of the capital consumed in their production and secures profit in proportion to this advanced capital as the aliquot part in the total social capital. His cost prices are specific. But the profit added to them is independent of his particular sphere of production, being a simple average per 100 units of invested capital.

Let us assume that the five different investments I to V of the foregoing illustration belong to one man. The quantity of variable and constant capital consumed per 100 of the invested capital in each of the departments I to V in the production of commodities I to V would, needless to say, make up a part of their price, since at least this price is required to recover the advanced and consumed portions of the capital. These cost prices would therefore be different for each class of the commodities I to V, and would as such be set differently by the owner. But as regards the different quantities of surplus value, or profit, produced by I to V, they might easily be regarded by the capitalist as profit on his advanced aggregate capital, so that each 100 units would get their definite aliquot part. Hence, the cost prices of the commodities produced in the various departments I to V would be different; but that portion of their selling price derived from the profit added per 100 capital would be the same for all these commodities. The aggregate price of the commodities I to V would therefore equal their aggregate value, i. e., the sum of the cost prices I to V plus the sum of the surplus values, or

profits, produced in I to V. It would hence actually be the money expression of the total quantity of past and newly applied labour incorporated in commodities I to V. And in the same way **the sum of the prices of production of all commodities produced in society — the totality of all branches of production — is equal to the sum of their values**.

This statement seems to conflict with the fact that under capitalist production the elements of productive capital are, as a rule, bought on the market, and that for this reason their prices include profit which has already been realised, hence, include the price of production of the respective branch of industry together with the profit contained in it, so that the profit of one branch of industry goes into the cost price of another. But if we place the sum of the cost prices of the commodities of an entire country on one side, and the sum of its surplus values, or profits, on the other, the calculation must evidently be right. For instance, take a certain commodity A. Its cost price may contain the profits of B, C, D, etc., just as the cost prices of B, C, D, etc., may contain the profits of A. Now, as we make our calculation the profit of A will not be included in its cost price, nor will the profits of B, C, D, etc., be included in theirs. Nobody ever includes his own profit in his cost price. If there are, therefore, n spheres of production, and if each makes a profit amounting to p, then their aggregate cost price = k - np. Considering the calculation as a whole we see that since the profits of one sphere of production pass into the cost price of another, they are therefore included in the calculation as constituents of the total price of the end-product, and so cannot appear a second time on the profit side. If any do appear on this side, however, then only because the commodity in question is itself an ultimate product, whose price of production does not pass into the cost price of some other commodity.

If the cost price of a commodity includes a sum = p, which stands for the profits of the producers of the means of production, and if a profit = $p_1$ is added to this cost price, the aggregate profit P = p + $p_1$. The aggregate cost price of the commodity, considered without the profit portions, is then its own cost price minus P. Let this cost price be k. Then, obviously, k + p = k + p + $p_1$. In dealing with surplus values, we have seen in Book I that the product of every capital may be so treated, as though a part of it replaces only capital, while the other part represents only surplus value. In applying this approach to the aggregate product of society, we must make some rectifications. Looking upon society as a whole, the profit contained in, say, the price of flax cannot appear twice — not both as a portion of the linen price and as the profit of the flax.

There is no difference between surplus value and profit, as long as, e.g., A's surplus value passes into B's constant capital. It is, after all, quite immaterial to the value of the commodities, whether the labour contained in

them is paid or unpaid. This merely shows that B pays for A's surplus value. A's surplus value cannot be entered twice in the total calculation.

But the difference is this: Aside from the fact that the price of a particular product, let us say that of capital B, differs from its value because the surplus value realised in B may be greater or smaller than the profit added to the price of the products of B, the same circumstance applies also to those commodities which form the constant part of capital B, and indirectly also its variable part, as the labourers' necessities of life. So far as the constant portion is concerned, it is itself equal to the cost price plus the surplus value, here therefore equal to cost price plus profit, and this profit may again be greater or smaller than the surplus value for which it stands. As for the variable capital, the average daily wage is indeed always equal to the value produced in the number of hours the labourer must work to produce the necessities of life. But this number of hours is in its turn obscured by the deviation of the prices of production of the necessities of life from their values. However, this always resolves itself to one commodity receiving too little of the surplus value while another receives too much, so that the deviations from the value which are embodied in the prices of production compensate one another. **Under capitalist production, the general law acts as the prevailing tendency only in a very complicated and approximate manner, as a never ascertainable average of ceaseless fluctuations**.

Since the general rate of profit is formed by taking the average of the various rates of profit for each 100 of capital invested in a definite period, e.g., a year, it follows that in it the difference brought about by different periods of turnover of different capitals is also effaced. But these differences have a decisive bearing on the different rates of profit in the various spheres of production whose average forms the general rate of profit.

In the preceding illustration concerning the formation of the average rate of profit we assumed each capital in each sphere of production = 100, and we did so to show the difference in the rates of profit in per cent, and thus also the difference in the values of commodities produced by equal amounts of capital. But it goes without saying that the actual amounts of surplus value produced in each sphere of production depend on the magnitude of the invested capitals, since the composition of capital is given in each sphere of production. Yet the actual *rate* of profit in any particular sphere of production is not affected by the fact that the capital invested is 100, or m times 100, or xm times 100. The rate of profit remains 10%, whether the total profit is 10:100, or 1,000:10,000.

However, since the rates of profit differ in the various spheres of production, with very much different quantities of surplus value, or profit, being produced in them, depending on the proportion of the variable to the total capital, it is evident that the average profit per 100 of the social capital,

and hence the average, or general, rate of profit, will differ considerably in accordance with the respective magnitudes of the capitals invested in the various spheres. Let us take four capitals A, B, C, D. Let the rate of surplus value for all = 100%. Let the variable capital for each 100 of the total be 25 in A, 40 in B, 15 in C, and 10 in D. Then each 100 of the total capital would yield a surplus value, or profit, of 25 in A, 40 in B, 15 in C, and 10 in D. This would total 90, and if these four capitals are of the same magnitude, the average rate of profit would then be 90/4 or 22½%.

Suppose, however, the total capitals are as follows: A = 200, B = 300, C = 1,000, D = 4,000. The profits produced would then respectively = 50, 120, 150, and 400. This makes a profit of 720, and an average rate of profit of 13 1/11% for 5,500, the sum of the four capitals.

The masses of the total value produced differ in accordance with the magnitudes of the total capitals invested in A, B, C, D, respectively. **The formation of the average rate of profit is, therefore, not merely a matter of obtaining the simple average of the different rates of profit in the various spheres of production, but rather one of the relative weight which these different rates of profit have in forming this average. This, however, depends on the relative magnitude of the capital invested in each particular sphere, or on the aliquot part which the capital invested in each particular sphere forms in the aggregate social capital.** There will naturally be a very great difference, depending on whether a greater or smaller part of the total capital produces a higher or lower rate of profit. And this, again, depends on how much capital is invested in spheres, in which the variable capital is relatively small or large compared to the total capital. **It is just like the average interest obtained by a usurer who lends various quantities of capital at different interest rates; for instance, at 4, 5, 6, 7%, etc. The average rate will depend entirely on how much of his capital he has loaned out at each of the different rates of interest.**

**The general rate of profit is, therefore, determined by two factors:**

**1) The organic composition of the capitals in the different spheres of production, and thus, the different rates of profit in the individual spheres.**

**2) The distribution of the total social capital in these different spheres, and thus, the relative magnitude of the capital invested in each particular sphere at the specific rate of profit prevailing in it; i. e., the relative share of the total social capital absorbed by each individual sphere of production.**

In Books I and II we dealt only with the *value* of commodities. On the one hand, the *cost price* has now been singled out as a part of this value, and, on the other, the *price of production* of commodities has been developed as

its converted form.

Suppose the composition of the average social capital is $80_c + 20_v$ and the annual rate of surplus value, s', is 100%. In that case the average annual profit for a capital of 100 = 20, and the general annual rate of profit = 20%. Whatever the cost price, k, of the commodities annually produced by a capital of 100, their price of production would then be k + 20. In those spheres of production in which the composition of capital would = $(80 - x)_c + (20 + x)_v$, the actually produced surplus value, or the annual profit produced in that particular sphere, would be 20 + x, that is, greater than 20, and the value of the produced commodities = k + 20 + x, that is, greater than k + 20, or greater than their price of production. In those spheres, in which the composition of the capital = $(80 + x)_c + (20 - x)_v$, the annually produced surplus value, or profit, would = 20 - x, or less than 20, and consequently the value of the commodities k + 20 - x less than the price of production, which = k + 20. Aside from possible differences in the periods of turnover, the price of production of the commodities would then equal their value only in spheres, in which the composition would happen to be $80_c + 20_v$.

The specific development of the social productivity of labour in each particular sphere of production varies in degree, higher or lower, depending on how large a quantity of means of production are set in motion by a definite quantity of labour, hence in a given working day by a definite number of labourers, and, consequently, on how small a quantity of labour is required for a given quantity of means of production. Such capitals as contain a larger percentage of constant and a smaller percentage of variable capital than the average social capital are, therefore, called capitals of *higher* composition, and, conversely, those capitals in which the constant is relatively smaller, and the variable relatively greater than in the average social capital, are called capitals of *lower* composition. Finally, we call those capitals whose composition coincides with the average, capitals of average composition. Should the average social capital be composed in per cent of $80_c + 20_v$, then a capital of $90_c + 10_v$ is *higher,* and a capital of $70_c + 30_v$ *lower* than the social average. Generally speaking, if the composition of the average social capital=mc + nv, in which m and n are constant magnitudes and m + n = 100, the formula $(m + x)_c + (n - x)_v$ represents the higher composition, and $(m - x)_c + (n + x)_v$ the lower composition of an individual capital or group of capitals. The way in which these capitals perform their functions after establishment of an average rate of profit and assuming one turnover per year, is shown in the following tabulation, in which I represents the average composition with an average rate of profit of 20%.

I) $80_v + 20_v + 20_s$. Rate of profit = 20%.
Price of product = 120. Value = 120.

II) $90_c + 10_v + 10_s$. Rate of profit = 20%.
Price of product = 120. Value = 110.
III) $70_c + 30_v + 30_s$. Rate of profit = 20%.
Price of product = 120. Value = 130.

The value of the commodities produced by capital II would, therefore, be smaller than their price of production, the price of production of the commodities of III smaller than their value, and only in the case of capital I in branches of production in which the composition happens to coincide with the social average, would value and price of production be equal. In applying these terms to any particular cases note must, however, be taken whether a deviation of the ratio between c and v is simply due to a change in the value of the elements of constant capital, rather than to a difference in the technical composition.

**The foregoing statements have at any rate modified the original assumption concerning the determination of the cost price of commodities. We had originally assumed that the cost price of a commodity equalled the *value* of the commodities consumed in its production. But for the buyer the price of production of a specific commodity is its cost price, and may thus pass as cost price into the prices of other commodities. Since the price of production may differ from the value of a commodity, it follows that the cost price of a commodity containing this price of production of another commodity may also stand above or below that portion of its total value derived from the value of the means of production consumed by it. It is necessary to remember this modified significance of the cost price, and to bear in mind that there is always the possibility of an error if the cost price of a commodity in any particular sphere is identified with the value of the means of production consumed by it.** Our present analysis does not necessitate a closer examination of this point. It remains true, nevertheless, that the cost price of a commodity is always smaller than its value. For no matter how much the cost price of a commodity may differ from the value of the means of production consumed by it, this past mistake is immaterial to the capitalist. The cost price of a particular commodity is a definite condition which is given, and independent of the production of our capitalist, while the result of his production is a commodity containing surplus value, therefore an excess of value over and above its cost price. For all other purposes, the statement that the cost price is smaller than the value of a commodity has now changed practically into the statement that the cost price is smaller than the price of production. As concerns the total social capital, in which the price of production is equal to the value, this statement is identical with the former, namely that the cost price is smaller than the value. And while it is

modified in the individual spheres of production, the fundamental fact always remains that in the case of the total social capital the cost price of the commodities produced by it is smaller than their value, or, in the case of the total mass of social commodities, smaller than their price of production, which is identical with their value. The cost price of a commodity refers only to the quantity of paid labour contained in it, while its value refers to all the paid and unpaid labour contained in it. The price of production refers to the sum of the paid labour plus a certain quantity of unpaid labour determined for any particular sphere of production by conditions over which it has no control.

**The formula that the price of production of a commodity = k + p, i. e., equals its cost price plus profit, is now more precisely defined with p = kp' (p' being the general rate of profit).** Hence the price of production = k + kp'. If k = 300 and p' = 15%, then the price of production is k + kp' = 300 + 300 × 15/100, or 345.

The price of production of the commodities in any particular sphere may change in magnitude:

1) If the general rate of profit changes independently of this particular sphere, while the value of the commodities remains the same (the same quantities of congealed and living labour being consumed in their production as before).

2) If there is a change of value, either in this particular sphere in consequence of technical changes, or in consequence of a change in the value of those commodities which form the elements of its constant capital, while the general rate of profit remains unchanged.

3) Finally, if a combination of the two aforementioned circumstances takes place.

In spite of the great changes occurring continually, as we shall see, in the actual rates of profit within the individual spheres of production, any real change in the general rate of profit, unless brought about by way of an exception by extraordinary economic events, is the belated effect of a series of fluctuations extending over very long periods, fluctuations which require much time before consolidating and equalising one another to bring about a change in the general rate of profit. In all shorter periods (quite aside from fluctuations of market prices), a change in the prices of production is, therefore, always traceable *prima facie* to actual changes in the value of commodities, i. e., to changes in the total amount of labour time required for their production. Mere changes in the money expression of the same values are, naturally, not at all considered here.

On the other hand, it is evident that from the point of view of the total social capital the value of the commodities produced by it (or, expressed in money, their price) = value of constant capital + value of variable capital +

surplus value. Assuming the degree of labour exploitation to be constant, the rate of profit cannot change so long as the mass of surplus value remains the same, unless there is a change in either the value of the constant capital, the value of the variable capital, or the value of both, so that C changes, and thereby s/C, which represents the general rate of profit. In each case, therefore, a change in the general rate of profit implies a change in the value of commodities which form the elements of the constant or variable capital, or of both.

Or, the general rate of profit may change, while the value of the commodities remains the same, when the degree of labour exploitation changes.

Or, if the degree of labour exploitation remains the same, the general rate of profit may change through a change in the amount of labour employed relative to the constant capital as a result of technical changes in the labour process. But such technical changes must always show themselves in, and be attended by, a change in the value of the commodities, whose production would then require more or less labour than before.

We saw in Part I that **surplus value and profit are identical from the standpoint of their mass**. **But the rate of profit is from the very outset distinct from the rate of surplus value**, which appears at first sight as merely a different form of calculating. But at the same time this serves, also from the outset, to obscure and mystify the actual origin of surplus value, since the rate of profit can rise or fall while the rate of surplus value remains the same, and vice versa, and since the capitalist is in practice solely interested in the rate of profit. Yet there was difference of magnitude only between the rate of surplus value and the rate of profit and not between the surplus value itself and profit. Since in the rate of profit the surplus value is calculated in relation to the total capital and the latter is taken as its standard of measurement, the surplus value itself appears to originate from the total capital, uniformly derived from all its parts, so that the organic difference between constant and variable capital is obliterated in the conception of profit. Disguised as profit, surplus value actually denies its origin, loses its character, and becomes unrecognisable. However, hitherto the distinction between profit and surplus value applied solely to a qualitative change, or change of form, while there was no real difference of magnitude in this first stage of the change between surplus value and profit, but only between the rate of profit and the rate of surplus value.

But it is different, as soon as a general rate of profit, and thereby an average profit corresponding to the magnitude of invested capital given in the various spheres of production, have been established.

It is then only an accident if the surplus value, and thus the profit, actually produced in any particular sphere of production, coincides with the

profit contained in the selling price of a commodity. As a rule, surplus value and profit and not their rates alone, are then different magnitudes. At a given degree of exploitation, the mass of surplus value produced in a particular sphere of production is then more important for the aggregate average profit of social capital, and thus for the capitalist class in general, than for the individual capitalist in any specific branch of production. It is of importance to the latter only in so far as the quantity of surplus value produced in his branch helps to regulate the average profit. But this is a process which occurs behind his back, one he does not see, nor understand, and which indeed does not interest him. The actual difference of magnitude between profit and surplus value — not merely between the rate of profit and the rate of surplus value — in the various spheres of production now completely conceals the true nature and origin of profit not only from the capitalist, who has a special interest in deceiving himself on this score, but also from the labourer. The transformation of values into prices of production serves to obscure the basis for determining value itself. Finally, since the mere transformation of surplus value into profit distinguishes the portion of the value of a commodity forming the profit from the portion forming its cost price, it is natural that the conception of value should elude the capitalist at this juncture, for he does not see the total labour put into the commodity, but only that portion of the total labour for which he has paid in the shape of means of production, be they living or not, so that his profit appears to him as something outside the immanent value of the commodity. Now this idea is fully confirmed, fortified, and ossified in that, from the standpoint of his particular sphere of production, the profit added to the cost price is not actually determined by the limits of the formation of value within his own sphere, but through completely outside influences.

**The fact that this intrinsic connection is here revealed for the first time**; that up to the present time political economy, as we shall see in the following and in Book IV, either forcibly abstracted itself from the distinctions between surplus value and profit, and their rates, so it could retain value determination as a basis, or else abandoned this value determination and with it all vestiges of a scientific approach, in order to cling to the differences that strike the eye in this phenomenon — this confusion of the theorists best illustrates the utter incapacity of the practical capitalist, blinded by competition as he is, and incapable of penetrating its phenomena, to recognise the inner essence and inner structure of this process behind its outer appearance.

In fact, all the laws evolved in Part I concerning the rise and fall of the rate of profit have the following two-fold meaning:

1) On the one hand, they are the laws of the general rate of profit. In view of the many different causes which make the rate of profit rise or fall

one would think, after everything that has been said and done, **that the general rate of profit must change every day. But a trend in one sphere of production compensates for that in another, their effects cross and paralyse one another. We shall later examine to which side these fluctuations ultimately gravitate**. But they are slow. The suddenness, multiplicity, and different duration of the fluctuations in the individual spheres of production make them compensate for one another in the order of their succession in time, a fall in prices following a rise, and vice versa, so that they remain limited to local, i. e., individual, spheres. Finally, the various local fluctuations neutralise one another. Within each individual sphere of production, there take place changes, i. e., deviations from the general rate of profit, which counterbalance one another in a definite time on the one hand, and thus have no influence upon the general rate of profit, and which, on the other, do not react upon it, because they are balanced by other simultaneous local fluctuations. Since the general rate of profit is not only determined by the average rate of profit in each sphere, but also by the distribution of the total social capital among the different individual spheres, and since this distribution is continually changing, it becomes another constant cause of change in the general rate of profit. But it is a cause of change which mostly paralyses itself, owing to the uninterrupted and many-sided nature of this movement.

2) Within each sphere, there is some room for play for a longer or shorter space of time, in which the rate of profit of this sphere may fluctuate, before this fluctuation consolidates sufficiently after rising or falling to gain time for influencing the general rate of profit and therefore assuming more than local importance. The laws of the rate of profit, as developed in Part I of this book, likewise remain applicable within these limits of space and time.

The theoretical conception concerning the first transformation of surplus value into profit, that every part of a capital yields a uniform profit, expresses a practical fact. Whatever the composition of an industrial capital, whether it sets in motion one quarter of congealed labour and three-quarters of living labour, or three-quarters of congealed labour and one-quarter of living labour, whether in one case it absorbs three times as much surplus labour, or produces three times as much surplus value than in another — in either case it yields the same profit, given the same degree of labour exploitation and leaving aside individual differences, which, incidentally, disappear because we are dealing in both cases with the average composition of the entire sphere of production. The individual capitalist (or all the capitalists in each individual sphere of production), whose outlook is limited, rightly believes that his profit is not derived solely from the labour employed by him, or in his line of production. This is quite true, as far as his average profit is concerned. To what extent this profit is due to the aggregate

exploitation of labour on the part of the total social capital, i. e., by all his capitalist colleagues — this interrelation is a complete mystery to the individual capitalist; all the more so, since no bourgeois theorists, the political economists, have so far revealed it. A saving of labour — not only labour necessary to produce a certain product, but also the number of employed labourers — and the employment of more congealed labour (constant capital), appear to be very sound operations from the economic standpoint and do not seem to exert the least influence on the general rate of profit and the average profit. How could living labour be the sole source of profit, in view of the fact that a reduction in the quantity of labour required for production appears not to exert any influence on profit? Moreover, it even seems in certain circumstances to be the nearest source of an increase of profits, at least for the individual capitalist.

If in any particular sphere of production there is a rise or fall of the portion of the cost price which represents the value of constant capital, this portion comes from the circulation and, either enlarged or reduced, passes from the very outset into the process of production of the commodity. If, on the other hand, the same number of labourers produces more or less in the same time, so that the quantity of labour required for the production of a definite quantity of commodities varies while the number of labourers remains the same, that portion of the cost price which represents the value of the variable capital may remain the same, i. e., contribute the same amount to the cost price of tho total product. But every one of the individual commodities whose sum makes up the total product, shares in more or less labour (paid and therefore also unpaid), and shares consequently in the greater or smaller outlay for this labour, i. e., a 1arger or smaller portion of the wage. The total wages paid by the capitalist remain the same, but wages differ if calculated per piece of the commodity. Thus, there is a change in this portion of the cost price of the commodity. But no matter whether the cost price of the individual commodity (or, perhaps, the cost price of the sum of commodities produced by a capital of a given magnitude) rises or falls, be it due to such changes in its own value, or in that of its elements, the average profit of, e.g., 10% remains 10%. Still, 10% of an individual commodity may represent very different amounts, depending on the change of magnitude caused in the cost price of the individual commodity by such changes of value as we have assumed.

So far as the variable capital is concerned — and this is most important, because it is the source of surplus value, and because anything which conceals its relation to the accumulation of wealth by the capitalist serves to mystify the entire system — matters get cruder or appear to the capitalist in the following light: A variable capital of £100 represents the weekly wage of, say, 100 labourers. If these 100 labourers weekly produce

200 pieces of a commodity = 200C, in a given working time, then 1C — abstracted from that portion of its cost price which is added by the constant capital, costs £100/200 = 10 shillings, since £100 = 200C. Now suppose that a change occurs in the productiveness of labour. Suppose it doubles, so that the same number of labourers now produces twice 200C in the time which it previously took to produce 200C. In that case (considering only that part of the cost price which consists of wages) 1C = £100/400 = 5 shillings, since now £100 = 400C. Should the productiveness decrease one-half, the same labour would produce only 200C/2 and since £100 = 200C/2, 1C = £200/2 = £1. The changes in the labour time required for the production of the commodities, and hence the changes in their value, thus appear in regard to the cost price, and hence to the price of production, as a different distribution of the same wage for more or fewer commodities, depending on the greater or smaller quantity of commodities produced in the same working time for the same wage. What the capitalist, and consequently also the political economist, see is that the part of the paid labour per piece of commodity changes with the productivity of labour, and that the value of each piece also changes accordingly. What they do not see is that the same applies to unpaid labour contained in very piece of the commodity, and this is perceived so much less since the average profit actually is only accidentally determined by the unpaid labour absorbed in the sphere of the individual capitalist. It is only in such crude and meaningless form that we can glimpse that the value of commodities is determined by the labour contained in them.

## CHAPTER 10: EQUALISATION OF THE GENERAL RATE OF PROFIT THROUGH COMPETITION. MARKET PRICES AND MARKET VALUES. SURPLUS PROFIT

The capital invested in some spheres of production has a mean, or average, composition, that is, it has the same, or almost the same composition as the average social capital.

In these spheres the price of production is exactly or almost the same as the value of the produced commodity expressed in money. If there were no other way of reaching a mathematical limit, this would be the one. Competition so distributes the social capital among the various spheres of production that the prices of production in each sphere take shape according to the model of the prices of production in these spheres of average composition, i.e., they = k + kp' (cost price plus the average rate of profit multiplied by the cost price). This average rate of profit, however, is the percentage of profit in that sphere of average composition in which profit, therefore, coincides with surplus value. Hence, the rate of profit is the same in all spheres of production, for it is equalized on the basis of those average

spheres of production which has the average composition of capital. **Consequently, the sum of the profits in all spheres of production must equal the sum of the surplus values, and the sum of the prices of production of the total social product equal the sum of its value**. But it is evident that the balance among spheres of production of different composition must tend to equalize them with the spheres of average composition, be it exactly or only approximately the same as the social average. Between the spheres more or less approximating the average there is again a tendency toward equalization, seeking the ideal average, i.e., an average that does not really exist, i.e., a tendency to take this ideal as a standard. In this way the tendency necessarily prevails to make the prices of production merely converted forms of value, or to turn profits into mere portions of surplus value. However, these are not distributed in proportion to the surplus value produced in each special sphere of production, but rather in proportion to the mass of capital employed in each sphere, so that equal masses of capital, whatever their composition, receive equal aliquot shares of the total surplus value produced by the total social capital.

In the case of capitals of average, or approximately average, composition, the price of production is thus the same or almost the same as the value, and the profit the same as the surplus value produced by them. All other capitals, of whatever composition, tend toward this average under pressure of competition. But since the capitals of average composition are of the same, or approximately the same, structure as the average social capital, all capitals have the tendency, regardless of the surplus value produced by them, to realize the average profit, rather than their own surplus value in the price of their commodity, i.e., to realize the prices of production.

On the other hand, it may be said that wherever an average profit, and therefore a general rate of profit, is produced — no matter by what means — such an average profit cannot be anything but the profit on the average social capital, whose sum is equal to the sum of surplus value. Moreover, the prices obtained by adding this average profit to the cost prices cannot be anything but the values transmuted into prices of production. Nothing would be altered if capitals in certain spheres of production would not, for some reason, be subject to the process of equalization. The average profit would then be computed on that portion of the social capital which enters the equalization process. It is evident that the average profit can be nothing but the total mass of surplus values allotted to the various quantities of capital proportionally to their magnitudes in their different spheres of production. It is the total realized unpaid labour, and this total mass, like the paid, congealed or living, labour, obtains in the total mass of commodities and money that falls to the capitalists.

The really difficult question is this: how is this equalization of profits

into a general rate of profit brought about, since it is obviously a result rather than a point of departure?

To begin with, an estimate of the values of commodities, for instance in terms of money, can obviously only be the result of their exchange. If, therefore, we assume such an estimate, we must regard it as the outcome of an actual exchange of commodity value for commodity value. But how does this exchange of commodities at their real value come about?

Let us first assume that all commodities in the different branches of production are sold at their real values. What would then be the outcome? According to the foregoing, very different rates of profit would then reign in the various spheres of production. It is *prima facie* two entirely different matters whether commodities are sold at their values (i.e., exchanged in proportion to the value contained in them at prices corresponding to their value), or whether they are sold at such prices that their sale yields equal profits for equal masses of the capital advanced for their respective production.

The fact that capitals employing unequal amounts of living labour produce unequal amounts of surplus value, presupposes at least to a certain extent that the degree of exploitation or the rate of surplus value are the same, or that any existing differences in them are equalized by real or imaginary (conventional) grounds of compensation. This would assume competition among labourers and equalization through their continual migration from one sphere of production to another. Such a general rate of surplus value — viewed as a tendency, like all other economic laws — has been assumed by us for the sake of theoretical simplification. But in reality it is an actual premise of the capitalist mode of production, although it is more or less obstructed by practical frictions causing more or less considerable local differences, such as the settlement laws for farm labourers in Britain. But in theory it is assumed that the laws of capitalist production operate in their pure form. In reality there exists only approximation; but, this approximation is the greater, the more developed the capitalist mode of production and the less it is adulterated and amalgamated with survivals of former economic conditions.

The whole difficulty arises from the fact that commodities are not exchanged simply as *commodities*, but as *products of capitals*, which claim participation in the total amount of surplus value, proportional to their magnitude, or equal if they are of equal magnitude. And this claim is to be satisfied by the total price for commodities produced by a given capital in a certain space of time. This total price is, however, only the sum of the prices of the individual commodities produced by this capital.

The *punctum saliens* will be best brought if we approach the matter as follows: suppose, the labourers themselves are in possession of their

respective means of production and exchange their commodities with one another. In that case these commodities would not be products of capital. The value of the various means of labour and raw materials would differ in accordance with the technical nature of the labours performed in the different branches of production. Furthermore, aside from the unequal value of the means of production employed by them, they would require different quantities of means of production for given quantities of labour, depending on whether a certain commodity can be finished in one hour, another in one day, and so forth. Also suppose the labourers work an equal average length of time, allowing for compensations that arise from the different labour intensities, etc. In such a case, two labourers would, first, both have replaced their outlays, the cost prices of the consumed means of production, in the commodities which make up the product of their day's work. These outlays would differ, depending on the technical nature of their labour. Secondly, both of them would have created equal amounts of new value, namely the working day added by them to the means of production. This would comprise their wages plus the surplus value, the latter representing surplus labour over and above their necessary wants, the product of which would however belong to them. To put it the capitalist way, both of them receive the same wages plus the same profit, or the same value, expressed, say, by the product of a ten-hour working day. But in the first place, the values of their commodities would have to differ. In commodity I, for instance, the portion of value corresponding to the consumed means of production might be higher than in commodity II. And, to introduce all possible differences, we might assume right now that commodity I absorbs more living labour, and consequently requires more labour time to be produced, than commodity II. The values of commodities I and II are, therefore, very different. So are the sums of the values of the commodities, which represent the product of the labour performed by labourers I and II in a given time. The rates of profit would also differ considerably for I and II if we take the rate of profit to be the proportion of the surplus value to the total value of the invested means of production. The means of subsistence daily consumed by I and II during production, which take the place of wages, here form the part of the invested means of production ordinarily called variable capital. But for equal working periods the surplus values would be the same for I and II, or, more precisely, since I and II each receive the value of the product of a day's work, both of them receive equal values after the value of the invested "constant" elements has been deducted, and one portion of those equal values may be regarded as a substitute for the means of subsistence consumed in production, and the other as surplus value in excess of it. If labourer I has greater expenses, they are made good by a greater portion of the value of his commodity, which replaces this "constant " part, and he therefore has to reconvert a larger

portion of the total value of his product into the material elements of this constant part, while labourer II, though receiving less for this, has so much less to reconvert. In these circumstances, a difference in the rates of profit would therefore be immaterial, just as it is immaterial to the wage labourer today what rate of profit may express the amount of surplus value filched from him, and just as in international commerce the difference in the various national rates of profit is immaterial to commodity exchange.

**The exchange of commodities at their values, or approximately at their values, thus requires a much lower stage than their exchange at their prices of production, which requires a definite level of capitalist development.**

**Whatever the manner in which the prices of various commodities are first mutually fixed or regulated, their movements are always governed by the law of value. If the labour time required for their production happens to shrink, prices fall; if it increases, prices rise, provided other conditions remain the same.**

**Apart from the domination of prices and price movement by the law of value, it is quite appropriate to regard the values of commodities as not only theoretically but also historically *prius* to the prices of production**. This applies to conditions in which the labourer owns his means of production, and this is the condition of the land-owning farmer living off his own labour and the craftsman, in the ancient as well as in the modern world. This agrees also with the view we expressed previously that the evolution of products into commodities arises through exchange between different communities, not between the members of the same community. It holds not only for this primitive condition, but also for subsequent conditions, based on slavery and serfdom, and for the guild organisation of handicrafts, so long as the means of production involved in each branch of production can be transferred from one sphere to another only with difficulty and therefore the various spheres of production are related to one another, within certain limits, as foreign countries or communist communities.

For prices at which commodities are exchanged to approximately correspond to their values, nothing more is necessary than 1) for the exchange of the various commodities to cease being purely accidental or only occasional; 2) so far as direct exchange of commodities is concerned, for these commodities to be produced on both sides in approximately sufficient quantities to meet mutual requirements, something learned from mutual experience in trading and therefore a natural outgrowth of continued trading; and 3) so far as selling is concerned, for no natural or artificial monopoly to enable either of the contracting sides to sell commodities above their value or to compel them to undersell. By accidental monopoly we mean a monopoly which a buyer or seller acquires through an accidental state of supply and

demand.

**The assumption that the commodities of the various spheres of production are sold at their value merely implies, of course, that their value is the centre of gravity around which their prices fluctuate**, and their continual rises and drops tend to equalise. **There is also the *market value* — of which later — to be distinguished from the individual value of particular commodities produced by different producers**. The individual value of some of these commodities will be below their market value (that is, less labour time is required for their production than expressed is the market value) while that of others will exceed the market value. On the one hand, **market value is to be viewed as the average value of commodities produced in a single sphere, and, on the other, as the individual value of the commodities produced under average conditions of their respective sphere and forming the bulk of the products of that sphere. It is only in extraordinary combinations that commodities produced under the worst, or the most favourable, conditions regulate the market value, which, in turn, forms the centre of fluctuation for market prices.** The latter, however, are the same for commodities of the same kind. **If the ordinary demand is satisfied by the supply of commodities of average value, hence of a value midway between the two extremes, then the commodities whose individual value is below the market value realise an extra surplus value, or surplus profit**, while those, whose individual value exceeds the market value, are unable to realise a portion of the surplus value contained in them.

It does no good to say that the sale of commodities produced under the least favourable conditions proves that they are required to satisfy the demand. If in the assumed case the price were higher than the average market value, the demand would be smaller. At a certain price, a commodity occupies just so much place on the market. This place remains the same in case of a price change only if the higher price is accompanied by a drop in the supply of the commodity, and a lower price by an increase of supply. And if the demand is so great that it does not contract when the price is regulated by the value of commodities produced under the least favourable conditions, then these determine the market value. This is not possible unless demand is greater than usual, or if supply drops below the usual level. Finally, **if the mass of the produced commodities exceeds the quantity disposed of at average market values, the commodities produced under the most favourable conditions regulate the market value. They may, for example, be sold exactly or approximately at their individual value, in which case the commodities produced under the least favourable conditions may not even realise their cost price, while those produced under average conditions realise only a portion of the surplus value contained in them.**

**What has been said here of market value applies to the price of production as soon as it takes the place of market value**. The price of production is regulated in each sphere, and likewise regulated by special circumstances. And **this price of production is, in its turn, the centre around which the daily market prices fluctuate** and tend to equalise one another within definite periods [...]

No matter how the prices are regulated, we arrive at the following:

1) The law of value dominates price movements with reductions or increases in required labour time making prices of production fall or rise [...]

2 ) The average profit determining the prices of production must always be approximately equal to that quantity of surplus value which falls to the share of individual capital in its capacity of an aliquot part of the total social capital. Suppose that the general rate of profit, and therefore the average profit, are expressed by money value greater than the money value of the actual average surplus value. So far as the capitalists are concerned, it is then immaterial whether they reciprocally charge 10 or 15% profit. Neither of these percentages covers more actual commodity value than the other, since the overcharge in money is mutual. As for the labourer (the assumption being that he receives his normal wage and the rise in the average profit does not therefore imply an actual deduction from his wage, i.e., it expresses something entirely different from the normal surplus value of the capitalist), the rise in commodity prices caused by an increase of the average profit must correspond to the rise of the money expression of the variable capital. Such a general nominal increase in the rate of profit and the average profit above the limit provided by the ratio of the actual surplus value to the total invested capital is not, in effect, possible without causing an increase in wages, and also an increase in the prices of commodities forming the constant capital. The reverse is true in case of a reduction. Since the total value of the commodities regulates the total surplus value, and this in turn regulates the level of average profit and thereby the general rate of profit — as a general law or a law governing fluctuations — it follows the law of value regulates the prices of production.

What competition, first in a single sphere, achieves is a single market value and market price derived from the various individual values of commodities. And it is competition of capitals in different spheres, which first brings out the price of production equalizing the rates of profit in the different spheres. The latter process requires a higher development of capitalist production that the previous one.

For commodities of the same sphere of production, the same kind, and approximately the same quality, to be sold at their values [...] the different individual values must be equalized at one social value, the above-named market value, and this implies competition among producers of the

same kind of commodities and, likewise, the existence of a common market in which they offer their articles for sale. **For the market price of identical commodities, each, however, produced under different individual circumstances, to correspond to the market value and not to deviate from it either by rising above or falling below it, it is necessary that the pressure exerted by different sellers upon one another be sufficient to bring enough commodities to market to fill the social requirements, i.e., a quantity for which society is capable of paying the market value. Should the mass of products exceed this demand, the commodities would have to be sold below their market value; and conversely, above their market value if the mass of products were not large enough to meet the demand**, or, what amounts to the same, if the pressure of competition among sellers were not strong enough to bring this mass of products to market. Should the market value change, this would also entail a change in the conditions on which the total mass of commodities could be sold. **Should the market value fall, this would entail a rise in the average social demand (this always taken to mean the effective demand), which could, within certain limits, absorb larger masses of commodities. Should the market value rise, this would entail a drop in the social demand, and a smaller mass of commodities would be absorbed. Hence, if supply and demand regulate the market price, or rather the deviations of the market price from the market value, then, in turn, the market value regulates the ratio of supply to demand, or the centre round which fluctuations of supply and demand cause market prices to oscillate.**

Looking closer, we find that the conditions applicable to the value of an individual commodity are here reproduced as conditions governing the value of the aggregate of a certain kind of commodity. Capitalist production is mass production from the very outset. But even in other, less developed, modes of production that which is produced in relatively small quantities as a common product by small-scale, even if numerous, producers, is concentrated in large quantities — at least in the case of the vital commodities — in the hands of relatively few merchants. The latter accumulate them and sell them as the common product of an entire branch of production, or of a more or less considerable contingent of it.

It should be here noted in passing that the "social demand," i.e., the factor which regulates the principle of demand, is essentially subject to the mutual relationship of the different classes and their respective economic position, notably therefore to, firstly, the ratio of total surplus value to wages, and, secondly, to the relation of the various parts into which surplus value is split up (profit, interest, ground rent, taxes, etc.). And this thus again shows how absolutely nothing can be explained by the relation of supply to demand before ascertaining the basis on which this relation rests [...]

The matter will be most readily pictured by regarding this whole mass of commodities, produced by *one* branch of industry, as *one* commodity, and the sum of the prices of the many identical commodities as one price. Then, whatever has been said of a single commodity applies literally to the mass of commodities of an entire branch of production available in the market. The requirement that the individual value of a commodity should correspond to its social value is now realised, or further determined, in that the mass contains social labour necessary for its production, and that the value of this mass is equal to its market value.

Now suppose that the bulk of these commodities is produced under approximately similar normal social conditions, so that this value is at the same time the individual value of the individual commodities which make up this mass. If a relatively small portion of these commodities may now have been produced below, and another above, these conditions, so that the individual value of one portion is greater, and that of the other smaller, than the average value of the bulk of the commodities, but in such proportions that these extremes balance one another, so that the average value of the commodities at these extremes is equal to the value of commodities in the centre, then the market value is determined by the value of the commodities produced under average conditions. The value of the entire mass of commodities is equal to the actual sum of the values of all individual commodities taken together, whether produced under average conditions, or under conditions above or below the average. In that case, the market value, or social value, of the mass of commodities — the necessary labour time contained in them — is determined by the value of the preponderant mean mass.

Suppose, on the contrary, that the total mass of the commodities in question brought to market remains the same, while the value of the commodities produced under less favourable conditions fails to balance out the value of commodities produced under more favourable conditions, so that the part of the mass produced under less favourable conditions forms a relatively weighty quantity as compared with the average mass and with the other extreme. In that case, the mass produced under less favourable conditions regulates the market, or social, value [...]

Under capitalist production it is not merely a matter of obtaining an equal mass of value in another form — be it that of money or some other commodity — for a mass of values thrown into circulation in the form of a commodity, but it is rather a matter of realising as much surplus value, or profit, on capital advanced for production, as any other capital of the same magnitude, or *pro rata* to its magnitude in whichever line it is applied. It is, therefore, a matter, at least as a minimum, of selling the commodities at prices which yield the average profit, i.e., at prices of production. In this form

capital becomes conscious of itself as a *social power* in which every capitalist participates proportionally to his share in the total social capital.

First, capitalist production is in itself indifferent to the particular use value, and distinctive features of any commodity it produces. In every sphere of production it is only concerned with producing surplus value, and appropriating a certain quantity of unpaid labour incorporated in the product of labour. And it is likewise in the nature of the wage labour subordinated by capital that it is indifferent to the specific character of its labour and must submit to being transformed in accordance with the requirements of capital and to being transferred from one sphere of production to another.

Second, one sphere of production is, in fact, just as good or just as bad as another. Every one of them yields the same profit, and every one of them would be useless if the commodities it produced did not satisfy some social need.

Now, **if the commodities are sold at their values, then, as we have shown, very different rates of profit arise in the various spheres of production, depending on the different organic composition of the masses of capital invested in them. But capital withdraws from a sphere with a low rate of profit and invades others, which yield a higher profit. Through this incessant outflow and influx, or, briefly, through its distribution among the various spheres, which depends on how the rate of profit falls here and rises there, it creates such a ratio of supply to demand that the average profit in the various spheres of production becomes the same, and values are, therefore, converted into prices of production. Capital succeeds in this equalisation, to a greater or lesser degree, depending on the extent of capitalist development in the given nation; i.e., on the extent the conditions in the country in question are adapted for the capitalist mode of production.** With the progress of capitalist production, it also develops its own conditions and subordinates to its specific character and its immanent laws all the social prerequisites on which the production process is based.

**The incessant equilibration of constant divergences is accomplished so much more quickly, 1) the more mobile the capital, i.e., the more easily it can be shifted from one sphere and from one place to another; 2) the more quickly labour power can be transferred from one sphere to another and from one production locality to another**. The first condition implies complete freedom of trade within the society and the removal of all monopolies with the exception of the natural ones, those, that is, which naturally arise out of the capitalist mode of production. It implies, furthermore, the development of the credit system, which concentrates the inorganic mass of the disposable social capital vis-a-vis the individual capitalist. Finally, it implies the subordination of the various spheres of

production to the control of capitalists. This last implication is included in our premises, since we assumed that it was a matter of converting values into prices of production in all capitalistically exploited spheres of production. But this equilibration itself runs into greater obstacles, whenever numerous and large spheres of production not operated on a capitalist basis (such as soil cultivation by small farmers), filter in between the capitalist enterprises and become linked with them. A great density of population is another requirement.— The second condition implies the abolition of all laws preventing the labourers from transferring from one sphere of production to another and from one local centre of production to another; indifference of the labourer to the nature of his labour; the greatest possible reduction of labour in all spheres of production to simple labour; the elimination of all vocational prejudices among labourers; and last but not least, a subjugation of the labourer to the capitalist mode of production. Further reference to this belongs to a special analysis of competition [...]

**The average profit coincides with the average surplus value produced for each 100 of capital**, and so far as the surplus value is concerned the foregoing statements apply as a matter of course. In the case of the average profit the value of the advanced capital becomes an additional element determining the rate of profit. In fact, the direct interest taken by the capitalist, or the capital, of any individual sphere of production in the exploitation of the labourers who are directly employed is confined to making an extra gain, a profit exceeding the average, either through exceptional overwork, or reduction of the wage below the average, or through the exceptional productivity of the labour employed [...]

Here, then, we have a mathematically precise proof why capitalists form a veritable freemason society vis-a-vis the whole working class, while there is little love lost between them in competition among themselves.

**The price of production includes the average profit. We call it price of production. It is really what Adam Smith calls *natural price*, Ricardo calls *price of production*, or *cost of production*, and the physiocrats call *prix nécessaire***, because in the long run it is a prerequisite of supply, of the reproduction of commodities in every individual sphere. **But none of them has revealed the difference between price of production and value** [...]

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Our analysis has revealed how the market value (and everything said concerning it applies with appropriate modifications to the price of production) embraces a surplus profit for those who produce in any particular sphere of production under the most favourable conditions. With the exception of crises, and of overproduction in general, this applies to all

market prices, no matter how much they may deviate from market values or market prices of production. For the market price signifies that the same price is paid for commodities of the same kind, although they may have been produced under very different individual conditions and hence may have different cost prices. (We do not speak at this point of any surplus profits due to monopolies in the usual sense of the term, whether natural or artificial.)

A surplus profit may also arise if certain spheres of production are in a position to evade the conversion of the values of their commodities into prices of production, and thus the reduction of their profits to the average profit. We shall devote more attention to the further modifications of these two forms of surplus profit in the part dealing with ground rent.

## CHAPTER 11: EFFECTS OF GENERAL WAGE FLUCTUATIONS ON PRICES OF PRODUCTION

Let the average composition of social capital be $80_c + 20_v$, and the profit 20%. The rate of surplus value is then 100%. A general increase of wages, all else remaining the same, is tantamount to a reduction in the rate of surplus value. In the case of average capital, profit and surplus value are identical. Let wages rise 25%. Then the same quantity of labour, formerly set in motion with 20, will cost 25. We shall then have a turnover value of $80_c + 25_v + 15_p$, instead of $80_c + 20_v + 20_p$. As before, the labour set in motion by the variable capital produces a value of 40. If v rises from 20 to 25, the surplus s, or p, will amount to only 15. The profit of 15 on a capital of 105 is 14 2/7%, and this would be the new average rate of profit. Since the price of production of commodities produced by the average capital coincides with their value, the price of production of these commodities would have remained unchanged. A wage increase would therefore have caused a drop in profit, but no change in the value and price of the commodities.

Formerly, as long as the average profit was 20%, the price of production of commodities produced in one period of turnover was equal to their cost price plus a profit of 20% on this cost price, therefore = k + kp' = k + 20k/100. In this formula k is a variable magnitude, changing in accordance with the value of the means of production that go into the commodities, and with the amount of depreciation given up by the fixed capital to the product. The price of production would then amount to k + 14 2/7 k/100. Let us now select a capital, whose composition is lower than the original composition of the average social capital of $80_c + 20_v$ (which has now changed into $76\ 4/21_c + 23\ 17/21_v$); say, $50_c + 50_v$. In this case, the price of production of the annual product before the wage increase would have been $50_c + 50_v + 20_p = 120$, assuming for the sake of simplicity that the entire fixed capital passes through depreciation into the product and that the period of turnover is the same as in

the first case. For the same quantity of labour set in motion a wage increase of 25% means an increase of the variable capital from 50 to 62½. If the annual product were sold at the former price of production of 120, this would give us $50_c + 62½_v + 7½_p$, or a rate of profit of 6⅔%. But the new average rate of profit is 14 2/7%, and since we assume all other circumstances to remain the same, the capital of $50_c + 62½_v$ must also make this profit. Now a capital of 112½ makes a profit of 16 1/14 at a rate of profit of 14 2/7%. Therefore, the price of production of the commodities produced by this capital is now $50_c + 62½_v + 16¼_p = 128$ 8/14. Owing to a wage rise of 255, the price of production of the same quantity of the same commodities, therefore, has here risen from 120 to 128 8/14, or more than 7%.

Conversely, suppose we take a sphere of production of a higher composition than the average capital; say, $92_c + 8_v$. The original average profit in this case would still be 20, and if we again assume that the entire fixed capital passes into the annual product and that the period of turnover is the same as in cases I and II, the price of production of the commodity is here also 120.

Owing to the rise in wages of 25% the variable capital for the same quantity of labour rises from 8 to 10, the cost price of the commodities from 100 to 102, while the average rate of profit falls from 20% to 14 2/7%. But 100:14 2/7 = 102:14 4/7. The profit now falling to the share of 102 is therefore 14 4/7. For this reason, the total product sells at k + kp' = 102 + 14 4/7 = 116 4/7. The price of production has therefore fallen from 120 to 116 4/7, or 3 3/7.

Consequently, if wages are raised 25%:

1) the price of production of the commodities of a capital of average social composition does not change;

2) the price of production of the commodities of a capital of lower composition rises, but not in proportion to the fall in profit;

3) the price of production of the commodities of a capital of higher composition falls, but also not in the same proportion as profit.

Since the price of production of the commodities of the average capital remained the same, equal to the value of the product, the sum of the prices of production of the products of all capitals remained the same as well, and equal to the sum total of the values produced by the aggregate capital. The increase on one side and the decrease on the other balance for the aggregate capital on the level of the average social capital.

If the price of production rises in case II and falls in case III, these opposite effects alone, which are brought about by a fall in the rate of surplus value or by a general wage increase, show that this cannot be a matter of compensation in the price for the rise in wages, since the fall in the price of production in case III cannot compensate the capitalist for the fall in profit,

and since the rise of the price in case II does not prevent a fall in profit. Rather, in either case, whether the price rises or falls, the profit remains the same as that of the average capital, in which case the price remains unchanged. It is the same average profit which has fallen by 5 5/7, or somewhat over 25%, in the case of II as well as III. It follows from this that if the price did not rise in II and fall in III, II would have to sell below and III above the new reduced average profit. It is self-evident that, depending on whether 50, 25, or 10 per 100 units of capital are laid out for wages, the effect of a wage increase on a capitalist who has invested 1/10 of his capital in wages must be quite different from that on one who has invested ¼ or ½. An increase in the price of production on the one side, a fall on the other, depending on a capital being below or above the average social composition, occurs solely by virtue of the process of levelling the profit to the new reduced average profit [...]

In this entire chapter, the establishment of the general rate of profit and the average profit, and consequently, the transmutation of values into prices of production, are assumed as given [...]

## CHAPTER 12: SUPPLEMENTARY REMARKS

[...]

## PART 3: THE LAW OF THE TENDENCY OF THE RATE OF PROFIT T O FALL

## CHAPTER 13: THE LAW AS SUCH

Assuming a given wage and working day, a variable capital, for instance of 100, represents a certain number of employed labourers. It is the index of this number. Suppose £100 are the wages of 100 labourers for, say, one week. If these labourers perform equal amounts of necessary and surplus labour, if they work daily as many hours for themselves, i.e., for the reproduction of their wage, as they do for the capitalist, i.e., for the production of surplus value, then the value of their total product = £200, and the surplus value they produce would amount to £100. The rate of surplus value, s/v, would = 100%. But, as we have seen, this rate of surplus value would nonetheless express itself in very different rates of profit, depending on the different volumes of constant capital c and consequently of the total capital C, because the rate of profit = s/C. The rate of surplus value is 100%:

If c = 50, and v = 100, then p' = 100/150 = 66⅔%;
c = 100, and v = 100, then p' = 100/200 = 50%;

c = 200, and v = 100, then p' = 100/300 = 33⅓%;
c = 300, and v = 100, then p' = 100/400 = 25%;
c = 400, and v = 100, then p' = 100/500 = 20%.

This is how the same rate of surplus value would express itself under the same degree of labour exploitation in a falling rate of profit, because the material growth of the constant capital implies also a growth — albeit not in the same proportion — in its value, and consequently in that of the total capital.

If it is further assumed that this gradual change in the composition of capital is not confined only to individual spheres of production, but that it occurs more or less in all, or at least in the key spheres of production, so that it involves changes in the average organic composition of the total capital of a certain society, then the gradual growth of constant capital in relation to variable capital must necessarily lead to *a gradual fall of the general rate of profit*, so long as the rate of surplus value, or the intensity of exploitation of labour by capital, remain the same. Now we have seen that it is a law of capitalist production that its development is attended by a relative decrease of variable in relation to constant capital, and consequently to the total capital set in motion. This is just another way of saying that owing to the distinctive methods of production developing in the capitalist system the same number of labourers, i.e., the same quantity of labour power set in motion by a variable capital of a given value, operate, work up and productively consume in the same time span an ever-increasing quantity of means of labour, machinery and fixed capital of all sorts, raw and auxiliary materials — and consequently a constant capital of an ever-increasing value. This continual relative decrease of the variable capital vis-à-vis the constant, and consequently the total capital, is identical with the progressively higher organic composition of the social capital in its average. It is likewise just another expression for the progressive development of the social productivity of labour, which is demonstrated precisely by the fact that the same number of labourers, in the same time, i.e., with less labour, convert an ever-increasing quantity of raw and auxiliary materials into products, thanks to the growing application of machinery and fixed capital in general. To this growing quantity of value of the constant capital — although indicating the growth of the real mass of use values of which the constant capital materially consists only approximately — corresponds a progressive cheapening of products. Every individual product, considered by itself, contains a smaller quantity of labour than it did on a lower level of production, where the capital invested in wages occupies a far greater place compared to the capital invested in means of production. The hypothetical series drawn up at the beginning of this chapter expresses, therefore, the actual tendency of

capitalist production. This mode of production produces a progressive relative decrease of the variable capital as compared to the constant capital, and consequently a continuously rising organic composition of the total capital. The immediate result of this is that the rate of surplus value, at the same, or even a rising, degree of labour exploitation, is represented by a continually falling general rate of profit. (We shall see later why this fall does not manifest itself in an absolute form, but rather as a tendency toward a progressive fall.) The progressive tendency of the general rate of profit to fall is, therefore, just *an expression peculiar to the capitalist mode of production* of the progressive development of the social productivity of labour. This does not mean to say that the rate of profit may not fall temporarily for other reasons. But proceeding from the nature of the capitalist mode of production, it is thereby proved logical necessity that in its development the general average rate of surplus value must express itself in a falling general rate of profit. Since the mass of the employed living labour is continually on the decline as compared to the mass of materialised labour set in motion by it, i.e., to the productively consumed means of production, it follows that the portion of living labour, unpaid and congealed in surplus value, must also be continually on the decrease compared to the amount of value represented by the invested total capital. Since the ratio of the mass of surplus value to the value of the invested total capital forms the rate of profit, this rate must constantly fall.

Simple as this law appears from the foregoing statements, all of political economy has so far had little success in discovering it, as we shall see in a later part. The economists perceived the phenomenon and cudgelled their brains in tortuous attempts to interpret it. Since this law is of great importance to capitalist production, it may be said to be a mystery whose solution has been the goal of all political economy since Adam Smith, the difference between the various schools since Adam Smith having been in the divergent approaches to a solution. When we consider, on the other hand, that up to the present political economy has been running in circles round the distinction between constant and variable capital, but has never known how to define it accurately; that it has never separated surplus value from profit, and never even considered profit in its pure form as distinct from its different, independent components, such as industrial profit, commercial profit, interest, and ground rent; that it has never thoroughly analysed the differences in the organic composition of capital, and, for this reason, has never thought of analysing the formation of the general rate of profit — if we consider all this, the failure to solve this riddle is no longer surprising.

We intentionally present this law before going on to the division of profit into different independent categories. The fact that this analysis is made independently of the division of profit into different parts, which fall to the

share of different categories of people, shows from the outset that this law is, in its entirety, independent of this division, and just as independent of the mutual relations of the resultant categories of profit. The profit to which we are here referring is but another name for surplus value itself, which is presented only in its relation to total capital rather than to variable capital, from which it arises. The drop in the rate of profit, therefore, expresses the falling relation of surplus value to advanced total capital, and is for this reason independent of any division whatsoever of this surplus value among the various categories.

We have seen that at a certain stage of capitalist development, where the organic composition of capital c : v was 50 : 100, a rate of surplus value of 100% was expressed in a rate of profit of 66⅔%, and that at a higher stage, where c : v was 400 : 100, the same rate of surplus value was expressed in a rate of profit of only 20%. What is true of different successive stages of development in one country, is also true of different coexisting stages of development in different countries. In an undeveloped country, in which the former composition of capital is the average, the general rate of profit would = 66⅔%, while in a country with the latter composition and a much higher stage of development it would = 20% [...]

Let a capital of 100 consist of $80_c + 20_v$, and the latter = 20 labourers. Let the rate of surplus value be 100%, i.e., the labourers work half the day for themselves and the other half for the capitalist. Now let the capital of 100 in a less developed country = $20_c + 80_v$, and let the latter = 80 labourers. But these labourers require 2/3 of the day for themselves, and work only 1/3 for the capitalist. Everything else being equal, the labourers in the first case produce a value of 40, and in the second of 120. The first capital produces $80_c + 20_v + 20_s = 120$; rate of profit = 20%. The second capital, $20_c + 80_v + 40_s = 140$; rate of profit 40%. In the second case the rate of profit is, therefore, double the first, although the rate of surplus value in the first = 100%, which is double that of the second, where it is only 50%. But then, a capital of the same magnitude appropriates the surplus labour of only 20 labourers in the first case, and of 80 labourers in the second case.

The law of the progressive falling of the rate of profit, or the relative decline of appropriated surplus labour compared to the mass of materialised labour set in motion by living labour, does not rule out in any way that the absolute mass of exploited labour set in motion by the social capital, and consequently the absolute mass of the surplus labour it appropriates, may grow; nor, that the capitals controlled by individual capitalists may dispose of a growing mass of labour and, hence, of surplus labour, the latter even though the number of labourers they employ does not increase.

Take a certain working population of, say, two million. Assume, furthermore, that the length and intensity of the average working day, and the

level of wages, and thereby the proportion between necessary and surplus labour, are given. In that case the aggregate labour of these two million, and their surplus labour expressed in surplus value, always produces the same magnitude of value. But with the growth of the mass of the constant (fixed and circulating) capital set in motion by this labour, this produced quantity of value declines in relation to the value of this capital, which value grows with its mass, even if not in quite the same proportion. This ratio, and consequently the rate of profit, shrinks in spite of the fact that the mass of commanded living labour is the same as before, and the same amount of surplus labour is sucked out of it by the capital. It changes because the mass of materialised labour set in motion by living labour increases, and not because the mass of living labour has shrunk. It is a relative decrease, not an absolute one, and has, in fact, nothing to do with the absolute magnitude of the labour and surplus labour set in motion. The drop in the rate of profit is not due to an absolute, but only to a relative decrease of the variable part of the total capital, i.e., to its decrease in relation to the constant part.

What applies to any given mass of labour and surplus labour, also applies to a growing number of labourers, and, thus, under the above assumption, to any growing mass of commanded labour in general, and to its unpaid part, the surplus labour, in particular. If the working population increases from two million to three, and if the variable capital invested in wages also rises to three million from its former two million, while the constant capital rises from four million to fifteen million, then, under the above assumption of a constant working day and a constant rate of surplus value, the mass of surplus labour, and of surplus value, rises by one-half, i.e., 50%, from two million to three. Nevertheless, in spite of this growth of the absolute mass of surplus labour, and hence of surplus value, by 50%, the ratio of variable to constant capital would fall from 2 : 4 to 3 : 15, and the ratio of surplus value to total capital would be (in millions)

I. $4_c + 2_v + 2_s$; C = 6, p' = 33⅓%.

II. $15_c + 3_v + 3_s$; C = 18, p' = 16⅔%.

While the mass of surplus value has increased by one-half, the rate of profit has fallen by one-half. However, the profit is only the surplus value calculated in relation to the total social capital, and the mass of profit, its absolute magnitude, is socially equal to the absolute magnitude of the surplus value. The absolute magnitude of the profit, its total amount, would, therefore, have grown by 50%, in spite of its enormous relative decrease compared to the advanced total capital, or in spite of the enormous decrease in the general rate of profit. The number of labourers employed by capital,

hence the absolute mass of the labour set in motion by it, and therefore the absolute mass of surplus labour absorbed by it, the mass of the surplus value produced by it, and therefore the absolute mass of the profit produced by it, *can*, consequently, increase, and increase progressively, in spite of the progressive drop in the rate of profit. And this not only can be so. Aside from temporary fluctuations it *must* be so, on the basis of capitalist production [...]

[The] same laws of production and accumulation increase also the value of the constant capital in a mounting progression more rapidly than that of the variable part of capital, invested as it is in living labour. Hence, the same laws produce for the social capital a growing absolute mass of profit, and a falling rate of profit [...] The development of capitalist production and accumulation lifts labour processes to an increasingly enlarged scale and thus imparts to them ever greater dimensions, and involves accordingly larger investments of capital for each individual establishment. A mounting concentration of capitals (accompanied, though on a smaller scale, by an increase in the number of capitalists) is, therefore, one of its material requirements as well as one of its results. Hand in hand with it, mutually interacting, there occurs a progressive expropriation of the more or less direct producers. It is, then, natural for the individual capitalists to command increasingly large armies of labourers (no matter how much the variable capital may decrease in relation to the constant), and natural, too, that the mass of surplus value, and hence profit, appropriated by them, should grow simultaneously with, and in spite of, the fall in the rate of profit [...]

Now, what must be the form of this double-edged law of a decrease in the rate of profit and a simultaneous increase in the absolute mass of profit arising from the same causes? [...]

Let us take an aliquot part of capital upon which we calculate the rate of profit, e.g., 100. These 100 represent the average composition of the total capital, say, $80_c + 20_v$. We have seen in the second part of this book that the average rate of profit in the various branches of production is determined not by the particular composition of each individual capital, but by the average social composition. As the variable capital decreases relative to the constant, hence the total capital of 100, the rate of profit, or the relative magnitude of surplus value, i.e., its ratio to the advanced total capital of 100, falls even though the intensity of exploitation were to remain the same, or even to increase. But it is not this relative magnitude alone which falls. The magnitude of the surplus value or profit absorbed by the total capital of 100 also falls absolutely. At a rate of surplus value of 100%, a capital of $60_c + 40_v$ produces a mass of surplus value, and hence of profit, amounting to 40; a capital of $80_c + 20_v$ a mass of profit of 30; and for a capital of $80_c + 20_v$ the profit falls to 20. This falling applies to the mass of surplus value, and hence of profit, and is due to the fact that the total capital of 100 employs less living

labour, and, the intensity of labour exploitation remaining the same, sets in motion less surplus labour, and therefore produces less surplus value. Taking any aliquot part of the social capital, i.e., a capital of average composition, as a standard by which to measure surplus value — and this is done in all profit calculations — a relative fall of surplus value is generally identical with its absolute fall. In the cases given above, the rate of profit sinks from 40% to 30% and to 20%, because, in fact, the mass of surplus value, and hence of profit, produced by the same capital falls absolutely from 40 to 30 and to 20. Since the magnitude of the value of the capital, by which the surplus value is measured, is given as 100, a fall in the proportion of surplus value to this given magnitude can be only another expression for the decrease of the absolute magnitude of surplus value and profit. This is, indeed, a tautology. But, as shown, the fact that this decrease occurs at all, arises from the nature of the development of the capitalist process of production.

On the other hand, however, the same causes which bring about an absolute decrease of surplus value, and hence profit, on a given capital, and consequently of the rate of profit calculated in per cent, produce an increase in the absolute mass of surplus value, and hence of profit, appropriated by the social capital (i.e., by all capitalists taken as a whole). How does this occur, what is the only way in which this can occur, or what are the conditions obtaining in this seeming contradiction? [...]

In our former illustration, when the percentage of composition was $60_c + 40_v$, the corresponding surplus value, or profit, was 40, and hence the rate of profit 40%. Suppose, the total capital in this stage of composition was one million. Then the total surplus value, and hence the total profit, amounted to 400,000. Now, if the composition later = $80_c + 20_v$, while the degree of labour exploitation remained the same, then the surplus value or profit for each 100 = 20. But since the absolute mass of surplus value or profit increases, as demonstrated, in spite of the decreasing rate of profit or the decreasing production of surplus value by every 100 of capital — increases, say, from 400,000 to 440,000, then this occurs solely because the total capital which formed at the time of this new composition has risen to 2,200,000. The mass of the total capital set in motion has risen to 220%, while the rate of profit has fallen by 50%. Had the total capital no more than doubled, it would have to produce as much surplus value and profit to obtain a rate of profit of 20% as the old capital of 1,000,000 produced at 40%. Had it grown to less than double, it would have produced less surplus value, or profit, than the old capital of 1,000,000, which, in its former composition, would have had to grow from 1,000,000 to no more than 1,100,000 to raise its surplus value from 400,000 to 440,000.

We again meet here the previously defined law that the relative decrease of the variable capital, hence the development of the social

productiveness of labour, involves an increasingly large mass of total capital to set in motion the same quantity of labour power and squeeze out the same quantity of surplus labour. Consequently, the possibility of a relative surplus of labouring people develops proportionately to the advances made by capitalist production not because the productiveness of social labour *decreases*, but because it *increases*. It does not therefore arise out of an absolute disproportion between labour and the means of subsistence, or the means for the production of these means of subsistence, but out of a disproportion occasioned by capitalist exploitation of labour, a disproportion between the progressive growth of capital and its relatively shrinking need for an increasing population.

Should the rate of profit fall by 50%, it would shrink one-half. If the mass of profit is to remain the same, the capital must be doubled. For the mass of profit made at a declining rate of profit to remain the same, the multiplier indicating the growth of the total capital must be equal to the divisor indicating the fall of the rate of profit. If the rate of profit falls from 40 to 20, the total capital must rise inversely at the rate of 20 : 40 to obtain the same result. If the rate of profit falls from 40 to 8, the capital would have to increase at the rate of 8 : 40, or five-fold. A capital of 1,000,000 at 40% produces 400,000, and a capital of 5,000,000 at 8% likewise produces 400,000. This applies if we want the result to remain the same. But if the result is to be higher, then the capital must grow at a greater rate than the rate of profit falls. In other words, for the variable portion of the total capital not to remain the same in absolute terms, but to increase absolutely in spite of its falling in percentage of the total capital, the total capital must grow at a faster rate than the percentage of the variable capital falls. It must grow so considerably that in its new composition it should require more than the old portion of variable capital to purchase labour power. If the variable portion of a capital = 100 should fall from 40 to 20, the total capital must rise higher than 200 to be able to employ a larger variable capital than 40.

Even if the exploited mass of the working population were to remain constant, and only the length and intensity of the working day were to increase, the mass of the invested capital would have to increase, since it would have to be greater in order to employ the same mass of labour under the old conditions of exploitation after the composition of capital changes.

Thus, the same development of the social productiveness of labour expresses itself with the progress of capitalist production on the one hand in a tendency of the rate of profit to fall progressively and, on the other, in a progressive growth of the absolute mass of the appropriated surplus value, or profit; so that on the whole a relative decrease of variable capital and profit is accompanied by an absolute increase of both. This two-fold effect, as we have seen, can express itself only in a growth of the total capital at a pace

more rapid than that at which the rate of profit falls. For an absolutely increased variable capital to be employed in a capital of higher composition, or one in which the constant capital has increased relatively more, the total capital must not only grow proportionately to its higher composition, but still more rapidly. It follows, then, that as the capitalist mode of production develops, an ever larger quantity of capital is required to employ the same, let alone an increased, amount of labour power. Thus, on a capitalist foundation, the increasing productiveness of labour necessarily and permanently creates a seeming over-population of labouring people. If the variable capital forms just 1/6 of the total capital instead of the former ½, the total capital must be trebled to employ the same amount of labour power. And if twice as much labour power is to be employed, the total capital must increase six-fold [...]

To say that the mass of profit is determined by two factors — first, the rate of profit, and, secondly, the mass of capital invested at this rate, is mere tautology. It is therefore but a corollary of this tautology to say that there is a possibility for the mass of profit to grow even though the rate of profit may fall at the same time. It does not help us one step farther, since it is just as possible for the capital to increase without the mass of profit growing, and for it to increase even while the mass of profit falls. For 100 at 25% yields 25, and 400 at 5% yields only 20. But if the same causes which make the rate of profit fall, entail the accumulation, i.e., the formation, of additional capital, and if each additional capital employs additional labour and produces additional surplus value; if, on the other hand, the mere fall in the rate of profit implies that the constant capital, and with it the total old capital, have increased, then this process ceases to be mysterious [...]

We have shown how the same causes that bring about a tendency for the general rate of profit to fall necessitate an accelerated accumulation of capital and, consequently, an increase in the absolute magnitude, or total mass, of the surplus labour (surplus value, profit) appropriated by it. Just as everything appears reversed in competition, and thus in the consciousness of the agents of competition, so also this law, this inner and necessary connection between two seeming contradictions. It is evident that within the proportions indicated above a capitalist disposing of a large capital will receive a larger mass of profit than a small capitalist making seemingly high profits. Even a cursory examination of competition shows, furthermore, that under certain circumstances, when the greater capitalist wishes to make room for himself on the market, and to crowd out the smaller ones, as happens in times of crises, he makes practical use of this, i.e., he deliberately lowers his rate of profit in order to drive the smaller ones to the wall [...]

The phenomenon, springing from the nature of the capitalist mode of production, that increasing productivity of labour implies a drop in the price of the individual commodity, or of a certain mass of commodities, an increase

in the number of commodities, a reduction in the mass of profit on the individual commodity and in the rate of profit on the aggregate of commodities, and an increase in the mass of profit on the total quantity of commodities — this phenomenon appears on the surface only in a reduction of the mass of profit on the individual commodity, a fall in its price, an increase in the mass of profit on the augmented total number of commodities produced by the total social capital or an individual capitalist [...]

The fall in commodity prices and the rise in the mass of profit on the augmented mass of these cheapened commodities is, in fact, but another expression for the law of the falling rate of profit attended by a simultaneously increasing mass of profit.

The analysis of how far a falling rate of profit may coincide with rising prices no more belongs here than that of the point previously discussed in Book I [...], concerning relative surplus value. A capitalist working with improved but not as yet generally adopted methods of production sells below the market price, but above his individual price of production; his rate of profit rises until competition levels it out. During this equalisation period the second requisite, expansion of the invested capital, makes its appearance. According to the degree of this expansion the capitalist will be able to employ a part of his former labourers, actually perhaps all of them, or even more, under the new conditions, and hence to produce the same, or a greater, mass of profit.

## CHAPTER 14: COUNTERACTING INFLUENCES

If we consider the enormous development of the productive forces of social labour in the last 30 years alone as compared with all preceding periods; if we consider, in particular, the enormous mass of fixed capital, aside from the actual machinery, which goes into the process of social production as a whole, then the difficulty which has hitherto troubled the economist, namely to explain the falling rate of profit, gives place to its opposite, namely to explain why this fall is not greater and more rapid. **There must be some counteracting influences at work, which cross and annul the effect of the general law, and which give it merely the characteristic of a tendency, for which reason we have referred to the fall of the general rate of profit as a tendency to fall.**

The following are the most general counterbalancing forces:

### I. INCREASING INTENSITY OF EXPLOITATION

The degree of exploitation of labour, the appropriation of surplus labour and surplus value, is raised notably by lengthening the working day

and intensifying labour. These two points have been comprehensively treated in Book I as incidental to the production of absolute and relative surplus value. There are many ways of intensifying labour which imply an increase of constant, as compared to variable, capital, and hence a fall in the rate of profit, such as compelling a labourer to operate a larger number of machines. In such cases — and in most procedures serving the production of relative surplus values — the same causes which increase the rate of surplus value, may also, from the standpoint of given quantities of invested total capital, involve a fall in the mass of surplus value. But there are other aspects of intensification, such as the greater velocities of machinery, which consume more raw material in the same time, but, so far as the fixed capital is concerned, wear out the machinery so much faster, and yet do not in any way affect the relation of its value to the price of the labour which sets it in motion. But notably, it is prolongation of the working day, this invention of modern industry, which increases the mass of appropriated surplus labour without essentially altering the proportion of the employed labour power to the constant capital set in motion by it, and which rather tends to reduce this capital relatively. Moreover, it has already been demonstrated — and this constitutes the real secret of the tendency of the rate of profit to fall — that the manipulations to produce relative surplus value amount, on the whole, to transforming as much as possible of a certain quantity of labour into surplus value, on the one hand, and employing as little labour as possible in proportion to the invested capital, on the other, so that the same reasons which permit raising the intensity of exploitation rule out exploiting the same quantity of labour as before by the same capital. These are the counteracting tendencies, which, while effecting a rise in the rate of surplus value, also tend to decrease the mass of surplus value, and hence the rate of profit produced by a certain capital. Mention should also be made here of the widespread introduction of female and child labour, in so far as the whole family must now perform more surplus labour for capital than before, even when the total amount of their wages increases, which is by no means always the case. — Everything that promotes the production of relative surplus value by mere improvement in methods, as in agriculture, without altering the magnitude of the invested capital, has the same effect [...]

Before leaving this point, it is to be emphasised once more that with a capital of a given magnitude the rate of surplus value may rise, while its mass is decreasing, and vice versa. The mass of surplus value is equal to the rate multiplied by the number of labourers; however, the rate is never calculated on the total, but only on the variable capital, actually only for every working day. On the other hand, with a given magnitude of capital value, the *rate of profit* can neither rise nor fall without the *mass of surplus value* also rising or falling.

## II. DEPRESSION OF WAGES BELOW THE VALUE OF LABOUR POWER

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

## III. CHEAPENING OF ELEMENTS OF CONSTANT CAPITAL

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

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

## IV. RELATIVE OVER-POPULATION

Its propagation is inseparable from, and hastened by, the development of the productivity of labour as expressed by a fall in the rate of profit. The relative over-population becomes so much more apparent in a country, the

more the capitalist mode of production is developed in it. This, again, is the reason why, on the one hand, the more or less imperfect subordination of labour to capital continues in many branches of production, and continues longer than seems at first glance compatible with the general stage of development. This is due to the cheapness and abundance of disposable or unemployed wage labourers, and to the greater resistance, which some branches of production, by their very nature, render to the transformation of manual work into machine production. On the other hand, new lines of production are opened up, especially for the production of luxuries, and it is these that take as their basis this relative over-population, often set free in other lines of production through the increase of their constant capital. These new lines start out predominantly with living labour, and by degrees pass through the same evolution as the other lines of production. In either case the variable capital makes up a considerable portion of the total capital and wages are below the average, so that both the rate and mass of surplus value in these lines of production are unusually high. Since the general rate of profit is formed by levelling the rates of profit in the individual branches of production, however, the same factor which brings about the tendency in the rate of profit to fall, again produces a counterbalance to this tendency and more or less paralyses its effects.

## V. FOREIGN TRADE

Since foreign trade partly cheapens the elements of constant capital, and partly the necessities of life for which the variable capital is exchanged, it tends to raise the rate of profit by increasing the rate of surplus value and lowering the value of constant capital. It generally acts in this direction by permitting an expansion of the scale of production. It thereby hastens the process of accumulation, on the one hand, but causes the variable capital to shrink in relation to the constant capital, on the other, and thus hastens a fall in the rate of profit. In the same way, the expansion of foreign trade, although the basis of the capitalist mode of production in its infancy, has become its own product, however, with the further progress of the capitalist mode of production, through the innate necessity of this mode of production, its need for an ever-expanding market. Here we see once more the dual nature of this effect [...]

We have thus seen in a general way that the same influences which produce a tendency in the general rate of profit to fall, also call forth counter-effects, which hamper, retard, and partly paralyse this fall. The latter do not do away with the law, but impair its effect. Otherwise, it would not be the fall of the general rate of profit, but rather its relative slowness, that would be incomprehensible. Thus, the law acts only as a tendency. And it is only under

certain circumstances and only after long periods that its effects become strikingly pronounced [...]

## CHAPTER 15: EXPOSITION OF THE INTERNAL CONTRADICTIONS OF THE LAW

### I. GENERAL

We have seen in the first part of this book that the rate of profit expresses the rate of surplus value always lower than it actually is. We have just seen that even a rising rate of surplus value has a tendency to express itself in a falling rate of profit. The rate of profit would equal the rate of surplus value only if c = 0, i.e., if the total capital were paid out in wages. A falling rate of profit does not express a falling rate of surplus value, unless the proportion of the value of the constant capital to the quantity of labour power which sets it in motion remains unchanged or the amount of labour power increases in relation to the value of the constant capital [...]

A fall in the rate of profit and accelerated accumulation are different expressions of the same process only in so far as both reflect the development of productiveness. Accumulation, in turn, hastens the fall of the rate of profit, inasmuch as it implies concentration of labour on a large scale, and thus a higher composition of capital. On the other hand, a fall in the rate of profit again hastens the concentration of capital and its centralisation through expropriation of minor capitalists, the few direct producers who still have anything left to be expropriated. This accelerates accumulation with regard to mass, although the rate of accumulation falls with the rate of profit.

On the other hand, the rate of self-expansion of the total capital, or the rate of profit, being the goad of capitalist production (just as self-expansion of capital is its only purpose), its fall checks the formation of new independent capitals and thus appears as a threat to the development of the capitalist production process. It breeds overproduction, speculation, crises, and surplus capital alongside surplus population. Those economists, therefore, who, like Ricardo, regard the capitalist mode of production as absolute, feel at this point that it creates a barrier itself, and for this reason attribute the barrier to Nature (in the theory of rent), not to production. But the main thing about their horror of the falling rate of profit is the feeling that capitalist production meets in the development of its productive forces a barrier which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the limitations and to the merely historical, transitory character of the capitalist mode of production; testifies that for the production of wealth, it is not an absolute mode, moreover, that at a certain stage it rather conflicts with its further development.

True, Ricardo and his school considered only industrial profit, which includes interest. But the rate of ground rent likewise has a tendency to fall, although its absolute mass increases, and may also increase proportionately more than industrial profit. (See Ed. West, who developed the law of ground rent *before* Ricardo). If we consider the total social capital C, and use $p_1$ for the industrial profit that remains after deducting interest and ground rent, i for interest, and r for ground rent, then s/C = p/C = ($p_1$ + i + r)/C = p1/C + i/C + r/C. We have seen that while s, the total amount of surplus value, is continually increasing in the course of capitalist development, s/C is just as steadily declining, because C grows still more rapidly than s. Therefore it is by no means a contradiction for $p_1$, i, and r to be steadily increasing, each individually, while s/C = p/C, as well as p1/C, i/C, and r/C, should each by itself be steadily shrinking, or that $p_1$ should increase in relation to i, or r in relation to $p_1$ or to $p_1$ and i. With a rising total surplus value or profit s = p, and a simultaneously falling rate of profit s/C = p/C, the proportions of the parts $p_1$, i, and r, which make up s = p, may change at will within the limits set by the total amount of s without thereby affecting the magnitude of s or s/C.

The mutual variation of p1, i, and r is merely a varying distribution of s among different classes. Consequently, $p_1$/C, i/C, or r/C, the rate of individual industrial profit, the rate of interest, and the ratio of ground rent to the total capital, may rise in relation to one another, while s/C, the general rate of profit, falls. The only condition is that the sum of all three = s/C. If the rate of profit falls from 50% to 25%, because the composition of a certain capital with, say, a rate of surplus value = 100% has changed from $50_c + 50_v$ to $75_c + 25_v$, then a capital of 1,000 will yield a profit of 500 in the first case, and in the second a capital of 4,000 will yield a profit of 1,000. We see that s or p have doubled, while p' has fallen by one-half. And if that 50% was formerly divided into 20 profit, 10 interest, and 20 rent, then p1/C = 20%, i/C = 10%, and r/C = 20%. If the proportions had remained the same after the change from 50% to 25%, then p1/C = 10%, i/C = 5%, and r/C = 10%. If, however, p1/C should fall to 8% and i/C to 4%, then r/C would rise to 13%. The relative magnitude of r would have risen as against p1 and i, while p would have remained the same. Under both assumptions, the sum of p1, i, and r would have increased, because produced by a capital four times as large. Furthermore, Ricardo's assumption that originally industrial profit (plus interest) contains the entire surplus value is historically and logically false. It is rather the progress of capitalist production which 1) gives the whole profit directly to the industrial and commercial capitalists for further distribution, and 2) reduces rent to the excess over the profit. On this capitalist basis, again, the rent grows, being a portion of profit (i.e., of the surplus value viewed as the product of the total capital), but not that specific portion of the

product, which the capitalist pockets [...]

The creation of this surplus value makes up the direct process of production, which, as we have said, has no other limits but those mentioned above. As soon as all the surplus labour it was possible to squeeze out has been embodied in commodities, surplus value has been produced. But this production of surplus value completes but the first act of the capitalist process of production — the direct production process. Capital has absorbed so and so much unpaid labour. With the development of the process, which expresses itself in a drop in the rate of profit, the mass of surplus value thus produced swells to immense dimensions. Now comes the second act of the process. The entire mass of commodities, i.e. , the total product, including the portion which replaces the constant and variable capital, and that representing surplus value, must be sold. If this is not done, or done only in part, or only at prices below the prices of production, the labourer has been indeed exploited, but his exploitation is not realised as such for the capitalist, and this can be bound up with a total or partial failure to realise the surplus value pressed out of him, indeed even with the partial or total loss of the capital. The conditions of direct exploitation, and those of realising it, are not identical. They diverge not only in place and time, but also logically. The first are only limited by the productive power of society, the latter by the proportional relation of the various branches of production and the consumer power of society. But this last-named is not determined either by the absolute productive power, or by the absolute consumer power, but by the consumer power based on antagonistic conditions of distribution, which reduce the consumption of the bulk of society to a minimum varying within more or less narrow limits. It is furthermore restricted by the tendency to accumulate, the drive to expand capital and produce surplus value on an extended scale. This is law for capitalist production, imposed by incessant revolutions in the methods of production themselves, by the depreciation of existing capital always bound up with them, by the general competitive struggle and the need to improve production and expand its scale merely as a means of self-preservation and under penalty of ruin. The market must, therefore, be continually extended, so that its interrelations and the conditions regulating them assume more and more the form of a natural law working independently of the producer, and become ever more uncontrollable. This internal contradiction seeks to resolve itself through expansion of the outlying field of production. But the more productiveness develops, the more it finds itself at variance with the narrow basis on which the conditions of consumption rest. It is no contradiction at all on this self-contradictory basis that there should be an excess of capital simultaneously with a growing surplus of population. For while a combination of these two would, indeed, increase the mass of produced surplus value, it would at the same time intensify the contradiction between

the conditions under which this surplus value is produced and those under which it is realised.

If a certain rate of profit is given, the mass of profit will always depend on the magnitude of the advanced capital. The accumulation, however, is then determined by that portion of this mass which is reconverted into capital. As for this portion, being equal to the profit minus the revenue consumed by the capitalists, it will depend not merely on the value of this mass, but also on the cheapness of the commodities which the capitalist can buy with it, commodities which pass partly into his consumption, his revenue, and partly into his constant capital. (Wages are here assumed to be given.)

The mass of capital set in motion by the labourer, whose value he preserves by his labour and reproduces in his product, is quite different from the value which he adds to it. If the mass of the capital = 1,000 and the added labour = 100, the reproduced capital = 1,100. If the mass = 100 and the added labour = 20, the reproduced capital = 120. In the first case the rate of profit = 10%, in the second = 20%. And yet more can be accumulated out of 100 than out of 20. And thus the river of capital rolls on (aside from its depreciation through increase of the productiveness), or its accumulation does, not in proportion to the rate of profit, but in proportion to the impetus it already possesses [...]

[The] mass of profit increases in spite of its slower rate with the growth of the invested capital. However, this requires a simultaneous concentration of capital, since the conditions of production then demand employment of capital on a larger scale. It also requires its centralisation, i.e., the swallowing up of the small capitalists by the big and their deprivation of capital. It is again but an instance of separating — raised to the second power — the conditions of production from the producers to whose number these small capitalists still belong, since their own labour continues to play a role in their case. The labour of a capitalist stands altogether in inverse proportion to the size of his capital, i.e., to the degree in which he is a capitalist. It is this same severance of the conditions of production, on the one hand, from the producers, on the other, that forms the conception of capital. It begins with primitive accumulation [...], appears as a permanent process in the accumulation and concentration of capital, and expresses itself finally as centralisation of existing capitals in a few hands and a deprivation of many of their capital (to which expropriation is now changed). This process would soon bring about the collapse of capitalist production if it were not for counteracting tendencies, which have a continuous decentralising effect alongside the centripetal one.

## II. CONFLICT BETWEEN EXPANSION OF PRODUCTION

## AND PRODUCTION OF SURPLUS VALUE

[...] Alongside the stimulants of an actual increase of the labouring population, which spring from the increase of the portion of the total social product serving as capital, there are agencies which create a merely relative over-population.

Alongside the fall in the rate of profit mass of capitals grows, and hand in hand with this there occurs a depreciation of existing capitals which checks the fall and gives an accelerating motion to the accumulation of capital values.

Alongside the development of productivity there develops a higher composition of capital, i.e., the relative decrease of the ratio of variable to constant capital.

These different influences may at one time operate predominantly side by side in space, and at another succeed each other in time. From time to time the conflict of antagonistic agencies finds vent in crises. **The crises are always but momentary and forcible solutions of the existing contradictions. They are violent eruptions which for a time restore the disturbed equilibrium**.

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

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

The decrease of variable in relation to constant capital, which goes hand in hand with the development of the productive forces, stimulates the growth of the labouring population, while continually creating an artificial over-population. The accumulation of capital in terms of value is slowed down by the falling rate of profit, to hasten still more the accumulation of use

values, while this, in its turn, adds new momentum to accumulation in terms of value.

Capitalist production seeks continually to overcome these immanent barriers, but overcomes them only by means which again place these barriers in its way and on a more formidable scale.

The *real barrier* of capitalist production is *capital itself*. It is that capital and its self-expansion appear as the starting and the closing point, the motive and the purpose of production; that production is only production for *capital* and not vice versa, the means of production are not mere means for a constant expansion of the living process of the *society* of producers. The limits within which the preservation and self-expansion of the value of capital resting on the expropriation and pauperisation of the great mass of producers can alone move — these limits come continually into conflict with the methods of production employed by capital for its purposes, which drive towards unlimited extension of production, towards production as an end in itself, towards unconditional development of the social productivity of labour. The means — unconditional development of the productive forces of society — comes continually into conflict with the limited purpose, the self-expansion of the existing capital. The capitalist mode of production is, for this reason, a historical means of developing the material forces of production and creating an appropriate world market and is, at the same time, a continual conflict between this its historical task and its own corresponding relations of social production.

## III. EXCESS CAPITAL AND EXCESS POPULATION

[...] There would be absolute overproduction of capital as soon as additional capital for purposes of capitalist production = 0. The purpose of capitalist production, however, is self-expansion of capital, i.e., appropriation of surplus labour, production of surplus value, of profit. As soon as capital would, therefore, have grown in such a ratio to the labouring population that neither the absolute working time supplied by this population, nor the relative surplus working time, could be expanded any further (this last would not be feasible at any rate in the case when the demand for labour were so strong that there were a tendency for wages to rise); at a point, therefore, when the increased capital produced just as much, or even less, surplus value than it did before its increase, there would be absolute overproduction of capital; i.e., the increased capital $C + \Delta C$ would produce no more, or even less, profit than capital C before its expansion by $\Delta C$. In both cases there would be a steep and sudden fall in the general rate of profit, but this time due to a change in the composition of capital not caused by the development of the productive forces, but rather by a rise in the money value of the variable

capital (because of increased wages) and the corresponding reduction in the proportion of surplus labour to necessary labour.

In reality, it would appear that a portion of the capital would lie completely or partially idle (because it would have to crowd out some of the active capital before it could expand its own value), and the other portion would produce values at a lower rate of profit, owing to the pressure of unemployed or but partly employed capital. It would be immaterial in this respect if a part of the additional capital were to take the place of the old capital, and the latter were to take its position in the additional capital. We should still always have the old sum of capital on one side, and the sum of additional capital on the other. The fall in the rate of profit would then be accompanied by an absolute decrease in the mass of profit, since the mass of employed labour power could not be increased and the rate of surplus value raised under the conditions we had assumed, so that the mass of surplus value could not be increased either. And the reduced mass of profit would have to be calculated on an increased total capital. But even if it is assumed that the employed capital continues to self-expand at the old rate of profit, and the mass of profit hence remains the same, this mass would still he calculated on an increased total capital, this likewise implying a fall in the rate of profit. If a total capital of 1,000 yielded a profit of 100, and after being increased to 1,500 still yielded 100, then, in the second case, 1,000 would yield only 66⅔. Self-expansion of the old capital, in the absolute sense, would have been reduced. The capital = 1,000 would yield no more under the new circumstances than formerly a capital = 666⅔.

It is evident, however, that this actual depreciation of the old capital could not occur without a struggle, and that the additional capital ΔC could not assume the functions of capital without a struggle. The rate of profit would not fall under the effect of competition due to overproduction of capital. It would rather be the reverse; it would be the competitive struggle which would begin because the fallen rate of profit and overproduction of capital originate from the same conditions. The part of ΔC in the hands of old functioning capitalists would be allowed to remain more or less idle to prevent a depreciation of their own original capital and not to narrow its place in the field of production. Or they would employ it, even at a momentary loss, to shift the need of keeping additional capital idle on newcomers and on their competitors in general.

That portion of ΔC which is in new hands would seek to assume a place for itself at the expense of the old capital, and would accomplish this in part by forcing a portion of the old capital to lie idle. It would compel the old capital to give up its old place and withdraw to join completely or partially unemployed additional capital.

A portion of the old capital has to lie unused under all circumstances;

it has to give up its characteristic quality as capital, so far as acting as such and producing value is concerned. The competitive struggle would decide what part of it would be particularly affected. So long as things go well, competition effects an operating fraternity of the capitalist class, as we have seen in the case of the equalisation of the general rate of profit, so that each shares in the common loot in proportion to the size of his respective investment. But as soon as it no longer is a question of sharing profits, but of sharing losses, everyone tries to reduce his own share to a minimum and to shove it off upon another. The class, as such, must inevitably lose. How much the individual capitalist must bear of the loss, i.e., to what extent he must share in it at all, is decided by strength and cunning, and competition then becomes a fight among hostile brothers. The antagonism between each individual capitalist's interests and those of the capitalist class as a whole, then comes to the surface, just as previously the identity of these interests operated in practice through competition.

How is this conflict settled and the conditions restored which correspond to the "sound" operation of capitalist production? The mode of settlement is already indicated in the very emergence of the conflict whose settlement is under discussion. It implies the withdrawal and even the partial destruction of capital amounting to the full value of additional capital $\Delta C$, or at least a part of it. Although, as the description of this conflict shows, the loss is by no means equally distributed among individual capitals, its distribution being rather decided through a competitive struggle in which the loss is distributed in very different proportions and forms, depending on special advantages or previously captured positions, so that one capital is left unused, another is destroyed, and a third suffers but a relative loss, or is just temporarily depreciated, etc.

But the equilibrium would be restored under all circumstances through the withdrawal or even the destruction of more or less capital. This would extend partly to the material substance of capital, i.e., a part of the means of production, of fixed and circulating capital, would not operate, not act as capital; some of the operating establishments would then be brought to a standstill. Although, in this respect, time attacks and worsens all means of production (except land), the stoppage would in reality cause far greater damage to the means of production. However, the main effect in this case would be that these means of production would cease to function as such, that their function as means of production would be disturbed for a shorter or longer period.

The main damage, and that of the most acute nature, would occur in respect to capital, and in so far as the latter possesses the characteristic of value it would occur in respect to the *values* of capitals. That portion of the value of a capital which exists only in the form of claims on prospective

shares of surplus value, i.e., profit, in fact in the form of promissory notes on production in various forms, is immediately depreciated by the reduction of the receipts on which it is calculated. A part of the gold and silver lies unused, i.e., does not function as capital. Part of the commodities on the market can complete their process of circulation and reproduction only through an immense contraction of their prices, hence through a depreciation of the capital which they represent. The elements of fixed capital are depreciated to a greater or lesser degree in just the same way. It must be added that definite, presupposed, price relations govern the process of reproduction, so that the latter is halted and thrown into confusion by a general drop in prices. This confusion and stagnation paralyses the function of money as a medium of payment, whose development is geared to the development of capital and is based on those presupposed price relations. The chain of payment obligations due at specific dates is broken in a hundred places. The confusion is augmented by the attendant collapse of the credit system, which develops simultaneously with capital, and leads to violent and acute crises, to sudden and forcible depreciations, to the actual stagnation and disruption of the process of reproduction, and thus to a real falling off in reproduction.

But there would have been still other agencies at work at the same time. The stagnation of production would have laid off a part of the working class and would thereby have placed the employed part in a situation, where it would have to submit to a reduction of wages even below the average. This has the very same effect on capital as an increase of the relative or absolute surplus value at average wages would have had. Prosperity would have led to more marriages among labourers and reduced the decimation of offspring. While implying a real increase in population, this does not signify an increase in the actual working population. But it affects the relations of the labourer to capital in the same way as an increase of the number of actually working labourers would have affected them. On the other hand, the fall in prices and the competitive struggle would have driven every capitalist to lower the individual value of his total product below its general value by means of new machines, new and improved working methods, new combinations, i.e., to increase the productivity of a given quantity of labour, to lower the proportion of variable to constant capital, and thereby to release some labourers; in short, to create an artificial over-population. Ultimately, the depreciation of the elements of constant capital would itself tend to raise the rate of profit. The mass of employed constant capital would have increased in relation to variable, but its value could have fallen. The ensuing stagnation of production would have prepared — within capitalistic limits — a subsequent expansion of production.

And thus the cycle would run its course anew. Part of the capital,

depreciated by its functional stagnation, would recover its old value. For the rest, the same vicious circle would be described once more under expanded conditions of production, with an expanded market and increased productive forces [...]

The limitations of the capitalist mode of production come to the surface:

1) In that the development of the productivity of labour creates out of the falling rate of profit a law which at a certain point comes into antagonistic conflict with this development and must be overcome constantly through crises.

2) In that the expansion or contraction of production are determined by the appropriation of unpaid labour and the proportion of this unpaid labour to materialised labour in general, or, to speak the language of the capitalists, by profit and the proportion of this profit to the employed capital, thus by a definite rate of profit, rather than the relation of production to social requirements, i.e., to the requirements of socially developed human beings. It is for this reason that the capitalist mode of production meets with barriers at a certain expanded stage of production which, if viewed from the other premise, would reversely have been altogether inadequate. It comes to a standstill at a point fixed by the production and realisation of profit, and not the satisfaction of requirements [...]

## PART 4: CONVERSION OF COMMODITY CAPITAL AND MONEY CAPITAL INTO COMMERCIAL CAPITAL AND MONEY-DEALING CAPITAL (MERCHANT'S CAPITAL)

### CHAPTER 16: COMMERCIAL CAPITAL

Merchant's, or trading, capital breaks up into two forms or sub-divisions, namely, commercial capital and money-dealing capital, which we shall now define more closely, in so far as this is necessary for our analysis of capital in its basic structure. This is all the more necessary, because modern political economy, even in the persons of its best exponents, throws trading capital and industrial capital indiscriminately together and, in effect, wholly overlooks the characteristic peculiarities of the former.

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The movements of commodity capital have been analysed in Book II. To take the total capital of society, one part of it — always made up of different elements and even changing in magnitude — always exists in the form of commodities on the market, to be converted into money. Another part exists on the market in the form of money, to be converted into commodities.

It is always in the process of this transition, of this formal metamorphosis. Inasmuch as this function of capital in the process of circulation is at all set apart as a special function of a special capital, as a function established by virtue of the division of labour to a special group of capitalists, commodity capital becomes commercial capital.

We have explained (Book II, Chapter VI, "The Costs of Circulation,") to what extent the transport industry, storage and distribution of commodities in a distributable form, may be regarded as production processes continuing within the process of circulation. These episodes incidental to the circulation of commodity capital are sometimes confused with the distinct functions of merchant's or commercial capital. Sometimes they are, indeed, practically bound up with these distinct, specific functions, although with the development of the social division of labour the function of merchant's capital evolves in a pure form, i.e., divorced from those real functions, and independent of them. Those functions are therefore irrelevant to our purpose, which is to define the specific difference of this special form of capital. In so far as capital solely employed in the circulation process, special commercial capital, partly combines those functions with its specific ones, it does not appear in its pure form. We obtain its pure form after stripping it of all these incidental functions [...]

We have seen that the existence of capital as commodity capital and the metamorphosis it undergoes within the sphere of circulation in the market as commodity capital — a metamorphosis which resolves itself into buying and selling, converting commodity capital into money capital and money capital into commodity capital — that this forms a phase in the reproduction process of industrial capital, hence in its process of production as a whole. We have also seen, however, that it is distinguished in its function as a capital of circulation from its function as productive capital. These are two different and separate forms of existence of the same capital [...]

Commercial capital is nothing but a transmuted form of a part of this capital of circulation constantly to be found in the market, ever in the process of its metamorphosis, and always encompassed by the sphere of circulation. We say a part, because a part of the selling and buying of commodities always takes place directly between industrial capitalists. We leave this part entirely out of consideration in this analysis, because it contributes nothing to defining the conception, or to understanding the specific nature of merchant's capital, and because it has furthermore been exhaustively treated for our purpose in Book II [...]

The dealer in commodities, as a capitalist generally, appears on the market primarily as the representative of a certain sum of money, which he advances as a capitalist, i.e., which he wants to turn from x (its original value) into $x + \Delta x$ (the original sum plus profit). But it is evident to him —

not being just a capitalist in general, but rather a special dealer in commodities — that his capital must first enter the market in the form of money capital, for he does not produce commodities. He merely trades in them, expedites their movement, and to operate with them he must first buy them, and, therefore, must be in possession of money capital.

Suppose that a dealer in commodities owns £3,000 which he invests as a trading capital. With these £3,000 he buys, say, 30,000 yards of linen from some linen manufacturer at 2s. per yard. He then sells the 30,000 yards. If the annual average rate of profit = 10% and he makes an annual profit of 10% after deducting all incidental expenses, then by the end of the year he has converted his £3,000 into £3,300. How he makes this profit is a question which we shall discuss later. At present, we intend to consider solely the form of the movements of his capital. With his £3,000 he keeps buying linen and selling it; he constantly repeats this operation of buying in order to sell, M — C — M', the simple form of capital as it obtains entirely in the process of circulation, uninterrupted by the production process, which lies outside its own movement and function.

What is now the relation of this commercial capital to commodity capital as a mere form of existence of industrial capital? So far as the linen manufacturer is concerned, he has realised the value of his linen with the merchant's money and thereby completed the first phase in the metamorphosis of his commodity capital — its conversion into money. Other conditions being equal, he can now proceed to reconvert this money into yarn, coal, wages, etc., and into means of existence, etc., for the consumption of his revenue. Hence, leaving aside the revenue expenditure, he can go on with his process of reproduction.

But while the sale of the linen, its metamorphosis into money, has taken place for him, as producer, it has not yet taken place for the linen itself. It is still on the market as commodity capital awaiting to undergo its first metamorphosis — to be sold. Nothing has happened to this linen besides a change in the person of its owner. As concerns its purpose, as concerns its place in the process, it is still commodity capital, a saleable commodity, with the only difference that it is now in the merchant's hands instead of the manufacturer's. The function of selling it, of effecting the first phase of its metamorphosis, has passed from the manufacturer to the merchant, has become the special business of the merchant, whereas previously it was a function which the producer had to perform himself after having completed the function of its production.

Let us assume that the merchant fails to sell the 30,000 yards of linen during the interval required by the linen manufacturer to bring another 30,000 yards to market at a value of £3,000. The merchant cannot buy them again, because he still has in stock the unsold 30,000 yards which have not as yet

been reconverted into money capital. A stoppage ensues, i.e., an interruption of reproduction. The linen producer might, of course, have additional money capital at his disposal, which he could convert into productive capital, regardless of the sale of the 30,000 yards, in order to continue the production process. But this would not alter the situation. So far as the capital tied up in the 30,000 yards of linen is concerned, its process of reproduction is, and remains, interrupted. It is, indeed, easily seen here that the merchant's operations are really nothing but operations that must be performed at all events to convert the producer's commodity capital into money. They are operations which effect the functions of commodity capital in the circulation and reproduction processes. If it devolved upon the producer's clerk to attend exclusively to the sale, and also the purchase, instead of an independent merchant, this connection would not be obscured for a single moment.

Commercial capital is, therefore, nothing but the producer's commodity — capital which has to undergo the process of conversion into money — to perform its function of commodity capital on the market — the only difference being that instead of representing an incidental function of the producer, it is now the exclusive operation of a special kind of capitalist, the merchant, and is set apart as the business of a special investment of capital [...]

[M]erchant's capital does not first have to buy commodities for its full amount of value, and then to sell them. Instead, the merchant performs both movements simultaneously. His capital then breaks up into two parts. One of them consists of commodity capital, and the other of money capital. He buys and converts his money into commodities at one place. Elsewhere, he sells and converts another part of his commodity capital into money. On one side, his capital returns to him in the form of money capital, while on the other he gets commodity capital. The larger the portion in one form, the smaller the portion in the other. This alternates and balances itself. If the use of money as a medium of circulation combines with its use as a means of payment and the attendant development of the credit system, then the money capital part of merchant's capital is reduced still more in relation to the volume of the transactions this merchant's capital effects. If I buy £3,000 worth of wine on three months' credit and sell all the wine for cash before this term expires, I do not need to advance a single penny for these transactions. In this case it is also quite obvious that the money capital, which here acts as merchant's capital, is nothing more than industrial capital in its money capital form, in its process of reflux in the form of money. (The fact that the manufacturer who sold £3,000 worth of wine on three months' credit may discount his promissory note at the banker's does not alter the matter at all and has nothing to do with the merchant's capital.) If market prices should fall in the meantime by, say, 1/10, the merchant, far from making a profit, would

recover only £2,700 instead of £3,000. He would have to put up £300 out of his own pocket. These £300 would serve merely as a reserve to balance the difference in price. But the same applies to the manufacturer. If he himself had sold at falling prices, he would likewise have lost £300, and would not be able to resume production on the same scale without reserve capital.

The linen merchant buys £3,000 worth of linen from the manufacturer. The latter pays, say, £2,000 of the £3,000 for yarn. He buys this yarn from a yarn dealer. The money which the manufacturer pays to the yarn dealer is not the linen dealer's money, for the latter has received commodities to this amount. It is the money form of the manufacturer's own capital. Now in the hands of the yarn dealer these £2,000 appear as returned money capital. But to what extent are they that as distinct from the £2,000 representing the discarded money form of the linen and the assumed money form of the yarn? If the yarn dealer bought on credit and sold for cash before the expiration of his term of payment, then these £2,000 do not contain one penny of merchant's capital as distinct from the money form which the industrial capital itself assumes in the course of its circuit. In so far as commercial capital is not, therefore, just a form of industrial capital in the merchant's hands as commodity- or money capital, it is nothing but that portion of money capital which belongs directly to the merchant and circulates in the purchase and sale of commodities. On a reduced scale this portion represents that part of capital advanced for production which should always have to be in the hands of the industrialist as money reserve and means of purchase, and which should always have to circulate as his money capital. This portion, on a reduced scale, is now in the hands of merchant capitalists and performs its functions as such in the process of circulation. It is that portion of the total capital which, aside from what is expended as revenue, must continually circulate on the market as a means of purchase in order to maintain the continuity of the process of reproduction. The more rapid the process of reproduction, and the more developed the function of money as a means of payment, i.e., the more developed the credit system, the smaller that portion is in relation to the total capital.

Merchant's capital is simply capital functioning in the sphere of circulation. The process of circulation is a phase of the total process of reproduction. But **no value is produced in the process of circulation, and, therefore, no surplus value**. Only changes of form of the same mass of value take place. In fact, nothing occurs there outside the metamorphosis of commodities, and this has nothing to do as such either with the creation or change of values. **If a surplus value is realised in the sale of produced commodities, then this is only because it already existed in them**. In the second act, the re-exchange of money capital against commodities (elements of production), the buyer therefore does not realise any surplus value either.

He merely initiates the production of surplus value through exchanging his money for means of production and labour power. But so far as these metamorphoses require circulation time — time during which capital does not produce at all, least of all surplus value — it restricts the creation of values, and the surplus value expresses itself through the rate of profit in inverse ratio to the duration of the circulation period. **Merchant's capital, therefore, does not create either value or surplus value, at least not directly. In so far as it contributes to shortening the time of circulation, it may help indirectly to increase the surplus value produced by the industrial capitalists. In so far as it helps to expand the market and effects the division of labour between capitals, hence enabling capital to operate on a larger scale, its function promotes the productivity of industrial capital, and its accumulation. In so far as it shortens circulation time, it raises the ratio of surplus value to advanced capital, hence the rate of profit. And to the extent that it confines a smaller portion of capital to the sphere of circulation in the form of money capital, it increases that portion of capital which is engaged directly in production.**

## CHAPTER 17: COMMERCIAL PROFIT

We have seen in Book II that the pure functions of capital in the sphere of Circulation — the operations which the industrial capitalist must perform, first, to realise the value of his commodities, and second, to reconvert this value into elements of production, operations effecting the metamorphosis of commodity capital, C' — M — C, hence the acts of selling and buying — produce neither value nor surplus value. It was rather seen that the time required for this purpose, objectively in regard to commodities and subjectively in regard to the capitalist, sets the limit to the production of value and surplus value. What is true of the metamorphosis of commodity capital in general, is, of course, not in the least altered by the fact that a part of it may assume the shape of commercial capital, or that the operations, effecting the metamorphosis of commodity capital, appear as the special concern of a special group of capitalists, or as the exclusive function of a portion of the money capital. If selling and buying commodities — and that is what the metamorphosis of commodity capital C' — M — C amounts to — by industrial capitalists themselves are not operations which create value or surplus value, they will certainly not create either of these when carried out by persons other than the industrial capitalists. Furthermore, if that portion of the total social capital, which must continually be on hand as money capital, in order that the process of reproduction is not interrupted by the process of circulation and proceeds continuously — if this money capital creates neither

value nor surplus value, it cannot acquire the properties of creating them by being continually thrown into circulation by some section of capitalists other than the industrial capitalists, to perform the same function. We have already indicated to what extent merchant's capital may be indirectly productive, and we shall later discuss this point at greater length.

Commercial capital, therefore — stripped of all heterogeneous functions, such as storing, expressing, transporting, distributing, retailing, which may be connected with it, and confined to its true function of buying in order to sell — creates neither value nor surplus value, but acts as middleman in their realisation and thereby simultaneously in the actual exchange of commodities, i.e., in their transfer from hand to hand, in the social metabolism. Nevertheless, since the circulation phase of industrial capital is just as much a phase of the reproduction process as production is, the **capital operating independently in the process of circulation must yield the average annual profit just as well as capital operating in the various branches of production**. Should merchant's capital yield a higher percentage of average profit than industrial capital, then a portion of the latter would transform itself into merchant's capital. Should it yield a lower average profit, then the converse would result. A portion of the merchant's capital would then be transformed into industrial capital. No species of capital changes its purpose, or function, with greater ease than merchant's capital.

Since merchant's capital does not itself produce surplus value, it is evident that the surplus value which it pockets in the form of average profit must be a portion of the surplus value produced by the total productive capital. But now the question arises: How does merchant's capital attract its share of the surplus value or profit produced by the productive capital?

It is just an illusion that commercial profit is a mere addition to, or a nominal rise of, the prices of commodities in excess of their value.

It is plain that the merchant can draw his profit only out of the price of the commodities he sells, and plainer still that the profit he makes in selling his commodities must be equal to the difference between his purchase price and his selling price, i.e., equal to the excess of the latter over the former.

It is possible that additional costs (costs of circulation) may enter into the commodities after their purchase and before their sale, and it is also possible that this may not happen. If such costs should occur, it is plain that the excess of the selling price over the purchase price would not be all profit. To simplify the analysis, we shall assume at this point that no such costs occur.

For the industrial capitalist the difference between the selling price and the purchase price of his commodities is equal to the difference between their price of production and their cost price, or, from the standpoint of the

total social capital, equal to the difference between the value of the commodities and their cost price for the capitalists, which again comes down to the difference between the total quantity of labour and the quantity of paid labour incorporated in them. Before the commodities bought by the industrial capitalist are thrown back on the market as saleable commodities, they pass through the process of production, in which alone the portion of their price to be realised as profit is created. But it is different with the merchant. The commodities are in his hands only so long as they are in the process of circulation. He merely continues their sale, the realisation of their price which was begun by the productive capitalist, and therefore does not cause them to pass through any intermediate process in which they could again absorb surplus value. While the industrial capitalist merely realises the previously produced surplus value, or profit, in the process of circulation, the merchant has not only to realise his profit during and through circulation, but must first make it. There appears to be no other way of doing this outside of selling the commodities bought by him from the industrial capitalist at their prices of production, or, from the standpoint of the total commodity capital, at their values in excess of their prices of production, making a nominal extra charge to their prices, hence, selling them, from the standpoint of the total commodity capital, above their value, and pocketing this excess of their nominal value over their real value; in short, selling them for more than they are worth.

This method of adding an extra charge is easy to grasp. For instance, one yard of linen costs 2s. If I want to make a 10% profit in reselling it, I must add 1/10 to the price, hence sell the yard at 2s. 2 2/5 d. The difference between its actual price of production and its selling price is then = 2 2/5d., and this represents a profit of 10% on 2s. This amounts to my selling the yard to the buyer at a price which is in reality the price of 1 1/10 yard. Or, what amounts to the same, it is as though I sold to the buyer only 10/11 of a yard for 2s. and kept 1/11 of a yard for myself. In fact I can buy back 1/11 of a yard for 2 2/5d. at the price of 2s. 2 2/5d. per yard. This would, therefore, be just a roundabout way of sharing in the surplus value and surplus product by a nominal rise in the price of commodities.

This is realisation of commercial profit by raising the price of commodities, as it appears at first glance. And, indeed, this whole notion that profit originates from a nominal rise in the price of commodities, or from their sale above their value, springs from the observations of commercial capital.

But it is quickly apparent on closer inspection that this is mere illusion. Assuming capitalist production to be predominant, commercial profit cannot be realised in this manner. (It is here always a question of averages, not of isolated cases.) Why do we assume that the merchant can realise a

profit of no more than, say, 10% on his commodities by selling them 10% above their price of production? Because we assume that the producer of these commodities, the industrial capitalist (who appears as "the producer" before the outside world, being the personification of industrial capital), had sold them to the dealer at their prices of production. If the purchase price of commodities paid by the dealer is equal to their price of production, or, in the last instance, equal to their value, so that the price of production or, in the last instance, the value, represent the merchant's cost price, then, indeed, the excess of his selling price over his purchase price — and this difference alone is the source of his profit — must be an excess of their commercial price over their price of production, so that in the final analysis the merchant sells all commodities above their values. But why was it assumed that the industrial capitalist sells his commodities to the merchant at their prices of production? Or rather, what was taken for granted in that assumption? It was that merchant's capital did not go into forming the general rate of profit (we are dealing with it as yet only in its capacity of commercial capital). We proceeded necessarily from this premise in discussing the general rate of profit, first, because merchant's capital as such did not exist for us at the time, and, second, because average profit, and hence the general rate of profit, had first to be developed as a levelling of profits or surplus values actually produced by the industrial capitals in the different spheres of production. But in the case of merchant's capital we are dealing with a capital which shares in the profit without participating in its production. Hence, it is now necessary to supplement our earlier exposition.

Suppose, the total industrial capital advanced in the course of the year = $720_c + 180_v = 900$ (say million £), and that s' = 100%. The product therefore = $720_c + 180_v + 180_s$. Let us call this product or the produced commodity capital, C, whose value, or price of production (since both are identical for the totality of commodities) = 1,080, and the rate of profit for the total social capital of 900 = 20%. These 20% are, according to our earlier analyses, the average rate of profit, since the surplus value is not calculated here on this or that capital of any particular composition, but on the total industrial capital of average composition. Thus, C = 1,080, and the rate of profit = 20%. Let us now assume, however, that aside from these £900 of industrial capital, there are still £100 of merchant's capital, which shares in the profit pro rata to its magnitude just as the former. According to our assumption, it is 1/10 of the total capital of 1,000. Therefore, it participates to the extent of 1/10 in the total surplus value of 180, and thus secures a profit of 18%. Actually, then, the profit to be distributed among the other 1/10 of the total capital is only = 162, or on the capital of 900 likewise = 18%. Hence, the price at which C is sold by the owners of the industrial capital of 900 to the merchants = $720_c + 180_v + 162_s = 1,062$. If the dealer then adds the

average profit of 18% to his capital of 100, he sells the commodities at 1,062 + 18 = 1,080, i.e., at their price of production, or, from the standpoint of the total commodity capital, at their value, although he makes his profit only during and through the circulation process, and only from an excess of his selling price over his purchase price. Yet he does not sell the commodities above their value, or above their price of production, precisely because he has bought them from the industrial capitalist below their value, or below their price of production.

Thus, merchant's capital enters the formation of the general rate of profit as a determinant *pro rata* to its part in the total capital. Hence, if we say in the given case that the average rate of profit = 18%, it would = 20%, if it were not that 1/10 of the total capital was merchant's capital and the general rate of profit thereby lowered by 1/10. This leads to a closer and more comprehensive definition of the price of production. **By price of production we mean, just as before, the price of a commodity = its costs (the value of the constant + variable capital contained in it) + the average profit. But this average profit is now determined differently. It is determined by the total profit produced by the total productive capital; but not as calculated on the total productive capital alone, so that if this = 900, as assumed above, and the profit = 180, then the average rate of profit = 180/900 = 20%. But, rather, as calculated on the total productive + merchant's capital, so that with 900 productive and 100 merchant's capital, the average rate of profit = 180/1,000 = 18%. The price of production is, therefore = k (the costs) + 18, instead of k + 20. The share of the total profit falling to merchant's capital is thus included in the average rate of profit. The actual value, or price of production, of the total commodity capital is therefore = k + p + m (where m is commercial profit). The price of production, or the price at which the industrial capitalist as such sells his commodities, is thus smaller than the actual price of production of the commodity; or in terms of all commodities taken together, the prices at which the class of industrial capitalists sell their commodities are lower than their value. Hence, in the above case, 900 (costs) + 18% on 900, or 900 + 162= 1,062. It follows, then, that in selling a commodity at 118 for which he paid 100 the merchant does, indeed, add 18% to the price. But since this commodity, for which he paid 100, is really worth 118, he does not sell it above its value. We shall henceforth use the term price of production in this, its more precise, sense.** It is evident, therefore, that the profit of the industrial capitalist equals the excess of the price of production of the commodity over its cost price, and that commercial profit, as distinct from this industrial profit, equals the excess of the selling price over the price of production of the commodity which, for the merchant, is its purchase price; but that the actual price of the

commodity = its price of production + the commercial profit. Just as industrial capital realises only such profits as already exist in the value of commodities as surplus value, so merchant's capital realises profits only because the entire surplus value, or profit, has not as yet been fully realised in the price charged for the commodities by the industrial capitalist. The merchant's selling price thus exceeds the purchase price not because the former exceeds the total value, but because the latter is below this value.

**Merchant's capital, therefore, participates in levelling surplus value to average profit, although it does not take part in its production. Thus, the general rate of profit contains a deduction from surplus value due to merchant's capital, hence a deduction from the profit of industrial capital.**

It follows from the foregoing:

1) The larger the merchant's capital in proportion to the industrial capital, the smaller the rate of industrial profit, and vice versa.

2) It was demonstrated in the first part that the rate of profit is always lower than the rate of the actual surplus value, i.e., it always understates the intensity of exploitation, as in the above case, $720_c + 180_v + 180_s$, the rate of surplus value of 100% and a rate of profit of only 20%. And the difference becomes still greater, inasmuch as the average rate of profit appears smaller again, dropping from 20% to 18%, if the share falling to merchant's capital is also taken into account. The average rate of profit of the direct capitalist exploiter, therefore, expresses a rate of profit smaller than it actually is.

Assuming all other circumstances remaining the same, the relative volume of merchant's capital (with the exception of the small dealer who represents a hybrid form) is in inverse proportion to the velocity of its turnover, hence in inverse proportion to the energy of the process of reproduction in general. **In the course of scientific analysis, the formation of a general rate of profit appears to result from industrial capitals and their competition, and is only later corrected, supplemented, and modified by the intervention of merchant's capital. In the course of its historical development, however, the process is really reversed. It is the commercial capital which first determines the prices of commodities more or less in accordance with their values, and it is the sphere of circulation, the sphere that promotes the process of reproduction, in which a general rate of profit initially takes shape. It is originally the commercial profit which determines the industrial profit. Not until the capitalist mode of production has asserted itself and the producer himself has become merchant, is commercial profit reduced to that aliquot part of the total surplus value falling to the share of merchant's capital as an aliquot part of the total capital engaged in the social process of reproduction.**

It was seen in the supplementary equalisation of profit through the intervention of merchant's capital that no additional element entered the value of commodities with the merchant's advanced money capital, and that the extra charge to the price, whereby the merchant makes his profit, was merely equal to that portion of the value of the commodities, which productive capital had not calculated in the price of production, i.e., had left out. The case of this money capital is similar to that of the industrial capitalist's fixed capital, since it is not consumed and its value, therefore, does not make up an element of the value of commodity. It is in the purchase price of commodity capital that the merchant replaces its price of production = M, in money. His own selling price, as previously shown, is = M + ΔM, where ΔM stands for the addition to the price of commodities determined by the general rate of profit. Once he sells the commodities, his original money capital, which he advanced for their purchase, returns to him together with this ΔM. We see once more that his money capital is nothing but the industrial capitalist's commodity capital transformed into money capital, which affects the magnitude of the value of this commodity capital no more than would a direct sale of the latter to the ultimate consumer, instead of to the merchant. It, actually, merely anticipates the payment of the consumer. However, this is correct only on the condition hitherto assumed, that the merchant has no overhead expenses, or that aside from the money capital which he must advance to buy commodities from the producer he need not advance any other capital, circulating or fixed, in the process of commodity metamorphosis., the process of buying and selling. But this is not so in reality, as we have seen in the analysis of the costs of circulation (Book II, Chap. VI). These costs of circulation are partly expenses which the merchant has to reclaim from other agents of circulation, and partly expenses arising directly from his specific business.

No matter what the nature of these costs of circulation — whether they arise from the purely commercial nature of the merchant's establishment as such and hence belong to the merchant's specific costs of circulation, or represent items which are charges for subsequent processes of production added in the process of circulation, such as expressage, transport, storage, etc. — they always require of the merchant, aside from his money capital, advanced to the purchase of commodities, some additional capital for the purchase and payment of such means of circulation. As much of this element of cost as consists of circulating capital passes wholly as an additional element into the selling price of the commodities; and as much of it as consists of fixed capital only to the extent of its wear and tear. But only as an element which forms a nominal value, even if as the purely commercial costs of circulation, it does not add any real value to the commodities. But whether fixed or circulating, this entire additional capital participates in forming the

general rate of profit.

The purely commercial costs of circulation (hence, excluding costs of expressage, shipping, storage, etc.) resolve themselves into costs required to realise the value of commodities, to transform it from commodities into money, or from money into commodities, to effect their exchange. We leave entirely out of consideration all possible processes of production which may continue in the process of circulation, and from which the merchant's business can be altogether separated; as, in fact, the actual transport industry and expressage may be, and are, industrial branches entirely distinct from commercial; and purchaseable and saleable commodities may be stored in docks or in other public premises, with the resultant cost of storage being charged to the merchant by third persons inasmuch as he has to advance it. All this takes place in actual wholesale commerce, where merchant's capital appears in its purest form, unmixed with other functions. The express company owner, the railway director, and the shipowner, are not "merchants". The costs which we consider here are those of buying and selling. We have already remarked earlier that these resolve themselves into accounting, bookkeeping, marketing, correspondence, etc. The constant capital required for this purpose consists of offices, paper, postage, etc. The other costs break up into variable capital advanced for the employment of mercantile wage workers. (Expressage, transport costs, advances for customs duties, etc., may partly be considered as being advanced by the merchant in purchasing commodities and thus enter the purchase price as far as he is concerned.)

All these costs are not incurred in producing the use value of commodities, but in realising their value. They are pure costs of circulation. They do not enter into the immediate process of production, but since they are part of the process of circulation they are also part of the total process of reproduction.

The only portion of these costs of interest to us at this point is that advanced as variable capital. (The following questions should also be analysed: First, how does the law that only necessary labour enters the value of commodities operate in the process of circulation? Second, how does accumulation obtain in merchant's capital? Third, how does merchant's capital function in the actual aggregate reproduction process of society?)

These costs arise due to the product having the economic form of a commodity.

If the labour time which the industrial capitalists themselves lose while directly selling commodities to one another — hence, speaking objectively, the circulation time of the commodities — does not add value to these commodities, it is evident that this labour time does not change its nature in the least by falling to the merchant instead of the industrial capitalist. The conversion of commodities (products) into money, and of

money into commodities (means of production) is a necessary function of industrial capital and, therefore, a necessary operation of the capitalist — who is actually but personified capital endowed with a consciousness of its own and a will. But these functions neither create value, nor produce surplus value. By performing these operations and carrying on the functions of capital in the sphere of circulation after the productive capitalist has ceased to be involved the merchant merely takes the place of the industrial capitalist. The labour time required in these operations is devoted to certain necessary operations of the reproduction process of capital, but yields no additional value. If the merchant did not perform these operations (hence, did not expend the labour time entailed), he would not be applying his capital as a circulation agent of industrial capital; he would not then be continuing the interrupted function of the industrial capitalist, and consequently could not participate as a capitalist *pro rata* to his advanced capital, in the mass of profit produced by industrial capitalists. In order to share in the mass of surplus value, to expand the value of his advance as capital, the commercial capitalist need not employ wage workers. If his business and capital are small, he may be the only worker in it. He is paid with that portion of the profit which falls to him through the difference between the purchase price paid by him for commodities and their actual price of production [...]

But, on the other hand, the profit realised by the merchant on a small amount of advanced capital may be no larger, or may even be smaller, than the wages of one of the better-paid skilled wage workers. In fact, he brushes shoulders with many direct commercial agents of the productive capitalist, such as buyers, sellers, travellers, who enjoy the same or a higher income either in the form of wages, or in the form of a share in the profit (percentages, bonuses) made from each sale. In the first case, the merchant pockets the mercantile profit as an independent capitalist; in the other, the salesman, the industrial capitalist's wage labourer, receives a portion of the profit either in the form of wages, or as a proportional share in the profit of the industrial capitalist, whose direct agent he is, while his employer pockets both the industrial and the commercial profit. But in all these cases, although his income may appear to the circulation agent as an ordinary wage, as payment for work performed, [...] his income is derived solely from the mercantile profit. This follows from his labour not being labour which produces value [...]

If the industrial capitalist who acts as his own merchant advances not only the additional capital to buy new commodities before his product in the process of circulation has been reconverted into money, but also capital (office expenses and wages for commercial employees) to realise the value of his commodity capital, or, in other words, for the process of circulation, then these supplements form additional capital, but do not create surplus value.

They must be made good out of the value of the commodities, because a portion of the value of these commodities must be reconverted into these circulation costs. But no additional surplus value is created thereby. So far as this concerns the total capital of society, it means in fact that a portion of it must be set aside for secondary operations which are no part of the self-expansion process, and that this portion of the social capital must be continually reproduced for this purpose. This reduces the rate of profit for the individual capitalist and for the entire class of industrial capitalists [...]

The question now arises: What about the commercial wage workers employed by the commercial capitalist, here the merchant?

In one respect, such a commercial employee is a wage worker like any other. In the first place, his labour power is bought with the variable capital of the merchant, not with money expended as revenue, and consequently it is not bought for private service, but for the purpose of expanding the value of the capital advanced for it. In the second place, the value of his labour power, and thus his wages, are determined as those of other wage workers, i.e., by the cost of production and reproduction of his specific labour power, not by the product of his labour.

However, we must make the same distinction between him and the wage workers directly employed by industrial capital which exists between industrial capital and merchant's capital, and thus between the industrial capitalist and the merchant. Since the merchant, as a mere agent of circulation, produces neither value nor surplus value (for the additional value which he adds to the commodities through his expenses resolves itself into an addition of previously existing values, although the question here poses itself, how he preserves this value of his constant capital?) it follows that the mercantile workers employed by him in these same functions cannot directly create surplus value for him. Here, as in the case of productive labourers, we assume that wages are determined by the value of the labour power [...]

The difficulty as concerns mercantile wage workers is by no means to explain how they produce direct profits for their employer without creating any direct surplus value (of which profit is but a transmuted form). This question has, indeed, already been solved in the general analysis of commercial profits. Just as industrial capital makes profit by selling labour embodied and realised in commodities, for which it has not paid any equivalent, so merchant's capital derives profit from not paying in full to productive capital for all the unpaid labour contained in the commodities (in commodities, in so far as capital invested in their production functions as an aliquot part of the total industrial capital), and by demanding payment for this unpaid portion still contained in the commodities when making a sale. The relation of merchant's capital to surplus value is different from that of industrial capital. The latter produces surplus value by directly appropriating

the unpaid labour of others. The former appropriates a portion of this surplus value by having this portion transferred from industrial capital to itself [...] Just as the labourer's unpaid labour directly creates surplus value for productive capital, so the unpaid labour of the commercial wage worker secures a share of this surplus value for merchant's capital [...]

Since merchant's capital is absolutely nothing but an individualised form of a portion of industrial capital engaged in the process of circulation, all questions referring to it must be solved by representing the problem primarily in a form; in which the phenomena peculiar to merchant's capital do not yet appear independently, but still in direct connection with industrial capital, as a branch of it. As an office, distinct from a workshop, mercantile capital operates continually in the circulation process. It is here — in the office of the industrial capitalist himself — that we must first analyse the [problem] now under consideration [...] The more developed the scale of production, the greater, even if not proportionately greater, the commercial operations of the industrial capital, and consequently the labour and other costs of circulation involved in realising value and surplus value. This necessitates the employment of commercial wage workers who make up the actual office staff. The outlay for these, although made in the form of wages, differs from the variable capital laid out in purchasing productive labour. It increases the outlay of the industrial capitalist, the mass of the capital to be advanced, without directly increasing surplus value. Because it is an outlay for labour employed solely in realising value already created. Like every other outlay of this kind, it reduces the rate of profit be-cause the advanced capital increases, but not the surplus value. If surplus value s remains constant while advanced capital C increases to $C + \Delta C$, then the rate of profit $s/C$ is replaced by the smaller rate of profit $s/(C + \Delta C)$. The industrial capitalist endeavours, therefore, to cut these expenses of circulation down to a minimum, just as his expenses for constant capital. Hence, industrial capital does not maintain the same attitude to its commercial wage labourers as it does to its productive wage labourers. The more productive wage labourers it employs under otherwise equal circumstances, the greater the output, and the greater the surplus value, or profit. Conversely, however, the larger the scale of production, the greater the quantity of value and surplus value to be realised, the greater the produced commodity capital, the greater are the absolute, if not relative, office costs, giving rise to a kind of division of labour. To what extent profit is the precondition for these outlays, is seen, among other things, from the fact that with the increase of commercial salaries, a part of them is frequently paid by a share in the profit. It is in the nature of things that labour consisting merely of intermediate operations connected partly with calculating values, partly with realising them, and partly with reconverting the realised money into means of production, is a

labour whose magnitude therefore depends on the quantity of the produced values that have to he realised, and does not act as the cause, like directly productive labour, but rather as an effect, of the respective magnitudes and masses of these values. The same applies to the other costs of circulation [...]

The commercial worker produces no surplus value directly. But the price of his labour is determined by the value of his labour power, hence by its costs of production, while the application of this labour power, its exertion, expenditure of energy, and wear and tear, is as in the ease of every other wage labourer by no means limited by its value. His wage, therefore, is not necessarily proportionate to the mass of profit which he helps the capitalist to realise. What he costs the capitalist and what he brings in for him, are two different things. He creates no direct surplus value, but adds to the capitalist's income by helping him to reduce the cost of realising surplus value, inasmuch as he performs partly unpaid labour [...]

To industrial capital the costs of circulation appear as unproductive expenses, and so they are. To the merchant they appear as a source of his profit, proportional, given the general rate of profit, to their size. The outlay to be made for these circulation costs is, therefore, a productive investment for mercantile capital. And for this reason, the commercial labour which it buys is likewise immediately productive for it.

## CHAPTER 18: THE TURNOVER OF MERCHANT'S CAPITAL. PRICES

The turnover of industrial capital is a combination of its period of production and time of circulation, and therefore embraces the entire process of production. The turnover of merchant's capital, on the other hand, being in reality nothing but an alienated movement of commodity capital, represents only the first phase in the metamorphosis of a commodity, C — M, as the refluent movement of a specific capital; M — C, C — M, is, from the mercantile point of view, the turnover of merchant's capital. The merchant buys, converting his money into commodities, then sells, converting the latter back into money, and so forth in constant repetition. Within circulation, the metamorphosis of industrial capital always presents itself in the form of $C_1$ — M — $C_2$; the money realised by the sale of the produced commodity $C_1$ is used to purchase new means of production, $C_2$. This amounts to a practical exchange of $C_1$ for $C_2$, and the same money thus changes hands twice. Its movement mediates the exchange of two different kinds of commodities, $C_1$ and $C_2$. But in the case of the merchant, it is, conversely, the same commodity which changes hands twice in M — C — M'. It merely promotes the reflux of his money.

If, for example, a certain merchant's capital is £100, and for these £100 the merchant buys commodities and sells them for £110, then his capital

of £100 has completed one turnover, and the number of such turnovers per year depends on the number of times this movement M — C — M' is repeated.

We here leave entirely out of consideration the costs which may be concealed in the difference between the purchase price and the selling price, since these do not alter in any way the form, which we are now analysing.

The number of turnovers of a given merchant's capital, therefore, is analogous in this case to the repeated cycles of money as a mere medium of circulation. Just as the same thaler buys ten times its value in commodities in making ten cycles, so the same money capital of the merchant, when turned over ten times, buys ten times its value in commodities, or realises a total commodity capital of ten times its value; a merchant's capital of 100, for instance, a ten-fold value = 1,000. But there is this difference: In the cycle of money as a medium of circulation it is the same piece of money that passes through different hands, thus repeatedly performing the same function and hence making up for the mass of the circulating pieces of money by its velocity. But in the merchant's case it is the same money capital, the same money value, regardless of what pieces of money it may be composed, which repeatedly buys and sells commodity capital to the amount of its value and which therefore returns to the same hands, the same point of departure as M + ΔM, i.e., value plus surplus value. This characterises its turnover as a capital turnover. It always withdraws more money from circulation than it throws in. It is self-evident, at any rate, that an accelerated turnover of merchant's capital (given a developed credit system, the function of money as a means of payment predominates) implies a more rapid circulation of the same quantity of money.

A repeated turnover of commercial capital, however, never connotes more than repeated buying and selling; while a repeated turnover of industrial capital connotes the periodicity and renovation of the entire reproduction process (which includes the process of consumption). For merchant's capital this appears merely as an external condition. Industrial capital must continually bring commodities to the market and withdraw them from it, in order that rapid turnover of merchant's capital may remain possible. If the process of reproduction is slow, then so is the turnover of merchant's capital. True, merchant's capital promotes the turnover of productive capital, but only in so far as it shortens its time of circulation. It has no direct influence on the time of production, which is also a barrier to the period of turnover of industrial capital. This is the first barrier for the turnover of merchant's capital. Secondly, aside from the barrier formed by reproductive consumption, the turnover of merchant's capital is ultimately limited by the velocity and volume of the total individual consumption, since all the commodity capital which is part of the consumption fund depends on it.

However (aside from the turnovers in the world of commerce, in which one merchant always sells the same commodity to another, and this sort of circulation may appear highly prosperous in times of speculation), the merchant's capital, in the first place, curtails phase C — M for productive capital. Secondly, under the modern credit system it disposes of a large portion of the total social money capital, so that it can repeat its purchases even before it has definitely sold what has previously been purchased. And it is immaterial in this case, whether our merchant sells directly to the ultimate consumer, or there are a dozen other intermediate merchants between them. Owing to the immense elasticity of the reproduction process, which may always be pushed beyond any given bounds, it does not encounter any obstacle in production itself, or at best a very elastic one. Aside from the separation of C — M and M — C, which follows from the nature of the commodities, a fictitious demand is then created. In spite of its independent status, the movement of merchant's capital is never more than the movement of industrial capital within the sphere of circulation. But by virtue of its independent status it moves, within certain limits, independently of the bounds of the reproduction process and thereby even drives the latter beyond its bounds. This internal dependence and external independence push merchant's capital to a point where the internal connection is violently restored through a crisis.

Hence the phenomenon that crises do not come to the surface, do not break out, in the retail business first, which deals with direct consumption, but in the spheres of wholesale trade, and of banking, which places the money capital of society at the disposal of the former.

The manufacturer may actually sell to the exporter, and the exporter, in his turn, to his foreign customer; the importer may sell his raw materials to the manufacturer, and the latter may sell his products to the wholesale merchant, etc. But at some particular imperceptible point the goods lie unsold, or else, again, all producers and middlemen may gradually become overstocked. Consumption is then generally at its highest, either because one industrial capitalist sets a succession of others in motion; or because the labourers employed by them are fully employed and have more to spend than usual. The capitalists' expenditures increase together with their growing income. Besides, as we have seen (Book II, Part III), continuous circulation takes place between constant capital and constant capital (even regardless of accelerated accumulation). It is at first independent of individual consumption because it never enters the latter. But this consumption definitely limits it nevertheless, since constant capital is never produced for its own sake but solely because more of it is needed in spheres of production whose products go into individual consumption. However, this may go on undisturbed for some time, stimulated by prospective demand, and in such

branches, therefore, the business of merchants and industrialists goes briskly forth. The crisis occurs when the returns of merchants who sell in distant markets (or whose supplies have also accumulated on the home market) become so slow and meagre that the banks press for payment, or promissory notes for purchased commodities become due before the latter have been resold. Then forced sales take place, sales in order to meet payments. Then comes the crash, which brings the illusory prosperity to an abrupt end.

But the superficiality and meaninglessness of the turnover of merchant's capital are still greater, because the turnover of one and the same merchant's capital may simultaneously or successively promote the turnovers of several productive capitals.

The turnover of merchant's capital does not just promote the turnovers of several industrial capitals, it can also expedite the opposite phases of the metamorphosis of commodity capital. For instance, the merchant buys linen from the manufacturer and sells it to the bleacher. In this case, therefore the turnover of the same merchant's capital — in fact, the same C — M, a realisation of the linen — represents two opposite phases for two different industrial capitals. Inasmuch as the merchant sells for productive consumption, his C — M is always M — C for one industrial capitalist, and his M — C always C — M for another industrial capitalist.

If we leave out K, the circulation costs, as we do in this chapter, if, in other words, we leave aside that portion of capital which the merchant advances along with the money required to purchase commodities, it follows that we also omit ΔK, the additional profit made on this additional capital. This is thus the strictly logical and mathematically correct mode of analysis if we want to see how profit and turnover of merchant's capital affect prices.

If the price of production of 1 lb. of sugar were £1, the merchant could buy 100 lbs. of sugar with £100. If he buys and sells this quantity in the course of the year, and if the average annual rate of profit is 15%, he would add £15 to the £100, and 3s. to £1, the price of production of 1 lb. of sugar. That is, he would sell 1 lb. of sugar at £1.3s. But if the price of production of 1 lb. of sugar should fall to 1s., the merchant could buy 2,000 lbs. of sugar with £100, and sell the sugar at 1s. 1 4/5d. per lb. The annual profit on capital invested in the sugar business would still be £15 on each £100. But the merchant has to sell 100 lbs. in the first case, and 2,000 lbs. in the second. The high or low level of the price of production has nothing to do with the rate of profit. But it would greatly and decisively affect that aliquot part of the selling price of each lb. of sugar, which resolves itself in mercantile profit, i.e., the addition to the price which the merchant makes on a certain quantity of commodities or products. If the price of production of a commodity is small, so, too, the amount the merchant advances in its purchase price, i.e., for a certain quantity of it. Hence, with a given rate of

profit, the amount of profit he makes on this quantity of cheap commodities is small as well. Or, what amounts to the same, he can then buy with a certain amount of capital, say, 100, a larger quantity of these cheap commodities, and the total profit of 15, which he makes per 100, breaks up into small fractions over each individual piece or portion belonging to this mass of commodities. If the opposite takes place, then the reverse is true. This depends entirely on the greater or smaller productivity of the industrial capital in whose products he trades. If we except the cases in which the merchant is a monopolist and simultaneously monopolises production, as did the Dutch East India Company in its day, nothing can be more ridiculous than the current idea that it depends on the merchant whether he sells many commodities at a small profit or few commodities at a large profit on each individual piece of the commodities. The two limits of his selling price are: on the one hand, the price of production of the commodities, over which he has no control; on the other hand, the average rate of profit, over which he has just as little control. The only thing up to him to decide is whether he wants to deal in dear or in cheap commodities, and even here the size of his available capital and other circumstances also have their effect. Therefore, it depends wholly on the degree of development of the capitalist mode of production, not on the merchant's goodwill, what course he shall follow [...]

The greater the number of turnovers of an industrial capital under conditions described in Book II, Part II, the greater the mass of profit it creates. True, through the formation of a general rate of profit, the total profit is distributed among the different capitals not in proportion to their actual part in its production, but in proportion to the aliquot part they make up of the total capital, i.e., in proportion to their magnitude. But this does not alter the essence of the matter. The greater the number of turnovers of the total industrial capital, the greater the mass of profits, the mass of annually produced surplus value, and, therefore, other circumstances remaining unchanged, the rate of profit. It is different with merchant's capital. The rate of profit is a given magnitude with respect to it, determined on the one hand by the mass of profit produced by industrial capital, and on the other by the relative magnitude of the total merchant's capital, by its quantitative relation to the sum of capital advanced in the processes of production and circulation. The number of its turnovers does, indeed, decisively affect its relation to the total capital, or the relative magnitude of merchant's capital required for the circulation, for it is evident that the absolute magnitude of the required merchant's capital and the velocity of its turnovers stand in inverse proportion. But, all other conditions remaining equal, the relative magnitude of merchant's capital, or the part it makes up of the total capital, is determined by its absolute magnitude. If the total capital is 10,000, and the merchant's capital 1/10 of that sum, it is = 1,000; if the total capital is 1,000, then 1/10 of

it = 100. The absolute magnitude of merchant's capital varies, depending on the magnitude of the total capital, although its relative magnitude remains the same. But here we assume that its relative magnitude, say, 1/10 of the total capital, is given. This relative magnitude, however, is again determined by the turnover. If it is turned over rapidly, its absolute magnitude, for example, will = £1,000 in the first case, = 100 in the second, and hence its relative magnitude = 1/10. With a slower turnover its absolute magnitude is, say, = 2,000 in the first case, and = 200 in the second. Its relative magnitude will then have increased from 1/10 to 1/5 of the total capital. Circumstances which reduce the average turnover of merchant's capital, like the development of means of transportation, for instance, reduce *pro tanto* the absolute magnitude of merchant's capital, and thereby increase the general rate of profit. If the opposite takes place, then the reverse is true [...]

But, assuming the relative magnitude of merchant's capital to total capital to be given, the difference of turnovers in the various branches of commerce does not affect either the magnitude of the total profit falling to the share of merchant's capital, or the general rate of profit. The merchant's profit is not determined by the mass of commodity capital turned over by him, but by the dimensions of the money capital advanced by him to promote this turnover. If the general annual rate of profit is 15%, and the merchant advances £100, which he turns over once a year, he will sell his commodities at 115. If his capital turns over five times a year, he will sell a commodity capital he bought at 100 at 103 five times a year, hence in a year a commodity capital of 500 at 515. This gives the same annual profit of 15 on his advanced capital of 100. If this were not so, merchant's capital would yield a much higher profit, proportionate to the number of its turnovers, than industrial capital, which would be in conflict with the law of the general rate of profit.

Hence, the number of turnovers of merchant's capital in the various branches of commerce has a direct influence on the mercantile prices of commodities. The amount added to the mercantile price, the aliquot part of mercantile profit of a given capital, which falls upon the price of production of a commodity, is in inverse proportion to the number of turnovers, or the velocity of turnover, of merchants' capitals in the various lines of commerce. If a certain merchant's capital is turned over five times a year, it will add to a commodity capital of equal value but 1/5 of what another merchant's capital, which turns over just once a year, adds to a commodity capital of equal value.

The modification of selling prices by the average period of turnover of capitals in different branches of commerce amounts to this: The same mass of profits, determined for any given magnitude of merchant's capital by the general annual rate of profit, hence determined independently of the specific character of the commercial operations of this capital, is differently

distributed — proportionately to the rate of turnover — over masses of commodities of equal value, so that, for instance, if a merchant's capital is turned over five times a year, 15/5 = 3% if once a year, 15%, is added to the price of the commodities.

The same percentage of commercial profit in different branches of commerce, therefore, increases the selling prices of commodities by quite different percentages of their values, all depending on their periods of turnover.

On the other hand, in the case of industrial capital, the period of turnover does not in any way affect the magnitude of the value of individual commodities produced, although it does affect the mass of values and surplus values produced in a given time by a given capital, because it affects the mass of exploited labour. This is concealed, to be sure, and seems to be otherwise as soon as one turns to prices of production. But this is due solely to the fact that, according to previously analysed laws, the prices of production of various commodities deviate from their values. If we look upon the process of production as a whole, and upon the mass of commodities produced by the total industrial capital, we shall at once find the general law vindicated [...]

## CHAPTER 19: MONEY-DEALING CAPITAL

The purely technical movements performed by money in the circulation process of industrial, and, as we may now add, of commercial capital (since it takes over a part of the circulation movement of industrial capital as its own, peculiar movement), if individualised as a function of some particular capital performing just these, and only these, operations as its specific operations, convert this capital into money-dealing capital. A portion of industrial capital, and, more precisely, also of commercial capital, not only obtains all the time in the form of money, as money capital in general, but as money capital engaged precisely in these technical functions. A definite part of the total capital dissociates itself from the rest and stands apart in the form of money capital, whose capitalist function consists exclusively in performing these operations for the entire class of industrial and commercial capitalists. As in the case of commercial capital, a portion of industrial capital engaged in the circulation process in the form of money capital separates from the rest and performs these operations of the reproduction process for all the other capital. The movements of this money capital are, therefore, once more merely movements of an individualised part of industrial capital engaged in the reproduction process [...]

This purely technical operation of disbursing and receiving money is in itself labour which, as long as the money serves as a means of payment, necessitates drawing up payment balances and acts of balancing accounts.

This labour is a cost of circulation, i.e., not labour creating value. It is shortened in being carried out by a special section of agents, or capitalists, for the rest of the capitalist class.

A definite portion of the capital must be on hand constantly as a hoard, as potential money capital — a reserve of means of purchase, a reserve of means of payment, and idle capital in the form of money waiting to be put to work. Another portion streams back continually in this form. Aside from collecting, paying, and bookkeeping, this entails safekeeping the hoard, which is an operation all in itself. It is, indeed, a continuous conversion of the hoard into means of circulation and means of payment, and its restoration by means of money secured through sales and from payments due. This constant movement of the part of capital existing as money, dissociated from the function of capital itself, this purely technical function, causes its own labour and expense, classified as costs of circulation.

The division of labour brings it about that these technical operations, dependent upon the functions of capital, should be performed for the entire capitalist class as much as possible by a special section of agents or capitalists as their exclusive function — or that these operations should be concentrated in their hands. We have here, as in merchant's capital, division of labour in a two-fold sense. It becomes a specialised business, and because performed as a specialised business for the money-mechanism of the whole class, it is concentrated and conducted on a large scale. A further division of labour takes place within it, both through division into various independent branches, and through segmentation of work within these branches (large offices, numerous book-keepers and cashiers, and far-reaching division of labour). Paying and receiving money, settling accounts, keeping current accounts, storing money, etc. — all this, dissociated from the acts necessitating these technical operations, makes money-dealing capital of the capital advanced for these functions.

The various operations, whose individualisation into specific businesses gives rise to the money trade, spring from the different purposes of money itself and from its functions, which capital in its money form must therefore likewise carry out.

I have pointed out earlier that finance developed originally from the exchange of products between different communities [(*Zur Kritik der politischen Oekonomie*, S. 27)].

Trading in money, commerce in the money commodity, first developed therefore out of international commerce. Ever since different national coins have existed merchants buying in foreign countries have had to exchange their national coins for local coins, and vice versa, or to exchange different coins for uncoined pure silver or gold — the world money. Hence the exchange business which is to be regarded as one of the natural

foundations of modern finance. Out of it developed banks of exchange, in which silver (or gold) serves as world money — now called bank money or commercial money — as distinct from currency. Exchange transactions, in the sense of mere notes of payment to travellers from a money changer in one country to a changer in another country, developed back in Rome and Greece out of the actual money-changing [...]

National money discards its local character in the capacity of universal money; one national currency is expressed in another, and thus all of them are finally reduced to their content of gold or silver, while the latter, being the two commodities circulating as world money, are simultaneously reduced to their reciprocal value-ratio, which changes continually. It is this intermediate operation which the money trader makes his special occupation. Money-changing and the bullion trade are thus the original forms of the money trade, and spring from the two-fold functions of money — as national money and world money.

The capitalist process of production, just as commerce in general, even under pre-capitalist methods, imply:

*First*, the accumulation of money as a hoard, i.e., here as that part of capital which must always be on hand in the form of money as a reserve fund of means of payment and purchase. This is the first form of a hoard, as it reappears under the capitalist mode of production, and as it appears generally with the development of merchant's capital, at least for the purposes of this capital. Both remarks apply to national, as well as international, circulation. The hoard is in continuous flux, pours ceaselessly into circulation, and returns ceaselessly from it. The second form of a hoard is that of idle, temporarily unemployed capital in the shape of money, including newly accumulated and not yet invested money capital. The functions entailed by this formation of a hoard are primarily those of safekeeping, bookkeeping, etc.

*Secondly*, however, this involves outlays of money for purchases, collecting money from sales, making and receiving payments, balancing payments, etc. The money dealer performs all these services at first as a simple cashier of the merchants and industrial capitalists.

The money trade becomes fully developed, even in its first stages, as soon as its ordinary functions are supplemented by lending and borrowing and by credit. Of this more in the next part, which deals with interest-bearing capital [...]

In discussing money and the way its movements and forms develop out of simple commodity circulation, we saw (Buch I, Kap. III) that the movements of the mass of money circulating as means of purchase and payment depend on the metamorphosis of commodities, on the volume and velocity of this metamorphosis, which we now know to be but a phase in the

entire process of reproduction. As for securing the money materials — gold and silver — from their sources of production, this resolves itself into a direct exchange of commodities, an exchange of gold and silver as commodities for other commodities. Hence, it is itself as much a phase of the exchange of commodities as the securing of iron or other metals. However, so far as the movement of precious metals on the world market is concerned (we here leave aside movements expressing the transfer of capital by loans — a type of transfer which also obtains in the shape of commodity capital), it is quite as much determined by the international exchange of commodities as the movement of money as a national means of purchase and payment is determined by the exchange of commodities in the home market. The inflow and outflow of precious metals from one national sphere of circulation to another, inasmuch as this is caused merely by a depreciation of the national currency, or by a double standard, are alien to money circulation as such and merely represent corrections of deviations brought about arbitrarily by state decrees. Finally, as concerns the formations of hoards which constitute reserve funds for means of purchase and payment, be it for home or foreign trade, and which also merely represent a form of temporarily idle capital, they are in both cases necessary precipitates of the circulation process.

If the entire circulation of money is in volume, form and movement purely a result of commodity circulation, which, in its turn, from the capitalist point of view, is only the circulation process of capital (also embracing the exchange of capital for revenue, and of revenue for revenue, so far as outlay of revenue is effected through retail trade), it is self-evident that dealing in money does not merely promote the circulation of money, a mere result and phenomenon of commodity circulation. This circulation of money itself, a phase in commodity circulation, is taken for granted in money-dealing. What the latter promotes is merely the technical operations of money circulation which it concentrates, shortens, and simplifies. Dealing in money does not form the hoards. It provides the technical means by which the formation of hoards may, so far as it is voluntary (hence, not an expression of unemployed capital or of disturbances in the reproduction process), be reduced to its economic minimum because, if managed for the capitalist class as a whole, the reserve funds of means of purchase and payment need not be as large as they would have to be if each capitalist were to manage his own [...]

Money-dealing in its pure form, which we consider here, i.e., set apart from the credit system, is thus concerned only with the technique of a certain phase of commodity circulation, namely, that of money circulation and the different functions of money arising in its circulation.

This substantially distinguishes dealing in money from the dealing in commodities, which promotes the metamorphosis of commodities and their

exchange, or even gives this process of the commodity capital the appearance of a process of a capital set apart from industrial capital. While, therefore, commercial capital has its own form of circulation, M — C — M, in which the commodity changes hands twice and thus provides a reflux of money, as distinct from C — M — C, in which money changes hands twice and thus promotes commodity exchange, there is no such special form in the case of money-dealing capital.

In so far as money capital is advanced by a separate class of capitalists in this technical promotion of money circulation — a capital which on a reduced scale represents the additional capital the merchants and industrial capitalists would otherwise have to advance themselves for these purposes — the general form of capital, M — M', occurs here as well. By advancing M, the advancing capitalist secures M + ΔM. But promotion of M — M' does not here concern the material, but only the technical, processes of the metamorphosis.

It is evident that the mass of money capital with which the money dealers operate is the money capital of merchants and industrial capitalists in the process of circulation, and that the money dealers' operations are actually operations of merchants and industrial capitalists, in which they act as middlemen.

It is equally evident that the money dealers' profit is nothing but a deduction from the surplus value, since they operate with already realised values [...]

## CHAPTER 20: HISTORICAL FACTS ABOUT MERCHANT'S CAPITAL

[...] Hitherto we have considered merchant's capital merely from the standpoint, and within the limits, of the capitalist mode of production. However, not commerce alone, but also **merchant's capital, is older than the capitalist mode of production, is, in fact, historically the oldest free state of existence of capital.**

Since merchant's capital is penned in the sphere of circulation, and since its function consists exclusively of promoting the exchange of commodities, it requires no other conditions for its existence — aside from the undeveloped forms arising from direct barter — outside those necessary for the simple circulation of commodities and money. Or rather, the latter is the condition of its existence. No matter what the basis on which products are produced, which are thrown into circulation as commodities — whether the basis of the primitive community, of slave production, of small peasant and petty bourgeois, or the capitalist basis, the character of products as commodities is not altered, and as commodities they must pass through the

process of exchange and its attendant changes of form [...]

The extent to which products enter trade and go through the merchants' hands depends on the mode of production, and reaches its maximum in the ultimate development of capitalist production, where the product is produced solely as a commodity, and not as a direct means of subsistence. On the other hand, on the basis of every mode of production, trade facilitates the production of surplus products destined for exchange, in order to increase the enjoyments, or the wealth, of the producers (here meant are the owners of the products). Hence, commerce imparts to production a character directed more and more towards exchange value.

The metamorphosis of commodities, their movement, consists 1) materially, of the exchange of different commodities for one another, and 2) formally, of the conversion of commodities into money by sale, and of money into commodities by purchase. And the function of merchant's capital resolves itself into these very acts of buying and selling commodities. It therefore merely promotes the exchange of commodities; yet this exchange is not to be conceived at the outset as a bare exchange of commodities between direct producers [...]

But whatever the social organisation of the spheres of production whose commodity exchange the merchant promotes, his wealth exists always in the form of money, and his money always serves as capital. Its form is always M — C — M'. Money, the independent form of exchange value, is the point of departure, and increasing the exchange value an end in itself [...]

The less developed the production, the more wealth in money is concentrated in the hands of merchants or appears in the specific form of merchants' wealth.

Within the capitalist mode of production — i.e., as soon as capital has established its sway over production and imparted to it a wholly changed and *specific* form — merchant's capital appears merely as a capital with a specific function. In all previous modes of production, and all the more, wherever production ministers to the immediate wants of the producer, merchant's capital appears to perform the function *par excellence* of capital.

There is, therefore, not the least difficulty in understanding why merchant's capital appears as the historical form of capital long before capital established its own domination over production. Its existence and development to a certain level are in themselves historical premises for the development of capitalist production 1) as premises for the concentration of money wealth, and 2) because the capitalist mode of production presupposes production for trade, selling on a large scale, and not to the individual customer, hence also a merchant who does not buy to satisfy his personal wants but concentrates the purchases of many buyers in his one purchase. On the other hand, all development of merchant's capital tends to give production

more and more the character of production for exchange value and to turn products more and more into commodities. Yet its development, as we shall presently see, is incapable by itself of promoting and explaining the transition from one mode of production to another.

Within capitalist production merchant's capital is reduced from its former independent existence to a special phase in the investment of capital, and the levelling of profits reduces its rate of profit to the general average. It functions only as an agent of productive capital. The special social conditions that take shape with the development of merchant's capital, are here no longer paramount. On the contrary, wherever merchant's capital still predominates we find backward conditions [...]

The law that the independent development of merchant's capital is inversely proportional to the degree of development of capitalist production is particularly evident in the history of the carrying trade, as among the Venetians, Genoese, Dutch, etc., where the principal gains were not thus made by exporting domestic products, but by promoting the exchange of products of commercially and otherwise economically undeveloped societies, and by exploiting both producing countries. Here, merchant's capital is in its pure form, separated from the extremes — the spheres of production between which it mediates [...]

In the pre-capitalist stages of society commerce ruled industry. In modern society the reverse is true. Of course, commerce will have more or less of a countereffect on the communities between which it is carried on. It will subordinate production more and more to exchange value by making luxuries and subsistence more dependent on sale than on the immediate use of the products. Thereby it dissolves the old relationships. It multiplies money circulation. It encompasses no longer merely the surplus of production, but bites deeper and deeper into the latter, and makes entire branches of production dependent upon it. Nevertheless this disintegrating effect depends very much on the nature of the producing community.

So long as merchant's capital promotes the exchange of products between undeveloped societies, commercial profit not only appears as outbargaining and cheating, but also largely originates from them. Aside from the fact that it exploits the difference between the prices of production of various countries (and in this respect it tends to level and fix the values of commodities), those modes of production bring it about that merchant's capital appropriates an overwhelming portion of the surplus product partly as a mediator between communities which still substantially produce for use value, and for whose economic organisation the sale of the portion of their product entering circulation, or for that matter any sale of products at their value, is of secondary importance; and partly, because under those earlier modes of production the principal owners of the surplus product with whom

the merchant dealt, namely, the slave-owner, the feudal lord, and the state (for instance, the oriental despot) represent the consuming wealth and luxury which the merchant seeks to trap, as Adam Smith correctly scented in the passage on feudal times quoted earlier. Merchant's capital, when it holds a position of dominance, stands everywhere for a system of robbery, so that its development among the trading nations of old and modern times is always directly connected with plundering, piracy, kidnapping slaves, and colonial conquest; as in Carthage, Rome, and later among the Venetians, Portuguese, Dutch, etc.

The development of commerce and merchant's capital gives rise everywhere to the tendency towards production of exchange values, increases its volume, multiplies it, makes it cosmopolitan, and develops money into world money. Commerce, therefore, has a more or less dissolving influence everywhere on the producing organisation, which it finds at hand and whose different forms are mainly carried on with a view to use value. To what extent it brings about a dissolution of the old mode of production depends on its solidity and internal structure. And whither this process of dissolution will lead, in other words, what new mode of production will replace the old, does not depend on commerce, but on the character of the old mode of production itself. In the ancient world the effect of commerce and the development of merchant's capital always resulted in a slave economy; depending on the point of departure, only in the transformation of patriarchal slave system devoted to the production of immediate means of subsistence into one devoted to the production of surplus value. However, in the modern world, it results in the capitalist mode of production. It follows therefrom that these results spring in themselves from circumstances other than the development of merchant's capital.

It is in the nature of things that as soon as town industry as such separates from agricultural industry, its products are from the outset commodities and thus require the mediation of commerce for their sale. The leaning of commerce towards the development of towns, and, on the other hand, the dependence of towns upon commerce, are so far natural. However, it depends on altogether different circumstances to what measure industrial development will go hand in hand with this development. Ancient Rome, in its later republican days, developed merchant's capital to a higher degree than ever before in the ancient world, without showing any progress in the development of crafts, while in Corinth and other Grecian towns in Europe and Asia Minor the development of commerce was accompanied by highly developed crafts. On the other hand, quite contrary to the growth of towns and attendant conditions, the trading spirit and the development of merchant's capital occur frequently among unsettled nomadic peoples.

There is no doubt — and it is precisely this fact which has led to

wholly erroneous conceptions — that in the 16th and 17th centuries the great revolutions, which took place in commerce with the geographical discoveries and speeded the development of merchant's capital, constitute one of the principal elements in furthering the transition from feudal to capitalist mode of production. The sudden expansion of the world market, the multiplication of circulating commodities, the competitive zeal of the European nations to possess themselves of the products of Asia and the treasures of America, and the colonial system — all contributed materially toward destroying the feudal fetters on production. However, in its first period — the manufacturing period — the modern mode of production developed only where the conditions for it had taken shape within the Middle Ages. Compare, for instance, Holland with Portugal. And when in the 16th, and partially still in the 17th, century the sudden expansion of commerce and emergence of a new world market overwhelmingly contributed to the fall of the old mode of production and the rise of capitalist production, this was accomplished conversely on the basis of the already existing capitalist mode of production. The world market itself forms the basis for this mode of production. On the other hand, the immanent necessity of this mode of production to produce on an ever-enlarged scale tends to extend the world market continually, so that it is not commerce in this case which revolutionises industry, but industry which constantly revolutionises commerce. Commercial supremacy itself is now linked with the prevalence to a greater or lesser degree of conditions for a large industry. Compare, for instance, England and Holland. The history of the decline of Holland as the ruling trading nation is the history of the subordination of merchant's capital to industrial capital [...]

The transition from the feudal mode of production is two-fold. The producer becomes merchant and capitalist, in contrast to the natural agricultural economy and the guild-bound handicrafts of the medieval urban industries. This is the really revolutionising path. Or else, the merchant establishes direct sway over production. However much this serves historically as a stepping-stone — witness the English 17th-century clothier, who brings the weavers, independent as they are, under his control by selling their wool to them and buying their cloth — it cannot by itself contribute to the overthrow of the old mode of production, but tends rather to preserve and retain it as its precondition. The manufacturer in the French silk industry and in the English hosiery and lace industries, for example, was thus mostly but nominally a manufacturer until the middle of the 19th century. In point of fact, he was merely a merchant, who let the weavers carry on in their old unorganised way and exerted only a merchant's control, for that was for whom they really worked. This system presents everywhere an obstacle to the real capitalist mode of production and goes under with its development. Without revolutionising the mode of production, it only worsens the

condition of the direct producers, turns them into mere wage workers and proletarians under conditions worse than those under the immediate control of capital, and appropriates their surplus labour on the basis of the old mode of production. The same conditions exist in somewhat modified form in part of the London handicraft furniture industry [...]

There is, consequently, a three-fold transition. *First*, the merchant becomes directly an industrial capitalist. This is true in crafts based on trade, especially crafts producing luxuries and imported by merchants together with the raw materials and labourers from foreign lands, as in Italy from Constantinople in the 15th century. *Second*, the merchant turns the small masters into his middlemen, or buys directly from the independent producer, leaving him nominally independent and his mode of production unchanged. *Third*, the industrialist becomes merchant and produces directly for the wholesale market [...]

The first theoretical treatment of the modern mode of production — the mercantile system — proceeded necessarily from the superficial phenomena of the circulation process as individualised in the movements of merchant's capital, and therefore grasped only the appearance of matters. Partly because merchant's capital is the first free state of existence of capital in general. And partly because of the overwhelming influence which it exerted during the first revolutionising period of feudal production — the genesis of modern production. The real science of modern economy only begins when the theoretical analysis passes from the process of circulation to the process of production. Interest-bearing capital is, indeed, likewise a very old form of capital. But we shall see later why mercantilism does not take it as its point of departure, but rather carries on a polemic against it.

## PART 5: DIVISION OF PROFIT INTO INTEREST AND PROFIT OF ENTERPRISE. INTEREST-BEARING CAPITAL

### CHAPTER 21: INTEREST-BEARING CAPITAL

In our first discussion of the general, or average, rate of profit (Part II of this book) we did not have this rate before us in its complete form, the equalisation of profit appearing only as equalisation between industrial capitals invested in different spheres. This was supplemented in the preceding part, which dealt with the participation of merchant's capital in this equalisation, and also commercial profit. The general rate of profit and the average profit now appeared in narrower limits than before. It should be remembered in the course of our analysis that in any future reference to the general rate of profit or to average profit we mean this latter connotation, hence only the final form of average rate. And since this rate is the same for

mercantile, as well as industrial, capital, it is no longer necessary, so far as this average profit is concerned, to make a distinction between industrial and commercial profit. Whether industrially invested in the sphere of production, or commercially in the sphere of circulation, capital yields the same average annual profit pro rata to its magnitude.

Money — here taken as the independent expression of a certain amount of value existing either actually as money or as commodities — may be converted into capital on the basis of capitalist production, and may thereby be transformed from a given value to a self-expanding, or increasing, value. It produces profit, i.e., it enables the capitalist to extract a certain quantity of unpaid labour, surplus product and surplus value from the labourers, and to appropriate it. In this way, aside from its use value as money, it acquires an additional use value, namely that of serving as capital. Its use value then consists precisely in the profit it produces when converted into capital. In this capacity of potential capital, as a means of producing profit, it becomes a commodity, but a commodity *sui generis*. Or, what amounts to the same, capital as capital becomes a commodity.

Suppose the annual average rate of profit is 20%. In that case a machine valued at £100, employed as capital under average conditions and an average amount of intelligence and purposive effort, would yield a profit of £20. A man in possession of £100, therefore, possesses the power to make £120 out of £100, or to produce a profit of £20. He possesses a potential capital of £100. If he gives these £100 to another for one year, so the latter may use them as real capital, he gives him the power to produce a profit of £20 — a surplus value which costs this other nothing, and for which he pays no equivalent. If this other should pay, say, £5 at the close of the year to the owner of the £100 out of the profit produced, he would thereby pay the use value of the £100 — the use value of its function as capital, the function of producing a profit of £20. The part of the profit paid to the owner is called interest, which is just another name, or special term, for a part of the profit given up by capital in the process of functioning to the owner of the capital, instead of putting it into its own pocket [...]

Let us first consider the singular circulation of interest-bearing capital. We shall then secondly have to analyse the peculiar manner in which it is sold as a commodity, namely loaned instead of relinquished once and for all.

The point of departure is the money which A advances to B [...] In B's possession the money is actually converted into capital, passes through M — C — M' and returns to A as M', as M+ΔM, where ΔM represents the interest [...] The movement, therefore, is M — M — C — M' — M'. What appears duplicated here, is 1) the outlay of money as capital, and 2) its reflux as realised capital, as M' or M+ΔM.

[... In] interest-bearing capital the first time M changes hands is by no means a phase either of the commodity metamorphosis, or of reproduction of capital. It first becomes one when it is expended a second time, in the hands of the active capitalist who carries on trade with it, or transforms it into productive capital. M's first change of hands does not express anything here, beyond its transfer from A to B — a transfer which usually takes place under certain legal forms and stipulations.

This double outlay of money as capital, of which the first is merely a transfer from A to B, is matched by its double reflux. As M', or M + ΔM, it flows back out of the process to B, the person acting as capitalist. The latter then transfers it back to A, but together with a part of the profit, as realised capital, as M + ΔM, in which ΔM is not the entire profit, but only a portion of the profit — the interest. It flows back to B only as what he had expended, as functioning capital, but as the property of A. To make its reflux complete, B must consequently return it to A. But in addition to the capital, B must also turn over to A a portion of the profit, a part which goes under the name of interest, which he had made with this capital since A had given him the money only as a capital, i.e., as value which is not only preserved in its movement, but also creates surplus value for its owner. It remains in B's hands only so long as it is functioning capital. And with its reflux — on the stipulated date — it ceases to function as capital. When no longer acting as capital, however, it must again be returned to A, who had never ceased being its legal owner [...]

The first expenditure, which transfers the capital from the lender to the borrower, is a legal transaction which has nothing to do with the actual process of reproduction. It is merely a prelude to this process. The return payment, which again transfers the capital that has flowed back from the borrower to the lender is another legal transaction, a supplement of the first. One introduces the actual process, the other is an act supplementary to this process. Point of departure and point of return, the giving away and the recovery of the loaned capital, thus appear as arbitrary movements promoted by legal transactions, which take place before and after the actual movement of capital and have nothing to do with it as such. It would have been all the same as concerns this actual movement if the capital had from the first belonged to the industrial capitalist and had returned to him, therefore, as his own [...]

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We have so far only considered the movements of loaned *capital* between its owner and the industrial capitalist. Now we must inquire into *interest*.

The lender expends his money as capital; the amount of value, which

he relinquishes to another, is capital, and consequently returns to him. But the mere return of it would not be the reflux of the loaned sum of value as capital, but merely the return of a loaned sum of value. To return as capital, the advanced sum of value must not only be preserved in the movement but must also expand, must increase in value, i.e., must return with a surplus value, as M + ΔM, the latter being interest or a portion of the average profit, which does not remain in the hands of the operating capitalist, but falls to the share of the money capitalist [...]

What is alienated in an ordinary sale? Not the value of the sold commodity, for this merely changes its form. The value exists ideally in a commodity as its price before it actually passes as money into the hands of the seller. The same value and the same amount of value merely change their form. In the one instance they exist in commodity form, in the other in the form of money. What is really alienated by the seller, and, therefore, passes into the individual or productive consumption of the buyer, is the use value of the commodity — the commodity as a use value.

What, now, is the use value which the money capitalist gives up for the period of the loan and relinquishes to the productive capitalist — the borrower? It is the use value which the money acquires by being capable of becoming capital, of performing the functions of capital, and creating a definite surplus value, the average profit (whatever is above or below it appears here as a mere accident) during its process, besides preserving its original magnitude of value. In the case of the other commodities the use value is ultimately consumed. Their substance disappears, and with it their value. In contrast, the commodity capital is peculiar in that its value and use value not only remain intact but also increase, through consumption of its use value.

It is this use value of money as capital — this faculty of producing an average profit — which the money capitalist relinquishes to the industrial capitalist for the period, during which he places the loaned capital at the latter's disposal.

Money thus loaned has in this respect a certain similarity with labour power in its relation to the industrial capitalist. With the difference that the latter pays for the value of labour power, whereas he simply pays back the value of the loaned capital. The use value of labour power for the industrial capitalist is that labour power creates more value (profit) in its consumption than it possesses itself, and than it costs. This additional value is use value for the industrial capitalist. And in like manner the use value of loaned capital appears as its faculty of begetting and increasing value [...] The use value of the loaned money lies in its being able to serve as capital and, as such, to produce the average profit under average conditions [...]

What the buyer of an ordinary commodity buys is its use value; what

he pays for is its value. What the borrower of money buys is likewise its use value as capital; but what does he pay for? Surely not its price, or value, as in the case of ordinary commodities. No change of form occurs in the value passing between borrower and lender, as occurs between buyer and seller when it exists in one instance in the form of money, and in another in the form of a commodity. The sameness of the alienated and returned value is revealed here in an entirely different way. The sum of value, i.e., the money, is given away without an equivalent, and is returned after a certain period. The lender always remains the owner of the same value, even after it passes from his hands into those of the borrower. In an ordinary exchange of commodities money always comes from the buyer's side; but in a loan it comes from the side of the seller. He is the one who gives away money for a certain period, and the buyer of capital is the one who receives it as a commodity. But this is only possible as long as the money acts as capital and is therefore advanced. The borrower borrows money as capital, as a value producing more value. But at the moment when it is advanced it is still only potential capital, like any other capital at its starting-point, the moment it is advanced. It is only through its employment that it expands its value and realises itself as capital. However, it has to be returned by the borrower as *realised* capital, hence as value plus surplus value (interest). And the latter can only be a portion of the realised profit. Only a portion, not all of it. For the use value of the loaned capital to the borrower consists in producing profit for him. Otherwise there would not have been any alienation of use value on the lender's part. On the other hand, not all the profit can fall to the borrower's share. Otherwise he would pay nothing for the alienated use value, and would return the advanced money to the lender as ordinary money, not as capital, as realised capital, for it is realised capital only as $M + \Delta M$.

Both of them, lender and borrower, expend the same sum of money as capital. But it is only in the hands of the latter that it serves as capital. The profit is not doubled by the double existence of the same sum of money as capital for two persons. It can serve as capital for both of them only by dividing the profit. The portion which falls to the lender is called interest.

The entire transaction, as assumed, takes place between two kinds of capitalists — the money capitalist and the industrial or merchant capitalist [...]

Furthermore, capital appears as a commodity, inasmuch as the division of profit into interest and profit proper is regulated by supply and demand, that is, by competition, just as the market prices of commodities. But the difference here is just as apparent as the analogy. If supply and demand coincide, the market price of commodities corresponds to their price of production, i.e., their price then appears to be regulated by the immanent laws of capitalist production, independently of competition, since the

fluctuations of supply and demand explain nothing but deviations of market prices from prices of production. These deviations mutually balance one another, so that in the course of certain longer periods the average market prices equal the prices of production. As soon as supply and demand coincide, these forces cease to operate, i.e., compensate one another, and the general law determining prices then also comes to apply to individual cases. The market price then corresponds even in its immediate form, and not only as the average of market price movements, to the price of production, which is regulated by the immanent laws of the mode of production itself. The same applies to wages. **If supply and demand coincide, they neutralise each other's effect, and wages equal the value of labour power. But it is different with the interest on money capital. Competition does not, in this case, determine the deviations from the rule. There is rather no law of division except that enforced by competition, because, as we shall later see, no such thing as a "natural" rate of interest exists. By the natural rate of interest people merely mean the rate fixed by free competition. There are no "natural" limits for the rate of interest. Whenever competition does not merely determine the deviations and fluctuations, whenever, therefore, the neutralisation of opposing forces puts a stop to any and all determination, the thing to be determined becomes something arbitrary and lawless. More on this in the next chapter** [...]

With his usual insight into the internal connection of things, the romantic Adam Müller says (*Elemente der Staatskunst*, Berlin, 1809, Dritter Theil, S. 138);

"In determining the prices of things, time is not considered; while in determining interest, time is the principal factor".

He does not see how the time of production and the time of circulation enter into the determination of commodity prices, and how this is just what determines the rate of profit for a given period of turnover of capital, whereas interest is determined by precisely this determination of profit for a given period. His sagacity here, as elsewhere, consists in observing the clouds of dust on the surface and presumptuously declaring this dust to be something mysterious and important.

## CHAPTER 22: DIVISION OF PROFIT. RATE OF INTEREST. "NATURAL" RATE OF INTEREST

The subject of this chapter, like all the other phenomena of credit we shall come across later on, cannot be analysed here in detail. The competition between lenders and borrowers and the resultant minor fluctuations of the money market fall outside the scope of our inquiry. The circuit described by the rate of interest during the industrial cycle requires for its presentation the

analysis of this cycle itself, but this likewise cannot be given here. The same applies to the greater or lesser approximate equalisation of the rate of interest in the world market. We are here concerned with the independent form of interest-bearing capital and the individualisation of interest, as distinct from profit.

Since interest is merely a part of profit paid, according to our earlier assumption, by the industrial capitalist to the money capitalist, the maximum limit of interest is the profit itself, in which case the portion pocketed by the productive capitalist would = 0. Aside from exceptional cases, in which interest might actually be larger than profit, but then could not be paid out of the profit, one might consider as the maximum limit of interest the total profit minus the portion (to be subsequently analysed) which resolves itself into wages of superintendence. The minimum limit of interest is altogether indeterminable. It may fall to any low. Yet in that case there will always be counteracting influences to raise it again above this relative minimum [...]

Let us first assume that there is a fixed relation between the total profit and that part of it which has to be paid as interest to the money capitalist. It is then clear that the interest will rise or fall with the total profit, and the latter is determined by the general rate of profit and its fluctuations. For instance, if the average rate of profit were = 20% and the interest = ¼ of the profit, the rate of interest would = 5%; if the average rate of profit were = 16%, the rate of interest would = 4%. With the rate of profit at 20%, the rate of interest might rise to 8%, and the industrial capitalist would still make the same profit as he would at a rate of profit = 16% and a rate of interest = 4%, namely 12%. Should interest rise only to 6% or 7%, he would still keep a larger share of the profit. If the interest amounted to a constant quota of the average profit, it would follow that the higher the general rate of profit, the greater the absolute difference between the total profit and the interest, and the greater the portion of the total profit pocketed by the productive capitalist, and vice versa. Take it that interest = 1/5 of the average profit. One-fifth of 10 is 2; the difference between total profit and interest = 8. One-fifth of 20 = 4; difference = 20 - 4 = 16; 1/5 of 25 = 5; difference = 25 - 5 = 20; 1/5 of 30 = 6; difference = 30 - 6 = 24; 1/5 of 35 = 7; difference = 35 - 7 = 28. The different rates of interest of 4, 5, 6, 7% would here always represent no more than 1/5, or 20% of the total profit. If the rates of profit are different, therefore, different rates of interest may represent the same aliquot parts of the total profit, or the same percentage of the total profit. With such constant proportions of interest, the industrial profit (the difference between the total profit and the interest) would rise proportionately to the general rate of profit, and conversely.

All other conditions taken as equal, i.e., assuming the proportion between interest and total profit to be more or less constant, the functioning

capitalist is able and willing to pay a higher or lower interest directly proportional to the level of the rate of profit.

Since we have seen that the rate of profit is inversely proportional to the development of capitalist production, it follows that the higher or lower rate of interest in a country is in the same inverse proportion to the degree of industrial development, at least in so far as the difference in the rate of interest actually expresses the difference in the rates of profit. It shall later develop that this need not always be the case. In this sense it may be said that interest is regulated through profit, or, more precisely, the general rate of profit. And this mode of regulating interest applies even to its average.

In any event the average rate of profit is to be regarded as the ultimate determinant of the maximum limit of interest.

The fact that interest is to be related to average profit will be considered presently at greater length. Whenever a specified entity, such as profit, is to be divided between two parties, the matter naturally hinges above all on the magnitude of the entity which is to be divided, and this, the magnitude of the profit, is determined by its average rate. Suppose the general rate of profit, hence the magnitude of profit, for a capital of given size, say, = 100, is assumed as given. Then the variations of interest will obviously be inversely proportional to those of the part of profit remaining in the hands of the producing capitalist, working with a borrowed capital. And the circumstances determining the amount of profit to be distributed, of the value produced by unpaid labour, differ widely from those which determine its distribution between these two kinds of capitalists, and frequently produce entirely opposite effects.

If we observe the cycles in which modern industry moves — state of inactivity, mounting revival, prosperity, overproduction, crisis, stagnation, state of inactivity, etc., which fall beyond the scope of our analysis — we shall find that a low rate of interest generally corresponds to periods of prosperity or extra profit, a rise in interest separates prosperity and its reverse, and a maximum of interest up to a point of extreme usury corresponds to the period of crisis. The summer of 1843 ushered in a period of remarkable prosperity; the rate of interest, still 4½% in the spring of 1842, fell to 2% in the spring and summer of 1843; in September it fell as low as 1½% (Gilbart, I, p. 166); whereupon it rose to 8% and higher during the crisis of 1847.

It is possible, however, for low interest to go along with stagnation, and for moderately rising interest to go along with revived activity.

The rate of interest reaches its peak during crises, when money is borrowed at any cost to meet payments. Since a rise in interest implies a fall in the price of securities, this simultaneously offers a fine opportunity to people with available money capital, to acquire at ridiculously low prices

such interest-bearing securities as must, in the course of things, at least regain their average price as soon as the rate of interest falls again.

However, the rate of interest also has a tendency to fall quite independently of the fluctuations in the rate of profit. And, indeed, due to two main causes:

I. "Were we even to suppose that capital was never borrowed with any view but to productive employment, I think it very possible that interest might vary without any change in the rate of gross profits. For, as a nation advances in the career of wealth, a class of men springs up and increases more and more, who by the labours of their ancestors find themselves in the possession of funds sufficiently ample to afford a handsome maintenance from the interest alone. Very many also who during youth and middle age were actively engaged in business, retire in their latter days' to live quietly on the interest of the sums they have themselves accumulated. This class, as well as the former, has a tendency to increase with the increasing riches of the country, for those who begin with a tolerable stock are likely to make an independence sooner than they who commence with little. Thus it comes to pass, that in old and rich countries, the amount of national capital belonging to those who are unwilling to take the trouble of employing it themselves, bears a larger proportion to the whole productive stock of the society, than in newly settled and poorer districts. How much more numerous in proportion to the population is the class of *rentiers* ... in England! As the class of *rentiers* increases, so also does that of lenders of capital, for they are one and the same". (Ramsay, *An Essay on the Distribution of Wealth*, pp. 201-02.)

II. The development of the credit system and the attendant ever-growing control of industrialists and merchants over the money savings of all classes of society that is effected through the bankers, and the progressive concentration of these savings in amounts which can serve as money capital, must also depress the rate of interest. More about this later [...]

To determine the average rate of interest we must 1) calculate the average rate of interest during its variations in the major industrial cycles; and 2) find the rate of interest for investments which require long-term loans of capital.

The average rate of interest prevailing in a certain country — as distinct from the continually fluctuating market rates — cannot be determined by any law. In this sphere there is no such thing as a natural rate of interest in the sense in which economists speak of a natural rate of profit and a natural rate of wages [...]

Equating supply and demand — assuming the average rate of profit as given — means nothing. Wherever else this formula is resorted to (and this is then practically correct), it serves as a formula to find the fundamental rule (the regulating limits or limiting magnitudes) which is independent of, and

rather determines, competition; notably as a formula for those who are held captive by the practice of competition, and by its phenomena and the conceptions arising out of them, to arrive at what is again but a superficial idea of the inner connection of economic relations obtaining within competition. It is a method to pass from the variations that go with competition to the limits of these variations. This is not the case with the average rate of interest. There is no good reason why average conditions of competition, the balance between lender and borrower, should give the lender an interest rate of 3, 4, 5%, etc., or else a certain percentage of the gross profits, say 20% or 50%, on his capital. Wherever it is competition as such which determines anything, the determination is accidental, purely empirical, and only pedantry or fantasy would seek to represent this accident as a necessity. Nothing is more amusing in the reports of Parliament for 1857 and 1858 concerning bank legislation and commercial crises than to hear of "the real rate produced" as the directors of the Bank of England, London bankers, country bankers, and professional theorists chatter back and forth, never getting beyond such commonplaces as that "the price paid for the use of loanable capital should vary with the supply of such capital," that "a high rate and a low profit cannot permanently exist," and similar specious platitudes. Customs, juristic tradition, etc., have as much to do with determining the average rate of interest as competition itself, in so far as it exists not merely as an average, but rather as actual magnitude. In many law disputes, where interest has to be calculated, an average rate of interest has to be assumed as the legal rate. If we inquire further as to why the limits of a mean rate of interest cannot be deduced from general laws, we find the answer lies simply in the nature of interest. It is merely a part of the average profit. The same capital appears in two roles — as loanable capital in the lender's hands and as industrial, or commercial, capital in the hands of the functioning capitalist. But it functions just once, and produces profit just once. In the production process itself the nature of capital as loanable capital plays no role. How the two parties who have claim to it divide the profit is in itself just as purely empirical a matter belonging to the realm of accident as the distribution of percentage shares of a common profit in a business partnership. Two entirely different elements — labour power and capital — act as determinants in the division between surplus value and wages, which division essentially determines the rate of profit; these are functions of two independent variables, which limit one another; and it is their *qualitative difference* that is the source of the *quantitative division* of the produced value. We shall see later that the same occurs in the splitting of surplus value into rent and profit. Nothing of the kind occurs in the case of interest. Here the *qualitative differentiation* as we shall presently see, proceeds rather from the purely *quantitative division* of the same sum of surplus value.

It follows from the aforesaid that there is no such thing as a "natural" rate of interest. But if, unlike the general rate of profit, there is on the one hand no general law to determine the limits of the average interest, or average rate of interest as distinct from the continually fluctuating market rates of interest, because it is merely a question of dividing the gross profit between two owners of capital under different title; on the other hand, the rate of interest — be it the average or the market rate prevalent in each particular case — appears as a uniform, definite and tangible magnitude in a quite different way from the general rate of profit.

The rate of interest is similarly related to the rate of profit as the market price of a commodity is to its value. In so far as the rate of interest is determined by the rate of profit, this is always the general rate of profit and not any specific rate of profit prevailing in some particular branch of industry, and still less any extra profit which an individual capitalist may make in a particular sphere of business. It is a fact, therefore, that the general rate of profit appears as an empirical, given reality in the average rate of interest, although the latter is not a pure or reliable expression of the former [...]

As concerns the perpetually fluctuating market rate of interest, however, it exists at any moment as a fixed magnitude, just as the market price of commodities, because in the money market all loanable capital continually faces functioning capital as an aggregate mass, so that the relation between the supply of loanable capital on one side, and the demand for it on the other, decides the market level of interest at any given time. This is all the more so, the more the development, and the attendant concentration, of the credit system gives to loanable capital a general social character and throws it all at once on the money market. On the other hand, the general rate of profit is never anything more than a tendency, a movement to equalise specific rates of profit. The competition between capitalists — which is itself this movement toward equilibrium — consists here of their gradually withdrawing capital from spheres in which profit is for an appreciable length of time below average, and gradually investing capital into spheres in which profit is above average. Or it may also consist in additional capital distributing itself gradually and in varying proportions among these spheres. It is continual variation in supply and withdrawal of capital in regard to these different spheres, and never a simultaneous mass effect, as in the determination of the rate of interest [...]

In emphasising this difference between the rate of interest and the rate of profit, we still omit the following two points, which favour consolidation of the rate of interest: 1) the historical pre-existence of interest-bearing capital and the existence of a traditional general rate of interest; 2) the far greater direct influence exerted by the world market on establishing the rate of interest, irrespective of the economic conditions of a country, as compared

with its influence on the rate of profit.

The average profit does not obtain as a directly established fact, but rather is to be determined as an end result of the equalisation of opposite fluctuations. Not so with the rate of interest. It is a thing fixed daily in its general, at least local, validity — a thing which serves industrial and mercantile capitals even as a prerequisite and a factor in the calculation of their operation. It becomes the general endowment of every sum of money of £100 to yield £2, 3, 4, 5 [...]

[... The] rate of interest is regularly reported as "the price of money". It is so, because capital itself is being offered here in the form of money as a commodity. The fixation of its price is thus a fixation of its market price, as with all other commodities. The rate of interest, therefore, always appears as the general rate of interest, as so much money for so much money, as a definite quantity [...]

## CHAPTER 23: INTEREST AND PROFIT OF ENTERPRISE

**Interest, as we have seen in the two preceding chapters, appears originally, is originally, and remains in fact merely a portion of the profit, i.e., of the surplus value, which the functioning capitalist, industrialist or merchant has to pay to the owner and lender of money capital whenever he uses loaned capital instead of his own. If he employs only his own capital, no such division of profit takes place; the latter is then entirely his.** Indeed, as long as the owners of the capital employ it on their own in the reproduction process, they do not compete in determining the rate of interest. This alone shows that the category of interest — impossible without determining the rate of interest — is alien to the movements of industrial capital as such [...]

**It is indeed only the separation of capitalists into money capitalists and industrial capitalists that transforms a portion of the profit into interest, that generally creates the category of interest; and it is only the competition between these two kinds of capitalists which creates the rate of interest** [...]

[We] must dwell somewhat longer on the actual point of departure in the formation of interest; that is, we must proceed from the assumption that the money capitalist and industrial capitalist really confront one another not just as legally different persons, but as persons playing entirely different roles in the reproduction process, or as persons in whose hands the same capital really performs a two-fold and wholly different movement. The one merely loans it, the other employs it productively.

**For the productive capitalist who works on borrowed capital, the gross profit falls into two parts — the interest, which he is to pay the**

**lender, and the surplus over and above the interest, which makes up his own share of the profit. If the general rate of profit is given, this latter portion is determined by the rate of interest; and if the rate of interest is given, then by the general rate of profit.** And furthermore: however the gross profit, the actual value of the total profit, may diverge in each individual case from the average profit, the portion belonging to the functioning capitalist is determined by the interest, since this is fixed by the general rate of interest (leaving aside any special legal stipulations) and assumed to be given beforehand, before the process of production begins, hence before its result, the gross profit, is achieved. We have seen that the actual specific product of capital is surplus value, or, more precisely, profit. But for the capitalist working on borrowed capital it is not profit, but profit minus interest, that portion of profit which remains to him after paying interest. This portion of the profit, therefore, necessarily appears to him to be the product of a capital as long as it is operative; and this it is, as far as he is concerned, because he represents capital only as functioning capital. He is its personification as long as it functions, and it functions as long as it is profitably invested in industry or commerce and such operations are undertaken with it through its employer as are prescribed by the branch of industry concerned. As distinct from interest, which he has to pay to the lender out of the gross profit, the portion of profit which falls to his share necessarily assumes the form of industrial or commercial profit, or, to use a German term embracing both, the form of *Unternehmergewinn* (**profit of enterprise**). If the gross profit equals the average profit, the size of the profit of enterprise is determined exclusively by the rate of interest. If the gross profit deviates from the average profit, its difference from the average profit (after interest is deducted from both) is determined by all the circumstances which cause a temporary deviation, be it of the rate of profit in any particular sphere from the general rate of profit, or the profit of some individual capitalist in a certain sphere from the average profit of this sphere. We have seen however that the rate of profit within the production process itself does not depend on surplus value alone, but also on many other circumstances, such as purchase prices of means of production, methods more productive than the average, on savings of constant capital, etc. And aside from the price of production, it depends on special circumstances, and in every single business transaction on the greater or lesser shrewdness and industry of the capitalist, whether, and to what extent, he buys or sells above or below the price of production and thus appropriates a greater or smaller portion of the total surplus value in the process of circulation. In any case, the quantitative division of the gross profit turns here into a qualitative one, and all the more so because the quantitative division itself depends on what is to be divided, the manner in which the active capitalist manages his capital, and what gross

profit it yields to him as a functioning capital, i.e., in consequence of his functions as an active capitalist. The functioning capitalist is here assumed as a non-owner of capital. Ownership of the capital is represented in relation to him by the money capitalist, the lender. The interest he pays to the latter thus appears as that portion of gross profit which is due to the ownership of capital as such. As distinct from this, that portion of profit which falls to the active capitalist appears now as profit of enterprise, deriving solely from the operations, or functions, which he performs with the capital in the process of reproduction, hence particularly those functions which he performs as entrepreneur in industry or commerce. In relation to him interest appears therefore as the mere fruit of owning capital, of capital as such abstracted from the reproduction process of capital, inasmuch as it does not "work", does not function; while profit of enterprise appears to him as the exclusive fruit of the functions which he performs with the capital, as the fruit of the movement and performance of capital, of a performance which appears to him as his own activity, as opposed to the inactivity, the non-participation of the money capitalist in the production process. This qualitative distinction between the two portions of gross profit that interest is the fruit of capital as such, of the ownership of capital irrespective of the production process, and that profit of enterprise is the fruit of performing capital, of capital functioning in the production process, and hence of the active role played by the employer of the capital in the reproduction process — this qualitative distinction is by no means merely a subjective notion of the money capitalist, on the one hand, and the industrial capitalist, on the other. It rests upon an objective fact, for interest flows to the money capitalist, to the lender, who is the mere owner of capital, hence represents only ownership of capital before the production process and outside of it; while the profit of enterprise flows to the functioning capitalist alone, who is non-owner of the capital.

The merely quantitative division of the gross profit between two different persons who both have different legal claims to the same capital, and hence to the profit produced by it, thus turns into a qualitative division for both the industrial capitalist in so far as he is operating on borrowed capital, and for the money capitalist, in so far as he does not himself apply his capital. One portion of the profit appears now as fruit due as such to capital in one form, as interest; the other portion appears as a specific fruit of capital in an opposite form, and thus as profit of enterprise. One appears exclusively as the fruit of operating with the capital, the fruit of performing capital, or of the functions performed by the active capitalist. And this ossification and individualisation of the two parts of the gross profit in respect to one another, as though they originated from two essentially different sources, now takes firm shape for the entire capitalist class and the total capital. And, indeed, regardless of whether the capital employed by the active capitalist is

borrowed or not, and whether the capital belonging to the money capitalist is employed by himself or not. The profit of every capital, and consequently also the average profit established by the equalisation of capitals, splits, or is separated, into two qualitatively different, mutually independent and separately individualised parts, to wit — interest and profit of enterprise — both of which are determined by separate laws. The capitalist operating on his own capital, like the one operating on borrowed capital, divides the gross profit into interest due to himself as owner, as his own lender, and into profit of enterprise due to him as to an active capitalist performing his function. As concerns this division, therefore, as a qualitative one, it is immaterial whether the capitalist really has to share with another, or not. The employer of capital, even when working with his own capital, splits into two personalities — the owner of capital and the employer of capital; with reference to the categories of profit which it yields, his capital also splits into capital-*property*, capital *outside* the production process, and yielding interest of itself, and capital in the production process which yields a profit of enterprise through its function.

Interest, therefore, becomes firmly established in a way that it no longer appears as a division of gross profit of indifference to production, which occurs occasionally when the industrial capitalist happens to operate with someone else's capital. His profit splits into interest and profit of enterprise even when he operates on his own capital. A merely quantitative division thus turns into a qualitative one. It occurs regardless of the fortuitous circumstance whether the industrial capitalist is, or is not, the owner of his capital. It is not only a matter of different quotas of profit assigned to different persons, but two different categories of profit which are differently related to the capital, hence related to different aspects of the capital [...]

*Qualitatively* speaking, interest is surplus value yielded by the mere ownership of capital; it is yielded by capital as such, even though its owner remains outside the reproduction process. Hence it is surplus value realised by capital outside of its process [...]

Interest is, therefore, the expression of the fact that value in general — materialised labour in its general social form — value which assumes the form of means of production in the actual process of production, confronts living labour power as an independent power, and is a means of appropriating unpaid labour; and that it is such a power because it confronts the labourer as the property of another. But on the other hand, this antithesis to wage labour is obliterated in the form of interest, because interest-bearing capital as such has not wage labour, but productive capital for its opposite. The lending capitalist as such faces the capitalist performing his actual function in the process of reproduction, not the wage worker, who, precisely under capitalist production, is expropriated of the means of production. Interest-bearing

capital is capital as *property* as distinct from capital as a *function*. But so long as capital does not perform its function, it does not exploit labourers and does not come into opposition to labour. On the other hand, profit of enterprise is not related as an opposite to wage labour, but only to interest. [... Assuming] the average profit to be given, the rate of the profit of enterprise is not determined by wages, but by the rate of interest. It is high or low in inverse proportion to it [...]

[The] form of interest and profit of enterprise assumed by the two parts of profit, i.e., of surplus value, expresses no relation to labour, because this relation exists only between labour and profit, or rather the surplus value as a sum, a whole, the unity of these two parts [...] If, therefore, the capitalist is the owner of the capital on which he operates, he pockets the whole profit, or surplus value. It is absolutely immaterial to the labourer whether the capitalist does this, or whether he has to pay a part of it to a third person as its legal proprietor [...]

## CHAPTER 24: EXTERNALISATION OF THE RELATIONS OF CAPITAL IN THE FORM OF INTEREST-BEARING CAPITAL

The relations of capital assume their most externalised and most fetish-like form in interest-bearing capital. We have here M — M', money creating more money, self-expanding value, without the process that effectuates these two extremes. In merchant's capital, M — C — M', there is at least the general form of the capitalistic movement, although it confines itself solely to the sphere of circulation, so that profit appears merely as profit derived from alienation; but it is at least seen to be the product of a social *relation*, not the product of a mere *thing* [...] This is obliterated in M — M', the form of interest-bearing capital [...] In interest-bearing capital, therefore, this automatic fetish, self-expanding value, money generating money, are brought out in their pure state and in this form it no longer bears the birth-marks of its origin. The social relation is consummated in the relation of a thing, of money, to itself. Instead of the actual transformation of money into capital, we see here only form without content. As in the case of labour power, the use value of money here is its capacity of creating value — a value greater than it contains. Money as money is potentially self-expanding value and is loaned out as such — which is the form of sale for this singular commodity. It becomes a property of money to generate value and yield interest [... It] seems to yield interest not as a functioning capital, but as capital in itself, as money capital [...]

This, too, becomes distorted. While interest is only a portion of the profit, i.e., of the surplus value, which the functioning capitalist squeezes out of the labourer, it appears now, on the contrary, as though interest were the

typical product of capital, the primary matter, and profit, in the shape of profit of enterprise, were a mere accessory and by-product of the process of reproduction. Thus we get the fetish form of capital and the conception of fetish capital. In M — M' we have the meaningless form of capital, the perversion and objectification of production relations in their highest degree, the interest-bearing form, the simple form of capital, in which it antecedes its own process of reproduction [...] As interest-bearing capital, and particularly in its direct form of interest-bearing money capital (the other forms of interest-bearing capital, which do not concern us here, are derivatives of this form and presuppose its existence), capital assumes its pure fetish form, M — M' being the subject, the saleable thing [...]

The process of accumulation of capital may be conceived as an accumulation of compound interest in the sense that the portion of profit (surplus value) which is reconverted into capital, i.e., serves to absorb more surplus labour, may be called interest. But:

1) Aside from all incidental interference, a large part of available capital is constantly more or less depreciated in the course of the reproduction process, because the value of commodities is not determined by the labour time originally expended in their production, but by the labour time expended in their reproduction, and this decreases continually owing to the development of the social productivity of labour. On a higher level of social productivity, all available capital appears, for this reason, to be the result of a relatively short period of reproduction, instead of a long process of accumulation of capital.

2) As demonstrated in Part III of this book, the rate of profit decreases in proportion to the mounting accumulation of capital and the correspondingly increasing productivity of social labour, which is expressed precisely in the relative and progressive decrease of the variable as compared to the constant portion of capital. To produce the same rate of profit after the constant capital set in motion by one labourer increases ten-fold, the surplus labour time would have to increase ten-fold, and soon the total labour time, and finally the entire 24 hours of a day, would not suffice, even if wholly appropriated by capital. The idea that the rate of profit does not shrink is, however, the basis of Price's progression and in general the basis of "all-engrossing capital with compound interest". [...]

## CHAPTER 25: CREDIT AND FICTITIOUS CAPITAL

An exhaustive analysis of the credit system and of the instruments which it creates for its own use (credit money, etc.) lies beyond our plan. We merely wish to dwell here upon a few particular points, which are required to characterise the capitalist mode of production in general. We shall deal only

with commercial and bank credit. The connection between the development of this form of credit and that of public credit will not be considered here.

I have shown earlier (Buch I, Kap. III) how the function of money as a means of payment, and therewith a relation of creditor and debtor between the producer and trader of commodities, develop from the simple circulation of commodities. With the development of commerce and of the capitalist mode of production, which produces solely with an eye to circulation, this natural basis of the credit system is extended, generalised, and worked out. Money serves here, by and large, merely as a means of payment, i.e., commodities are not sold for money, but for a written promise to pay for them at a certain date. For brevity's sake, we may put all these promissory notes under the general head of bills of exchange. Such bills of exchange, in their turn, circulate as means of payment until the day on which they fall due; and they form the actual commercial money. Inasmuch as they ultimately neutralise one another through the balancing of claims and debts, they act absolutely as money, although there is no eventual transformation into actual money. Just as these mutual advances of producers and merchants make up the real foundation of credit, so does the instrument of their circulation, the bill of exchange, form the basis of credit money proper, of banknotes, etc. These do not rest upon the circulation of money, be it metallic or government-issued paper money, but rather upon the circulation of bills of exchange [...]

The other side of the credit system is connected with the development of money-dealing, which, of course, keeps step under capitalist production with the development of dealing in commodity. We have seen in the preceding part (Chap. XIX) how the care of the reserve funds of businessmen, the technical operations of receiving and disbursing money, of international payments, and thus of the bullion trade, are concentrated in the hands of the money dealers. The other side of the credit system — the management of interest-bearing capital, or money capital, develops alongside this money-dealing as a special function of the money dealers. Borrowing and lending money becomes their particular business. They act as middlemen between the actual lender and the borrower of money capital. Generally speaking, this aspect of the banking business consists of concentrating large amounts of the loanable money capital in the bankers' hands, so that, in place of the individual money lender, the bankers confront the industrial capitalists and commercial capitalists as representatives of all moneylenders. They become the general managers of money capital. On the other hand by borrowing for the entire world of commerce, they concentrate all the borrowers vis-à-vis all the lenders. A bank represents a centralisation of money capital, of the lenders, on the one hand, and on the other a centralisation of the borrowers. Its profit is generally made by borrowing at a

lower rate of interest than it receives in loaning.

The loanable capital which the banks have at their disposal streams to them in various ways. In the first place, being the cashiers of the industrial capitalists, all the money capital which every producer and merchant must have as a reserve fund, or receives in payment, is concentrated in their hands. These funds are thus converted into loanable money capital. In this way, the reserve fund of the commercial world, because it is concentrated in a common treasury, is reduced to its necessary minimum, and a portion of the money capital which would otherwise have to lie slumbering as a reserve fund, is loaned out and serves as interest-bearing capital. In the second place, the loanable capital of the banks is formed by the deposits of money capitalists who entrust them with the business of loaning them out. Furthermore, with the development of the banking system, and particularly as soon as banks came to pay interest on deposits, money savings and the temporarily idle money of all classes were deposited with them. Small amounts, each in itself incapable of acting in the capacity of money capital, merge together into large masses and thus form a money power. This aggregation of small amounts must be distinguished as a specific function of the banking system from its go-between activities between the money capitalists proper and the borrowers. In the final analysis, the revenues, which are usually but gradually consumed, are also deposited with the banks.

The loan is made (we refer here strictly to commercial credit) by discounting bills of exchange — by converting bills of exchange into money before they come due — and by advances of various kinds: direct advances on personal credit, loans against securities, such as interest-bearing paper, government paper, stocks of all sorts, and, notably, overdrafts against bills of lading, dock warrants, and other certified titles of ownership of commodities and overdrawing deposits, etc.

The credit given by a banker may assume various forms, such as bills of exchange on other banks, cheques on them, credit accounts of the same kind, and finally, if the bank is entitled to issue notes — banknotes of the bank itself [...]

Special credit institutions, like special forms of banks, need no further consideration for our purpose [...]

The following [is] from J. W. Gilbart's *The History and Principle of Banking*, London, 1834:

"[...] It is the object of banking to give facilities to trade, and whatever gives facilities to trade gives facilities to speculation. Trade and speculation are in some cases so nearly allied, that it is impossible to say at what precise point trade ends and speculation begins.... Wherever there are banks, capital is more readily obtained, and at a cheaper rate. The cheapness of capital gives facilities to speculation, just in the same way as the cheapness

of beef and of beer gives facilities to gluttony and drunkenness" (pp. 137, 438). "As banks of circulation always issue their own notes, it would seem that their discounting business was carried on exclusively with this last description of capital, but it is not so. It is very possible for a banker to issue his own notes for all the bills he discounts, and yet nine-tenths of the bills in his possession shall represent real capital. For, although in the first instance, the banker's notes are given for the bill, yet these notes may not stay in circulation until the bill becomes due — the bill may have three months to run, the notes may return in three days" (p. 172). "The overdrawing of a cash credit account is a regular matter of business; it is, in fact, the purpose for which the cash credit has been granted.... Cash credits are granted not only upon personal security, but also upon the security of the Public Funds" (pp. 174, 175).

[The following is from] *The Currency Theory Reviewed*, etc., pp. 62-63:

"It is unquestionably true that the £1,000 which you deposit at A today may be reissued tomorrow, and form a deposit at B. The day after that, reissued from B, it may form a deposit at C ... and so on to infinitude; and that the same £1,000 in money may thus, by a succession of transfers, multiply itself into a sum of deposits absolutely indefinite. It is possible, therefore, *that nine-tenths of all the deposits in the United Kingdom may have no existence beyond their record in the books of the bankers who are respectively accountable for them* [...]".

[...]

## CHAPTER 27: THE ROLE OF CREDIT IN CAPITALIST PRODUCTION

The general remarks, which the credit system so far elicited from us, were the following:

I. Its necessary development to effect the equalisation of the rate of profit, or the movements of this equalisation, upon which the entire capitalist production rests.

II. Reduction of the costs of circulation.

1) One of the principal costs of circulation is money itself, being value in itself. It is economised through credit in three ways.

A. By dropping away entirely in a great many transactions.

B. By the accelerated circulation of the circulating medium. This corresponds in part with what is to be said under 2). On the one hand, the acceleration is technical; i.e., with the same magnitude and number of actual turnovers of commodities for consumption, a smaller quantity of money or money tokens performs the same service. This is bound up with the technique

of banking. On the other hand, credit accelerates the velocity of the metamorphoses of commodities and thereby the velocity of money circulation.

C. Substitution of paper for gold money.

2) Acceleration, by means of credit, of the individual phases of circulation or of the metamorphosis of commodities, later the metamorphosis of capital, and with it an acceleration of the process of reproduction in general. (On the other hand, credit helps to keep the acts of buying and selling longer apart and serves thereby as a basis for speculation.) Contraction of reserve funds, which may be viewed in two ways: as a reduction of the circulating medium, on the one hand, and, on the other, as a reduction of that part of capital which must always exist in the form of money.

III. Formation of stock companies. Thereby:

1) An enormous expansion of the scale of production and of enterprises, that was impossible for individual capitals. At the same time, enterprises that were formerly government enterprises, become public.

2) The capital, which in itself rests on a social mode of production and presupposes a social concentration of means of production and labour power, is here directly endowed with the form of social capital (capital of directly associated individuals) as distinct from private capital, and its undertakings assume the form of social undertakings as distinct from private undertakings. It is the abolition of capital as private property within the framework of capitalist production itself.

3) Transformation of the actually functioning capitalist into a mere manager, administrator of other people's capital, and of the owner of capital into a mere owner, a mere money capitalist. Even if the dividends which they receive include the interest and the profit of enterprise, i.e., the total profit (for the salary of the manager is, or should be, simply the wage of a specific type of skilled labour, whose price is regulated in the labour market like that of any other labour), this total profit is henceforth received only in the form of interest, i.e., as mere compensation for owning capital that now is entirely divorced from the function in the actual process of reproduction, just as this function in the person of the manager is divorced from ownership of capital. Profit thus appears (no longer only that portion of it, the interest, which derives its justification from the profit of the borrower) as a mere appropriation of the surplus labour of others, arising from the conversion of means of production into capital, i.e., from their alienation vis-à-vis the actual producer, from their antithesis as another's property to every individual actually at work in production, from manager down to the last day labourer. In stock companies the function is divorced from capital ownership, hence also labour is entirely divorced from ownership of means of production and

surplus labour. This result of the ultimate development of capitalist production is a necessary transitional phase towards the reconversion of capital into the property of producers, although no longer as the private property of the individual producers, but rather as the property of associated producers, as outright social property. On the other hand, the stock company is a transition toward the conversion of all functions in the reproduction process which still remain linked with capitalist property, into mere functions of associated producers, into social functions.

Before we go any further, there is still the following economically important fact to be noted: Since profit here assumes the pure form of interest, undertakings of this sort are still possible if they yield bare interest, and this is one of the causes, stemming the fall of the general rate of profit, since such undertakings, in which the ratio of constant capital to the variable is so enormous, do not necessarily enter into the equalisation of the general rate of profit [...]

This is the abolition of the capitalist mode of production within the capitalist mode of production itself, and hence a self-dissolving contradiction, which *prima facie* represents a mere phase of transition to a new form of production. It manifests itself as such a contradiction in its effects. It establishes a monopoly in certain spheres and thereby requires state interference. It reproduces a new financial aristocracy, a new variety of parasites in the shape of promoters, speculators and simply nominal directors; a whole system of swindling and cheating by means of corporation promotion, stock issuance, and stock speculation. It is private production without the control of private property.

IV. Aside from the stock-company business, which represents the abolition of capitalist private industry on the basis of the capitalist system itself and destroys private industry as it expands and invades new spheres of production, credit offers to the individual capitalist; or to one who is regarded a capitalist, absolute control within certain limits over the capital and property of others, and thereby over the labour of others. The control over social capital, not the individual capital of his own, gives him control of social labour. The capital itself, which a man really owns or is supposed to own in the opinion of the public, becomes purely a basis for the superstructure of credit. This is particularly true of wholesale commerce, through which the greatest portion of the social product passes. All standards of measurement, all excuses more or less still justified under capitalist production, disappear here. What the speculating wholesale merchant risks is social property, not his *own*. Equally sordid becomes the phrase relating the origin of capital to savings, for what he demands is that *others* should save for him [...] The other phrase concerning abstention is squarely refuted by his luxury, which is now itself a means of credit. Conceptions which have some

meaning on a less developed stage of capitalist production, become quite meaningless here. Success and failure both lead here to a centralisation of capital, and thus to expropriation on the most enormous scale. Expropriation extends here from the direct producers to the smaller and the medium-sized capitalists themselves. It is the point of departure for the capitalist mode of production; its accomplishment is the goal of this production. In the last instance, it aims at the expropriation of the means of production from all individuals. With the development of social production the means of production cease to be means of private production and products of private production, and can thereafter be only means of production in the hands of associated producers, i.e., the latter's social property, much as they are their social products. However, this expropriation appears within the capitalist system in a contradictory form, as appropriation of social property by a few; and credit lends the latter more and more the aspect of pure adventurers. Since property here exists in the form of stock, its movement and transfer become purely a result of gambling on the stock exchange, where the little fish are swallowed by the sharks and the lambs by the stock-exchange wolves. There is antagonism against the old form in the stock companies, in which social means of production appear as private property; but the conversion to the form of stock still remains ensnared in the trammels of capitalism; hence, instead of overcoming the antithesis between the character of wealth as social and as private wealth, the stock companies merely develop it in a new form.

The co-operative factories of the labourers themselves represent within the old form the first sprouts of the new, although they naturally reproduce, and must reproduce, everywhere in their actual organisation all the shortcomings of the prevailing system. But the antithesis between capital and labour is overcome within them, if at first only by way of making the associated labourers into their own capitalist, i.e., by enabling them to use the means of production for the employment of their own labour. They show how a new mode of production naturally grows out of an old one, when the development of the material forces of production and of the corresponding forms of social production have reached a particular stage. Without the factory system arising out of the capitalist mode of production there could have been no co-operative factories. Nor could these have developed without the credit system arising out of the same mode of production. The credit system is not only the principal basis for the gradual transformation of capitalist private enterprises into capitalist stock companies, but equally offers the means for the gradual extension of co-operative enterprises on a more or less national scale. The capitalist stock companies, as much as the co-operative factories, should be considered as transitional forms from the capitalist mode of production to the associated one, with the only distinction

that the antagonism is resolved negatively in the one and positively in the other.

So far we have considered the development of the credit system — and the implicit latent abolition of capitalist property — mainly with reference to industrial capital. In the following chapters we shall consider credit with reference to interest-bearing capital as such, and to its effect on this capital, and the form it thereby assumes; and there are generally a few more specifically economic remarks still to be made.

But first this:

The credit system appears as the main lever of overproduction and over-speculation in commerce solely because the reproduction process, which is elastic by nature, is here forced to its extreme limits, and is so forced because a large part of the social capital is employed by people who do not own it and who consequently tackle things quite differently than the owner, who anxiously weighs the limitations of his private capital in so far as he handles it himself. This simply demonstrates the fact that the self-expansion of capital based on the contradictory nature of capitalist production permits an actual free development only up to a certain point, so that in fact it constitutes an immanent fetter and barrier to production, which are continually broken through by the credit system. Hence, the credit system accelerates the material development of the productive forces and the establishment of the world market. It is the historical mission of the capitalist system of production to raise these material foundations of the new mode of production to a certain degree of perfection. At the same time credit accelerates the violent eruptions of this contradiction — crises — and thereby the elements of disintegration of the old mode of production.

The two characteristics immanent in the credit system are, on the one hand, to develop the incentive of capitalist production, enrichment through exploitation of the labour of others, to the purest and most colossal form of gambling and swindling, and to reduce more and more the number of the few who exploit the social wealth; on the other hand, to constitute the form of transition to a new mode of production. It is this ambiguous nature, which endows the principal spokesmen of credit from Law to Isaac Péreire with the pleasant character mixture of swindler and prophet [...]

## CHAPTER 29: COMPONENT PARTS OF BANK CAPITAL

[...] Bank capital consists of 1) cash money, gold or notes; 2) securities. The latter can be subdivided into two parts: commercial paper or bills of exchange, which run for a period, become due from time to time, and whose discounting constitutes the essential business of the banker; and public securities, such as government bonds, treasury notes, stocks of all kinds, in

short, interest-bearing paper which is however significantly different from bills of exchange. Mortgages may also be included here. The capital composed of these tangible component parts can again be divided into the banker's invested capital and into deposits, which constitute his banking capital, or borrowed capital. In the case of banks which issue notes, these must be included. We shall leave the deposits and notes out of consideration for the present. It is evident at any rate that the actual component parts of the banker's capital (money, bills of exchange, deposit currency) remain unaffected whether the various elements represent the banker's own capital or deposits, i.e., the capital of other people. The same division would remain, whether he were to carry on his business with only his own capital or only with deposited capital [...]

The formation of a fictitious capital is called capitalisation. Every periodic income is capitalised by calculating it on the basis of the average rate of interest, as an income which would be realised by a capital loaned at this rate of interest. For example, if the annual income is £100 and the rate of interest 5%, then the £100 would represent the annual interest on £2,000, and the £2,000 is regarded as the capital value of the legal title of ownership on the £100 annually. For the person who buys this title of ownership, the annual income of £100 represents indeed the interest on his capital invested at 5%. All connection with the actual expansion process of capital is thus completely lost, and the conception of capital as something with automatic self-expansion properties is thereby strengthened.

Even when the promissory note — the security — does not represent a purely fictitious capital, as it does in the case of state debts, the capital value of such paper is nevertheless wholly illusory. We have previously seen in what manner the credit system creates associated capital. The paper serves as title of ownership which represents this capital. The stocks of railways, mines, navigation companies, and the like, represent actual capital, namely, the capital invested and functioning in such enterprises, or the amount of money advanced by the stockholders for the purpose of being used as capital in such enterprises. This does not preclude the possibility that these may represent pure swindle. But this capital does not exist twice, once as the capital value of titles of ownership (stocks) on the one hand and on the other hand as the actual capital invested, or to be invested, in those enterprises. It exists only in the latter form, and a share of stock is merely a title of ownership to a corresponding portion of the surplus value to be realised by it. A may sell this title to B, and B may sell it to C. These transactions do not alter anything in the nature of the problem. A or B then has his title in the form of capital, but C has transformed his capital into a mere title of ownership to the anticipated surplus value from the stock capital.

The independent movement of the value of these titles of ownership,

not only of government bonds but also of stocks, adds weight to the illusion that they constitute real capital alongside of the capital or claim to which they may have title. For they become commodities, whose price has its own characteristic movements and is established in its own way. Their market value is determined differently from their nominal value, without any change in the value (even though the expansion may change) of the actual capital. On the one hand, their market value fluctuates with the amount and reliability of the proceeds to which they afford legal title. If the nominal value of a share of stock, that is, the invested sum originally represented by this share, is £100, and the enterprise pays 10% instead of 5%, then its market value, everything else remaining equal, rises to £200, as long as the rate of interest is 5%, for when capitalised at 5%, it now represents a fictitious capital of £200. Whoever buys it for £200 receives a revenue of 5% on this investment of capital. The converse is true when the proceeds from the enterprise diminish. The market value of this paper is in part speculative, since it is determined not only by the actual income, but also by the anticipated income, which is calculated in advance. But assuming the expansion of the actual capital as constant, or where no capital exists, as in the case of state debts, the annual income to be fixed by law and otherwise sufficiently secured, the price of these securities rises and falls inversely as the rate of interest. If the rate of interest rises from 5% to 10%, then securities guaranteeing an income of £5 will now represent a capital of only £50. Conversely, if the rate of interest falls to 2½%; the same securities will represent a capital of £200. Their value is always merely capitalised income, that is, the income calculated on the basis of a fictitious capital at the prevailing rate of interest. Therefore, when the money market is tight these securities will fall in price for two reasons: first, because the rate of interest rises, and secondly, because they are thrown on the market in large quantities in order to convert them into cash [...]

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

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

A part of the banker's capital is now invested in this so-called interest-bearing paper. This is itself a portion of the reserve capital, which does not perform any function in the actual business of banking. The most important portion of this paper consists of bills of exchange, that is, promises to pay

made by industrial capitalists or merchants. For the money lender these bills of exchange are interest-bearing, in other words, when he buys them, he deducts interest for the time which they still have to run. This is called discounting. It depends on the prevailing rate of interest, how much of a deduction is made from the sum represented by the bill of exchange.

Finally, the last part of the capital of a banker consists of his money reserve in gold and notes. The deposits, unless tied up by agreement for a certain time, are always at the disposal of the depositors. They are in a state of continual fluctuation. But while one depositor draws on his account, another deposits, so that the general average sum total of deposits fluctuates little during periods of normal business.

The reserve funds of the banks, in countries with developed capitalist production, always express on the average the quantity of money existing in the form of a hoard, and a portion of this hoard in turn consists of paper, mere drafts upon gold, which have no value in themselves. The greater portion of banker's capital is, therefore, purely fictitious and consists of claims (bills of exchange), government securities (which represent spent capital), and stocks (drafts on future revenue). And it should not be forgotten that the money value of the capital represented by this paper in the safes of the banker is itself fictitious, in so far as the paper consists of drafts on guaranteed revenue (e.g., government securities), or titles of ownership to real capital (e.g., stocks), and that this value is regulated differently from that of the real capital, which the paper represents at least in part; or, when it represents mere claims on revenue and no capital, the claim on the same revenue is expressed in continually changing fictitious money capital. In addition to this, it must be noted that this fictitious banker's capital represents largely, not his own capital, but that of the public, which makes deposits with him, either interest-bearing or not [...]

With the development of interest-bearing capital and the credit system, all capital seems to double itself, and sometimes treble itself, by the various modes in which the same capital, or perhaps even the same claim on a debt, appears in different forms in different hands. The greater portion of this "money capital" is purely fictitious. All the deposits, with the exception of the reserve fund, are merely claims on the banker, which, however, never exist as deposits. To the extent that they serve in clearing-house transactions, they perform the function of capital for the bankers — after the latter have loaned them out. They pay one another their mutual drafts upon the non-existing deposits by balancing their mutual accounts [...]

## CHAPTER 30: MONEY CAPITAL AND REAL CAPITAL. I

The only difficult questions, which we are now approaching in

connection with the credit system, are the following:

*First*: The accumulation of the actual money capital. To what extent is it, and to what extent is it not, an indication of an actual accumulation of capital, i.e., of reproduction on an extended scale? Is the so-called plethora of capital — an expression used only with reference to the interest-bearing capital, i.e., moneyed capital — only a special way of expressing industrial overproduction, or does it constitute a separate phenomenon alongside of it? Does this plethora, or excessive supply of money capital, coincide with the existence of stagnating masses of money (bullion, gold coin and banknotes), so that this superabundance of actual money is the expression and external form of that plethora of loan capital?

*Secondly*: To what extent does a scarcity of money, i.e., a shortage of loan capital, express a shortage of real capital (commodity capital and productive capital)? To what extent does it coincide, on the other hand, with a shortage of money as such, a shortage of the medium of circulation?

In so far as we have hitherto considered the peculiar form of accumulation of money capital and of money wealth in general, it has resolved itself into an accumulation of claims of ownership upon labour. The accumulation of the capital of the national debt has been revealed to mean merely an increase in a class of state creditors, who have the privilege of a firm claim upon a certain portion of the tax revenue. By means of these facts, whereby even an accumulation of debts may appear as an accumulation of capital, the height of distortion taking place in the credit system becomes apparent. These promissory notes, which are issued for the originally loaned capital long since spent, these paper duplicates of consumed capital, serve for their owners as capital to the extent that they are saleable commodities and may, therefore, be reconverted into capital.

Titles of ownership to public works, railways, mines, etc., are indeed, as we have also seen, titles to real capital. But they do not place this capital at one's disposal. It is not subject to withdrawal. They merely convey legal claims to a portion of the surplus value to be produced by it. But these titles likewise become paper duplicates of the real capital; it is as though a bill of lading were to acquire a value separate from the cargo, both concomitantly and simultaneously with it. They come to nominally represent non-existent capital. For the real capital exists side by side with them and does not change hands as a result of the transfer of these duplicates from one person to another. They assume the form of interest-bearing capital, not only because they guarantee a certain income, but also because, through their sale, their repayment as capital values can be obtained. To the extent that the accumulation of this paper expresses the accumulation of railways, mines, steamships, etc., to that extent does it express the extension of the actual reproduction process — just as the extension of, for example, a tax list on

movable property indicates the expansion of this property. But as duplicates which are themselves objects of transactions as commodities, and thus able to circulate as capital values, they are illusory, and their value may fall or rise quite independently of the movement of value of the real capital for which they are titles. Their value, that is, their quotation on the Stock Exchange, necessarily has a tendency to rise with a fall in the rate of interest — in so far as this fall, independent of the characteristic movements of money capital, is due merely to the tendency for the rate of profit to fall; therefore, this imaginary wealth expands, if for this reason alone, in the course of capitalist production in accordance with the expressed value for each of its aliquot parts of specific original nominal value [...]

[In] addition to this commercial credit we have actual money credit. The advances of the industrialists and merchants among one another are amalgamated with the money advances made to them by the bankers and money lenders. In discounting bills of exchange the advance is only nominal. A manufacturer sells his product for a bill of exchange and gets this bill discounted by some bill-broker. In reality, the latter advances only the credit of his banker, who in turn advances to the broker the money capital of his depositors. The depositors consist of the industrial capitalists and merchants themselves and also of workers (through savings banks) — as well as ground rent recipients and other unproductive classes. In this way every individual industrial manufacturer and merchant gets around the necessity of keeping a large reserve fund and being dependent upon his actual returns. On the other hand, the whole process becomes so complicated, partly by simply manipulating bills of exchange, partly by commodity transactions for the sole purpose of manufacturing bills of exchange, that the semblance of a very solvent business with a smooth flow of returns can easily persist even long after returns actually come in only at the expense partly of swindled money lenders and partly of swindled producers. Thus business always appears almost excessively sound right on the eve of a crash. The best proof of this is furnished, for instance, by the Reports on Bank Acts of 1857 and 1858, in which all bank directors, merchants, in short all the invited experts with Lord Overstone at their head, congratulated one another on the prosperity and soundness of business — just one month before the outbreak of the crisis in August 1857 [...] Business is always thoroughly sound and the campaign in full swing, until suddenly the debacle takes place.

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We revert now to the accumulation of money capital.

Not every augmentation of loanable money capital indicates a real accumulation of capital or expansion of the reproduction process. This becomes most evident in the phase of the industrial cycle immediately

following a crisis, when loan capital lies around idle in great quantities. At such times, when the production process is curtailed (production in the English industrial districts was reduced by one-third after the crisis of 1847), when the prices of commodities are at their lowest level, when the spirit of enterprise is paralysed, the rate of interest is low, which in this case indicates nothing more than an increase in loanable capital precisely as a result of contraction and paralysation of industrial capital [...] Hence the demand for loanable money capital, either to act as a medium of circulation or as a means of payment (the investment of new capital is still out of the question), decreases and this capital, therefore, becomes relatively abundant. Under such circumstances, however, the supply of loanable money capital also increases, as we shall later see [...]

After the reproduction process has again reached that state of prosperity which precedes that of over-exertion, commercial credit becomes very much extended; this forms, indeed, the "sound" basis again for a ready flow of returns and extended production. In this state the rate of interest is still low, although it rises above its minimum. This is, in fact, the *only* time that it can be said a low rate of interest, and consequently a relative abundance of loanable capital, coincides with a real expansion of industrial capital. The ready flow and regularity of the returns, linked with extensive commercial credit, ensures the supply of loan capital in spite of the increased demand for it, and prevents the level of the rate of interest from rising. On the other hand, those cavaliers who work without any reserve capital or without any capital at all and who thus operate completely on a money credit basis begin to appear for the first time in considerable numbers. To this is now added the great expansion of fixed capital in all forms, and the opening of new enterprises on a vast and far-reaching scale. The interest now rises to its average level. It reaches its maximum again as soon as the new crisis sets in. Credit suddenly stops then, payments are suspended, the reproduction process is paralysed, and with the previously mentioned exceptions, a superabundance of idle industrial capital appears side by side with an almost absolute absence of loan capital.

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

industrial capital [...]

It is clear that there is a shortage of means of payment during a period of crisis. The convertibility of bills of exchange replaces the metamorphosis of commodities themselves, and so much more so exactly at such times the more a portion of the firms operates on pure credit [...]

In a system of production, where the entire continuity of the reproduction process rests upon credit, a crisis must obviously occur — a tremendous rush for means of payment — when credit suddenly ceases and only cash payments have validity. At first glance, therefore, the whole crisis seems to be merely a credit and money crisis. And in fact it is only a question of the convertibility of bills of exchange into money. But the majority of these bills represent actual sales and purchases, whose extension far beyond the needs of society is, after all, the basis of the whole crisis. At the same time, an enormous quantity of these bills of exchange represents plain swindle, which now reaches the light of day and collapses; furthermore, unsuccessful speculation with the capital of other people; finally, commodity capital which has depreciated or is completely unsaleable, or returns that can never more be realised again. The entire artificial system of forced expansion of the reproduction process cannot, of course, be remedied by having some bank, like the Bank of England, give to all the swindlers the deficient capital by means of its paper and having it buy up all the depreciated commodities at their old nominal values. Incidentally, everything here appears distorted, since in this paper world, the real price and its real basis appear nowhere, but only bullion, metal coin, notes, bills of exchange, securities [...]

Incidentally in connection with the superabundance of industrial capital which appears during crises the following should be noted: commodity capital is in itself simultaneously money capital, that is, a definite amount of value expressed in the price of the commodities. As use value it is a definite quantum of objects of utility, and there is a surplus of these available in times of crises. But as money capital as such, as potential money capital, it is subject to continual expansion and contraction. On the eve of a crisis, and during it, commodity capital in its capacity as potential money capital is contracted. It represents less money capital for its owner and his creditors (as well as security for bills of exchange and loans) than it did at the time when it was bought and when the discounts and mortgages based on it were transacted. If this is the meaning of the contention that the money capital of a country is reduced in times of stringency, this is identical with saying that the prices of commodities have fallen [...]

It follows from the above that commodity capital, during crises and during periods of business depression in general, loses to a large extent its capacity to represent potential money capital. The same is true of fictitious capital, interest-bearing paper, in so far as it circulates on the stock exchange

as money capital. Its price falls with rising interest. It falls, furthermore, as a result of the general shortage of credit, which compels its owners to dump it in large quantities on the market in order to secure money. It falls, finally, in the case of stocks, partly as a result of the decrease in revenues for which it constitutes drafts and partly as a result of the spurious character of the enterprises which it often enough represents. This fictitious money capital is enormously reduced in times of crisis, and with it the ability of its owners to borrow money on it on the market. However, the reduction of the money equivalents of these securities on the stock exchange list has nothing to do with the actual capital which they represent, but very much indeed with the solvency of their owners.

## CHAPTER 31: MONEY CAPITAL AND REAL CAPITAL. II (CONTINUED)

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

The transformation of money into loanable money capital is a much simpler matter than the transformation of money into productive capital. But two things should be distinguished here:

1) the mere transformation of money into loan capital;

2) the transformation of capital or revenue into money, which is transformed into loan capital.

It is only the latter point which can involve a positive accumulation of loan capital connected with an actual accumulation of industrial capital.

### 1. TRANSFORMATION OF MONEY INTO LOAN CAPITAL

We have already seen that a large build-up or surplus of loan capital can occur, which is connected with productive accumulation only to the extent that it is inversely proportional to it. This is the case in two phases of the industrial cycle, namely, first, when industrial capital in both its forms of productive and commodity capital is contracted, i.e., at the beginning of the cycle after the crisis; and, secondly, when the improvement begins, but when commercial credit still does not use bank credit to a great extent. In the first case, money capital, which was formerly employed in production and commerce, appears as idle loan capital; in the second case, it appears used to an increasing extent, but at a very low rate of interest, because the industrial and commercial capitalists now prescribe terms to the money capitalist. The surplus of loan capital expresses, in the first case, a stagnation of industrial capital, and in the second, a relative independence of commercial credit from

banking credit — based on the fluidity of the returns, short-term credit, and a preponderance of operations with one's own capital. The speculators, who count on the credit capital of other people, have not yet appeared on the field; the people who work with their own capital are still far removed from approximately pure credit operations. In the former phase, the surplus of loan capital is directly opposite to expressing actual accumulation. In the second phase, it coincides with a renewed expansion of the reproduction process — it accompanies it, but is not its cause. The surplus of loan capital is already decreasing, i.e., it is still only relative compared to the demand. In both cases, the expansion of the actual process of accumulation is promoted by the fact that the low interest — which coincides in the first case with low prices and in the second, with slowly rising prices — increases that portion of the profit which is transformed into profit of enterprise. This takes place to an even greater extent when interest rises to its average level during the height of the period of prosperity, when it has indeed grown, but not relative to profit.

We have seen, on the other hand, that an accumulation of loan capital can take place without any actual accumulation, i.e., by mere technical means such as an expansion and concentration of the banking system; and a saving in the circulation reserve, or in the reserve fund of private means of payment, which are then always transformed into loan capital for a short time. Although this loan capital, which, for this reason, is also called floating capital, always retains the form of loan capital only for short periods of time (and should indeed also be used for discounting only for short periods of time), there is a continual ebb and flow of it. If one draws some away, another adds to it. The mass of loanable money capital thus grows quite independently of the actual accumulation (we are not speaking here at all about loans for a number of years but only of short-term ones on bills of exchange and deposits) [...]

The variations in the interest rate (aside from those occurring over longer periods or the variation in the interest rate among various countries; the former are dependent upon variations in the general rate of profit, the latter on differences in the rates of profit and in the development of credit) depend upon the supply of loan capital (all other circumstances, state of confidence, etc. being equal), that is, of capital loaned in the form of money, coin and notes; in contradistinction to industrial capital, which, as such — in commodity form — is loaned by means of commercial credit among the agents of reproduction themselves.

However, the mass of this loanable money capital is different from, and independent of, the mass of circulating money.

For example, if £20 were loaned five times per day, a money capital of £100 would be loaned, and this would imply at the same time that this £20 would have served, moreover, at least four times as a means of purchase or

payment; for, if no purchase and payment intervened — so that it would not have represented at least four times the converted form of capital (commodities, including labour power) — it would not constitute a capital of £100, but only five claims of £20 each.

In countries with a developed credit, we can assume that all money capital available for lending exists in the form of deposits with banks and money lenders. This is at least true for business as a whole. Moreover, in times of flourishing business, before the real speculation gets underway — when credit is easy and confidence is growing — most of the functions of circulation are settled by a simple transfer of credit, without the help of coin or paper money.

The mere possibility of large sums of deposits existing when a relatively small quantum of a medium of circulation is available, depends solely on:

1) the number of purchases and payments which the same coin performs;

2) the number of return excursions, whereby it goes back to the banks as deposits, so that its repeated function as a means of purchase and payment is promoted through its renewed transformation into deposits. For example, a small dealer deposits weekly with his banker £100 in money; the banker pays out a portion of the deposit of a manufacturer with this; the latter pays it to his workers; and the workers use it to pay the small dealer, who deposits it in the bank again. The £100 deposited by this small dealer have served, therefore, first, to pay the manufacturer a deposit of his; secondly, to pay the workers; thirdly, to pay the dealer himself; fourthly, to deposit another portion of the money capital of the same small dealer; thus at the end of twenty weeks, if he himself did not have to draw against this money, he would have deposited £2,000 in the bank by means of the same £100 [...]

## 2. TRANSFORMATION OF CAPITAL OR REVENUE INTO MONEY THAT IS TRANSFORMED INTO LOAN CAPITAL

We will consider here the accumulation of money capital, in so far as it is not an expression either of a stoppage in the flow of commercial credit or of an economy — whether it be an economy in the actual circulating medium or in the reserve capital of the agents engaged in reproduction [...]

The accumulation of all money-lending capitalists naturally always takes place directly in money form, whereas we have seen that the actual accumulation of industrial capitalists is accomplished, as a rule, by an increase in the elements of reproductive capital itself. Hence, the development of the credit system and the enormous concentration of the money-lending business in the hands of large banks must, by themselves

alone, accelerate the accumulation of loanable capital, as a form distinct from actual accumulation. This rapid development of loan capital is, therefore, a result of actual accumulation, for it is a consequence of the development of the reproduction process, and the profit which forms the source of accumulation for these money capitalists is only a deduction from the surplus value which the reproductive ones filch (and it is at the same time the appropriation of a portion of the interest from the savings of *others*). Loan capital accumulates at the expense of both the industrial and commercial capitalists. We have seen that in the unfavourable phases of the industrial cycle the rate of interest may rise so high that it temporarily consumes the whole profit of some lines of business which are particularly handicapped. At the same time, prices of government and other securities fall. It is at such times that the money capitalists buy this depreciated paper in huge quantities which in the later phases soon regains its former level and rises above it. It is then sold again and a portion of the money capital of the public is thus appropriated. That portion which is not sold yields a higher interest because it was bought below par. But the money capitalists convert all profits made, and reconverted by them into capital, first into loanable money capital. The accumulation of the latter — as distinct from the actual accumulation, although its offshoot — thus takes place, even when we consider only the money capitalists, bankers, etc., by themselves, as an accumulation of this particular class of capitalists. And it must grow with every expansion of the credit system which accompanies the actual expansion of the reproduction process [...]

As for the money accumulation of the other classes of capitalists, we disregard that portion of it which is invested in interest-bearing paper and accumulates in this form. We consider only that portion which is thrown upon the market as loanable money capital.

In the first place, we have here that portion of the profit which is not spent as revenue, but is set aside for accumulation — for which, however, the industrial capitalists have no use in their own business at the moment. This profit exists directly in commodity capital, a part of whose value it constitutes, and along with which it is realised in money. Now, if it is not reconverted into the production elements of commodity capital (we leave out of consideration for the present the merchant, whom we shall discuss separately), it must remain for a length of time in the form of money. This amount increases with the amount of capital itself, even when the rate of profit declines. That portion which is to be spent as revenue is gradually consumed, but, in the meantime, as deposits, it constitutes loan capital with the banker. Thus, even the growth of that portion of profit which is spent as revenue expresses itself as a gradual and continually repeated accumulation of loan capital. The same is true of the other portion, which is intended for

accumulation. Therefore, with the development of the credit system and its organisation, even an increase in revenue, i.e., the consumption of the industrial and commercial capitalists, expresses itself as an accumulation of loan capital. And this holds true for all revenues so far as they are consumed gradually, in other words, for ground rent, wages in their higher form, incomes of unproductive classes, etc. All of them assume for a certain time the form of money revenue and are, therefore, convertible into deposits and thus into loan capital. All revenue — whether it be intended for consumption or accumulation — as long as it exists in some form of money, is a part of the value of commodity capital transformed into money, and is, for this reason, an expression and result of actual accumulation, but is not productive capital itself [...]

## CHAPTER 32: MONEY CAPITAL AND REAL CAPITAL. Ill (CONCLUDED)

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

The most important point of our presentation so far is that the expansion of the part of the revenue intended for consumption (leaving out of consideration the worker, because his revenue is equal to the variable capital) shows itself at first as an accumulation of money capital. A factor, therefore, enters into the accumulation of money capital that is essentially different from the actual accumulation of industrial capital; for the portion of the annual product which is intended for consumption does not by any means become capital. A portion of it *replaces* capital, i.e., the constant capital of the producers of means of consumption, but to the extent that it is actually transformed into capital, it exists in the natural form of the revenue of the producers of this constant capital. The same money, which represents the revenue and serves merely for the promotion of consumption, is regularly transformed into loanable money capital for a period of time. In so far as this money represents wages, it is at the same time the money form of the variable capital; and in so far as it replaces the constant capital of the producers of means of consumption, it is the money form temporarily assumed by their constant capital and serves to purchase the components of their constant capital to be replaced in kind. Neither in the one nor in the other form does it express in itself accumulation, although its quantity increases with the growth of the reproduction process. But it performs temporarily the function of loanable money, i.e., of money capital. In this respect, therefore, the accumulation of money capital must always reflect a greater accumulation of capital than actually exists, owing to the fact that the

extension of individual consumption, because it is promoted by means of money, appears as an accumulation of money capital, since it furnishes the money form for actual accumulation, i.e., for money which permits new investments of capital.

Thus, the accumulation of loanable money capital expresses in part only the fact that all money into which industrial capital is transformed in the course of its circuit assumes the form not of money *advanced* by the reproductive capitalists, but of money *borrowed* by them; so that indeed the advance of money that must take place in the reproduction process appears as an advance of borrowed money. In fact, on the basis of commercial credit, one person lends to another the money required for the reproduction process. But this now assumes the following form: the banker, who receives the money as a loan from one group of the reproductive capitalists, lends it to another group of reproductive capitalists, so that the banker appears in the role of a supreme benefactor; and at the same time, the control over this capital falls completely into the hands of the banker in his capacity as middleman.

A few special forms of accumulation of money capital still remain to be mentioned. For example, capital is released by a fall in the price of the elements of production, raw materials, etc. If the industrial capitalist cannot expand his reproduction process immediately, a portion of his money capital is expelled from the circuit as superfluous and is transformed into loanable money capital. Secondly, however, capital in the form of money is released especially by the merchant, whenever interruptions in his business take place. If the merchant has completed a series of transactions and cannot begin a new series because of such interruptions until later, the money realised represents for him only a hoard, surplus capital. But at the same time, it represents a direct accumulation of loanable money capital [...]

Finally, accumulation of money capital is influenced by the number of people who have feathered their nests and have withdrawn from reproduction. Their number increases as more profits are made in the course of the industrial cycle. In this case, the accumulation of loanable money capital expresses, on the one hand, an actual accumulation (in accordance with its relative extent), and, on the other hand, only the extent of the transformation of the industrial capitalists into mere money capitalists.

As for the other portion of profit, which is not intended to be consumed as revenue, it is converted into money capital only when it is not immediately able to find a place for investment in the expansion of business in the productive sphere in which it has been made. This may be due to two causes. Either because this sphere of production is saturated with capital, or because accumulation must first reach a certain volume before it can serve as capital, depending on the investment magnitudes of new capital required in

this particular sphere. Hence it is converted for a while into loanable money capital and serves in the expansion of production in other spheres [...]

The accumulation of loan capital consists simply in the fact that money is precipitated as loanable money. This process is very different from an actual transformation into capital; it is merely the accumulation of money in a form in which it can be transformed into capital. But this accumulation can reflect, as we have shown, events which are greatly different from actual accumulation. As long as actual accumulation is continually expanding, this extended accumulation of money capital may be partly its result, partly the result of circumstances which accompany it but are quite different from it, and, finally, even partly the result of impediments to actual accumulation. If for no other reason than that accumulation of loan capital is inflated by such circumstances, which are independent of actual accumulation but nevertheless accompany it, there must be a continuous plethora of money capital in definite phases of the cycle and this plethora must develop with the expansion of credit. And simultaneously with it, the necessity of driving the production process beyond its capitalistic limits must also develop: over-trade, overproduction, and excessive credit. At the same time, this must always take place in forms that call forth a reaction.

As far as accumulation of money capital from ground rent, wages, etc., is concerned, it is not necessary to discuss that matter here. Only one aspect should be emphasised and that is that the business of actual saving and abstinence (by hoarders), to the extent that it furnishes elements of accumulation, is left by the division of labour, which comes with the progress of capitalist production, to those who receive the minimum of such elements, and who frequently enough lose even their savings, as do the labourers when banks fail. On the one hand, the capital of the industrial capitalist is not "saved" by himself, but he has command of the savings of others in proportion to the magnitude of his capital; on the other hand, the money capitalist makes of the savings of others his own capital, and of the credit, which the reproductive capitalists give to one another and which the public gives to them, a private source for enriching himself. The last illusion of the capitalist system, that capital is the fruit of one’s own labour and savings, is thereby destroyed. Not only does profit consist in the appropriation of other people’s labour, but the capital, with which this labour of others is set in motion and exploited, consists of other people’s property, which the money capitalist places at the disposal of the industrial capitalists, and for which he in turn exploits the latter [...]

In the discussion on interest-bearing capital, we have already shown that **the average interest over a long period of years, other conditions remaining equal, is determined by the average rate of profit; not profit of enterprise, which is nothing more than profit minus interest** [...]

When the rate of interest stays up for a long time [...], it is *prima facie* proof that the rate of profit is high during this period, but it does not prove necessarily that the rate of profit of enterprise is high [... It] is possible that this high rate of profit may leave only a low rate of profit of enterprise, after the high rate of interest has been deducted. The rate of profit of enterprise may shrink, while the high rate of profit continues. This is possible because the enterprises must be continued, once they have been started. During this phase, operations are carried on to a large extent with pure credit capital (capital of other people); and the high rate of profit may be partly speculative and prospective [...]

If **supply and demand of money capital, which determine the rate of interest**, were identical with supply and demand of actual capital, as Overstone maintains, the interest would be simultaneously low and high, depending on whether various commodities or various phases (raw material, semi-finished product, finished product) of the same commodity were being considered [...]

## CHAPTER 33: THE MEDIUM OF CIRCULATION IN THE CREDIT SYSTEM

"The great regulator of the velocity of the currency is credit. This explains why a severe pressure upon the money market is generally coincident with a full circulation". (*The Currency Theory Reviewed*, p. 65.)

This is to be taken in a double sense. On the one hand, all methods which save on medium of circulation are based upon credit. On the other hand, however, take, for example, a 500-pound note. A gives it to B on a certain day in payment for a bill of exchange; B deposits it on the same day with his banker; the latter discounts a bill of exchange with it on the very same day for C; C pays it to his bank, the bank gives it to the bill-broker as an advance, etc. The velocity with which the note circulates here, to serve for purchases and payments, is effected by the velocity with which it repeatedly returns to someone in the form of a deposit and passes over to someone else again in the form of a loan. The pure economy in medium of circulation appears most highly developed in the clearing house — in the simple exchange of bills of exchange that are due — and in the preponderant function of money as a means of payment for merely settling balances. But the very existence of these bills of exchange depends in turn on credit, which the industrialists and merchants mutually give one another. If this credit declines, so does the number of bills, particularly long-term ones, and consequently also the effectiveness of this method of balancing accounts. And this economy, which consists in eliminating money from transactions and rests entirely upon the function of money as a means of payment, which

in turn is based upon credit, can only be of two kinds (aside from the more or less developed technique in the concentration of these payments): mutual claims, represented by bills of exchange or cheques, are balanced out either by the same banker, who merely transcribes the claim from the account of one to that of another, or by the various bankers among themselves. The concentration of 8 to 40 million bills of exchange in the hands of one bill-broker, such as the firm of Overend, Gurney & Co., was one of the principal means of expanding the scale of such balancing locally. The effectiveness of the medium of circulation is increased through this economy in so far as a smaller quantity of it is required simply to balance accounts. On the other hand the velocity of the money flowing as medium of circulation (by which it is also economised) depends entirely upon the flow of purchases and sales, and on the chain of payments, in so far as they occur successively in money. But credit effects and thereby increases the velocity of circulation. A single piece of money, for instance, can effect only five moves, and remains longer in the hands of each individual as mere medium of circulation without credit mediating — when A, its original owner, buys from B, B from C, C from D, D from E, and E from F, that is, when its transition from one hand to another is due only to actual purchases and sales. But when B deposits the money received in payment from A with his banker and the latter uses it in discounting bills of exchange for C, C in turn buys from D, D deposits it with his banker and the latter lends it to E, who buys from F, then even its velocity as mere medium of circulation (means of purchase) is effected by several credit operations: B's depositing with his banker and the latter's discounting for C, D's depositing with his banker, and the latter's discounting for E; in other words through four credit operations. Without these credit operations, the same piece of money would not have performed five purchases successively in the given period of time. The fact that it changed hands without mediation of actual sales and purchases, through depositing and discounting, has here accelerated its change of hands in the series of actual transactions.

We have seen previously that one and the same banknote can constitute deposits in several banks. Similarly, it can also constitute various deposits in the same bank. The banker discounts, with the note which A has deposited, B's bill of exchange, B pays C, and C deposits the same note in the same bank that issued it.

We have already demonstrated in the discussion of simple money circulation (Buch I, Kap. III) that the mass of actual circulating money, assuming the velocity of circulation and economy of payments as given, is determined by the prices of commodities and the quantity of transactions. The same law governs the circulation of notes [...]

The absolute amount of circulation has a determining influence on the

rate of interest only in times of stringency. The demand for full circulation can either reflect merely a demand for a hoarding medium (disregarding the reduced velocity of the money circulation and the continuous conversion of the same identical pieces of money into loan capital) owing to lack of credit, as was the case in 1847 when the suspension of the Bank Act did not cause any expansion of the circulation, but sufficed to draw forth the hoarded notes and to channel them into circulation; or it may be that more means of circulation are actually required under the circumstances, as was the case in 1857 when the circulation actually expanded for some time after the suspension of the Bank Act.

Otherwise, the absolute quantity of circulation has no influence whatever upon the rate of interest, since — assuming the economy and velocity of currency to be constant — it is determined in the first place by commodity prices and the quantity of transactions (whereby one of these generally neutralises the effect of the other), and finally by the state of credit, whereas it by no means exerts the reverse effect upon the latter; and, secondly, since commodity prices and interest do not necessarily stand in any direct correlation to each other [...]

The difference between the issue of circulating medium and the lending of capital is best demonstrated in the actual reproduction process. We have seen (Book II, Part III) in what manner the different component parts of production are exchanged for one another. For example, variable capital consists materially of the means of subsistence of the labourers, a portion of their own product. But this is paid out to them piecemeal in money. The capitalist has to advance this, and it is very greatly dependent on the credit system organisation whether he can pay out the new variable capital the following week with the old money which he paid out in the previous week. The same holds for exchange among various component parts of the total social capital, for instance, between means of consumption and means of production of means of consumption. The money for their circulation, as we have seen, must be advanced by one or both of the exchanging parties. It remains thereupon in circulation, but returns after the exchange has been completed to the one who advanced it, since it had been advanced by him over and above his actually employed industrial capital (Book II, Chap. XX). Under a developed system of credit, with the money concentrated in the hands of bankers, it is they, at least nominally, who advance it. This advance refers only to money in circulation. It is an advance of circulation, not an advance of capitals which it circulates [...]

The quantity of circulating bills of exchange, therefore, like that of banknotes, is determined solely by the requirements of commerce; in ordinary times, there circulated in the fifties in the United Kingdom, in addition to 39 million in banknotes, about 300 million in bills of exchange —

of which 100-120 million were made out on London alone. The volume of circulating bills of exchange has no influence on note circulation and is influenced by the latter only in times of money tightness, when the quantity of bills increases and their quality deteriorates. Finally, in a period of crisis, the circulation of bills collapses completely; nobody can make use of a promise to pay since everyone will accept only cash payment; only the banknote retains, at least thus far in England, its ability to circulate, because the nation with its total wealth backs up the Bank of England [...]

## PART 6: TRANSFORMATION OF SURPLUS PROFIT INTO GROUND RENT

### CHAPTER 37: INTRODUCTION

The analysis of landed property in its various historical forms is beyond the scope of this work. We shall be concerned with it only in so far as a portion of the surplus value produced by capital falls to the share of the landowner. We assume, then, that agriculture is dominated by the capitalist mode of production just as manufacture is; in other words, that agriculture is carried on by capitalists who differ from other capitalists primarily in the manner in which their capital, and the wage labour set in motion by this capital, are invested. So far as we are concerned, the farmer produces wheat, etc., in much the same way as the manufacturer produces yarn or machines. The assumption that the capitalist mode of production has encompassed agriculture implies that it rules over all spheres of production and bourgeois society, i.e., that its prerequisites, such as free competition among capitals, the possibility of transferring the latter from one production sphere to another, and a uniform level of the average profit, etc., are fully matured. The form of landed property which we shall consider here is a specifically historical one a form transformed through the influence of capital and of the capitalist mode of production, either of feudal landownership, or of small-peasant agriculture as a means of livelihood, in which the possession of the land and the soil constitutes one of the prerequisites of production for the direct producer, and in which his ownership of land appears as the most advantageous condition for the prosperity of his mode of production. Just as the capitalist mode of production in general is based on the expropriation of the conditions of labour from the labourers, so does it in agriculture presuppose the expropriation of the rural labourers from the land and their subordination to a capitalist, who carries on agriculture for the sake of profit. Thus, for the purpose of our analysis, the objection that other forms of landed property and of agriculture have existed, or still exist, is quite irrelevant. Such an objection can only apply to those economists who treat the capitalist

mode of production in agriculture, and the form of landed property corresponding to it, not as historical but rather as eternal categories.

For our purposes it is necessary to study the modern form of landed property, because our task is to consider the specific conditions of production and circulation which arise from the investment of capital in agriculture. Without this, our analysis of capital would not be complete. We therefore confine ourselves exclusively to the investment of capital in agriculture itself, that is, in producing the principal agricultural crop which feeds a given people. We can use wheat for this purpose, because it is the principal means of subsistence in modern capitalistically developed nations. (Or, instead of agriculture, we can use mining because the laws are the same for both.)

One of the big contributions of Adam Smith was to have shown that ground rent for capital invested in the production of such agricultural products as flax and dye-stuffs, and in independent cattle-raising, etc., is determined by the ground rent obtained from capital invested in the production of the principal article of subsistence. In fact, no further progress has been made in this regard since then. Any limitations or additions would belong in an independent study of landed property, not here. Hence, we shall not speak of landed property *ex professo* — in so far as it does not refer to land destined for wheat production — but shall merely refer to it on occasion by way of illustration.

It should be noted for the sake of completeness that we also include water, etc., in the term land, in so far as it belongs to someone as an accessory to the land.

Landed property is based on the monopoly by certain persons over definite portions of the globe, as exclusive spheres of their private will to the exclusion of all others. With this in mind, the problem is to ascertain the economic value, that is, the realisation of this monopoly on the basis of capitalist production. With the legal power of these persons to use or misuse certain portions of the globe, nothing is decided. The use of this power depends wholly upon economic conditions, which are independent of their will. The legal view itself only means that the landowner can do with the land what every owner of commodities can do with his commodities. And this view, this legal view of free private ownership of land, arises in the ancient world only with the dissolution of the organic order of society, and in the modern world only with the development of capitalist production. It has been imported by Europeans to Asia only here and there. In the section dealing with primitive accumulation (Buch I, Kap. XXIV), we saw that this mode of production presupposes, on the one hand, the separation of the direct producers from their position as mere accessories to the land (in the form of vassals, serfs, slaves, etc.), and, on the other hand, the expropriation of the mass of the people from the land. To this extent the monopoly of landed

property is a historical premise, and continues to remain the basis of the capitalist mode of production, just as in all previous modes of production which are based on the exploitation of the masses in one form or another. But the form of landed property with which the incipient capitalist mode of production is confronted does not suit it. It first creates for itself the form required by subordinating agriculture to capital. It thus transforms feudal landed property, clan property, small peasant property in mark communes — no matter how divergent their juristic forms may be — into the economic form corresponding to the requirements of this mode of production. One of the major results of the capitalist mode of production is that, on the one hand, it transforms agriculture from a mere empirical and mechanical self-perpetuating process employed by the least developed part of society into the conscious scientific application of agronomy, in so far as this is at all feasible under conditions of private property; that it divorces landed property from the relations of dominion and servitude, on the one hand, and, on the other, totally separates land as an instrument of production from landed property and landowner — for whom the land merely represents a certain money assessment which he collects by virtue of his monopoly from the industrial capitalist, the capitalist farmer; it dissolves the connection between landownership and the land so thoroughly that the landowner may spend his whole life in Constantinople, while his estates lie in Scotland. Landed property thus receives its purely economic form by discarding all its former political and social embellishments and associations, in brief all those traditional accessories, which are denounced, as we shall see later, as useless and absurd superfluities by the industrial capitalists themselves, as well as their theoretical spokesmen, in the heat of their struggle with landed property. The rationalising of agriculture, on the one hand, which makes it for the first time capable of operating on a social scale, and the reduction *ad absurdum* of property in land, on the other, are the great achievements of the capitalist mode of production. Like all of its other historical advances, it also attained these by first completely impoverishing the direct producers.

Before we proceed to the problem itself, several more preliminary remarks are necessary to avoid misunderstanding.

The prerequisites for the capitalist mode of production therefore are the following: The actual tillers of the soil are wage labourers employed by a capitalist, the capitalist farmer who is engaged in agriculture merely as a particular field of exploitation for capital, as investment for his capital in a particular sphere of production. This capitalist farmer pays the landowner, the owner of the land exploited by him, a sum of money at definite periods fixed by contract, for instance, annually (just as the borrower of money capital pays a fixed interest), for the right to invest his capital in this specific sphere of production. This sum of money is called ground rent, no matter whether it is

paid for agricultural land, building lots, mines, fishing grounds, or forests, etc. It is paid for the entire time for which the landowner has contracted to rent his land to the capitalist farmer. Ground rent, therefore, is here that form in which property in land is realised economically, that is, produces value. Here, then, we have all three classes — wage labourers, industrial capitalists, and landowners constituting together, and in their mutual opposition, the framework of modern society.

Capital may be fixed in the land, incorporated in it either in a transitory manner, as through improvements of a chemical nature, fertilisation, etc., or more permanently, as in drainage canals, irrigation works, leveling, farm buildings, etc. Elsewhere I have called the capital thus applied to land *la terre-capital*. It belongs to the category of fixed capital. The interest on capital incorporated in the land and the improvements thus made in it as an instrument of production can constitute a part of the rent paid by the capitalist farmer to the landowner, but it does not constitute the actual ground rent, which is paid for the use of the land as such — be it in a natural or cultivated state. In a systematic treatment of landed property, which is not within our scope, this part of the landowner's revenue would have to be discussed at length. But a few words about it will suffice here. The more transitory capital investments, which accompany the ordinary production processes in agriculture, are all made without exception by the capitalist farmer. These investments, like cultivation proper in general, improve the land, increase its output, and transform the land from mere material into land-capital when the cultivation is carried on more or less rationally, i.e., when it is not reduced to a brutal spoliation of the soil, as was in vogue, e.g., among the former slave-holders in the United States; however, the gentlemen landowners secure themselves against such practice by contract. A cultivated field is worth more than an uncultivated one of the same natural quality. The more permanent fixed capital investments, which are incorporated in the soil and used up in a longer period of time, are also in the main, and in some spheres often exclusively, made by the capitalist farmer. But as soon as the time stipulated by contract has expired — and this is one of the reasons why with the development of capitalist production the landowners seek to shorten the contract period as much as possible — the improvements incorporated in the soil become the property of the landowner as an inseparable feature of the substance, the land. In the new contract made by the landowner he adds the interest for capital incorporated in the land to the ground rent itself. And he does this whether he now leases the land to the capitalist farmer who made these improvements or to some other farmer. His rent is thus inflated; and should he wish to sell his land (we shall see immediately how its price is determined), its value is now higher. He sells not merely the land but the improved land, the capital incorporated in the land for which he paid nothing.

Quite aside from the movements of ground rent itself, here lies one of the secrets of the increasing enrichment of landowners, the continuous inflation of their rents, and the constantly growing money value of their estates along with progress in economic development. Thus they pocket a product of social development created without their help — *fruges consumere nati*. But this is at the same time one of the greatest obstacles to a rational development of agriculture, for the tenant farmer avoids all improvements and outlays for which he cannot expect complete returns during the term of his lease. We find this situation denounced as such an obstacle again and again, not only in the 18th century by James Anderson, the actual discoverer of the modern theory of rent — who was also a practical capitalist farmer and an advanced agronomist for his time — but also in our own day by opponents of the present constitution of landed property in England [...]

In agriculture proper this process does not yet appear quite as plainly as when the land is used for building purposes. By far the largest portion of land used in England for building purposes but not sold as a freehold is leased by the landowners for 99 years or, if possible, for a shorter term. After the lapse of this period the buildings fall into the hands of the landowner together with the land itself [...]

This illustration of ownership in buildings is important. In the first place, it clearly shows the difference between actual ground rent and interest on fixed capital incorporated in the land, which may constitute an addition to ground rent. Interest on buildings, like that on capital incorporated in the land by the tenant in agriculture, falls into the hands of the industrial capitalist, the building speculator, or the tenant, so long as the lease lasts, and has in itself nothing to do with ground rent, which must be paid on stated dates annually for the use of the land. Secondly, it shows that capital incorporated in the land by others ultimately passes into the hands of the landlord together with the land, and that the interest for it inflates his rent.

Some writers, acting either as spokesmen of landlordism and taking up the cudgels against the attacks of bourgeois economists, or in an endeavour to transform the capitalist system of production from a system of contradictions into one of "harmonies", like Carey, have tried to represent ground rent, the specific economic expression of landed property, as identical with interest. This would eliminate the opposition between landlords and capitalists. The opposite method was employed in the early stages of capitalist production. In those days, landed property was still regarded by popular conception as the pristine and respectable form of private property, while interest on capital was decried as usury. Dudley North, Locke and others, therefore, represented interest on capital as a form analogous to ground rent, just as Turgot deduced the justification for interest from the existence of ground rent. — Aside from the fact that ground rent may, and

does, exist in its pure form without any addition for interest on capital incorporated in the land, those more recent writers forget that, in this way, the landlord not only receives interest on other persons' capital that costs him nothing, but also pockets this capital of others without recompense. The justification of landed property, like that of all other forms of property corresponding to a certain mode of production, is that the mode of production itself is a transient historical necessity, and this includes the relations of production and exchange which stem from it. It is true, as we shall see later, that landed property differs from other kinds of property in that it appears superfluous and harmful at a certain stage of development, even from the point of view of the capitalist mode of production.

Ground rent may in another form be confused with interest and thereby its specific character overlooked. Ground rent assumes the form of a certain sum of money, which the landlord draws annually by leasing a certain plot on our planet. We have seen that every particular sum of money may be capitalised, that is, considered as the interest on an imaginary capital. For instance, if the average rate of interest is 5%, then an annual ground rent of £200 may be regarded as interest on a capital of £4,000. Ground rent so capitalised constitutes the purchase price or value of the land, a category which like the price of labour is *prima facie* irrational, since the earth is not the product of labour and therefore has no value. But on the other hand, a real relation in production is concealed behind this irrational form. If a capitalist buys land yielding a rent of £200 annually and pays £4,000 for it, then he draws the average annual interest of 5% on his capital of £4,000, just as if he had invested this capital in interest-bearing papers or loaned it directly at 5% interest. It is the expansion of a capital of £4,000 at 5%. On this assumption, he would recover the purchase price of his estate through its revenues in twenty years. In England, therefore, the purchase price of land is calculated in so many years' purchase which is merely another way of expressing the capitalisation of ground rent. It is in fact the purchase price — not of the land, but of the ground rent yielded by it — calculated in accordance with the usual interest rate. But this capitalisation of rent assumes the existence of rent, while rent cannot inversely be derived and explained from its own capitalisation. Its existence, independent of its sale, is rather the starting-point for the inquiry.

It follows, then, that the price of land may rise or fall inversely as the interest rate rises or falls if we assume ground rent to be a constant magnitude. If the ordinary interest rate should fall from 5% to 4%, then the annual ground rent of £200 would represent the annual realisation from a capital of £5,000 instead of £4,000. The price of the same piece of land would thus have risen from £4,000 to £5,000, or from 20 years' to 25 years' purchase. The converse would take place in the opposite case. This is a

movement of the price of land which is independent of the movement of ground rent itself and regulated only by the interest rate. But as we have seen that the rate of profit has a tendency to fall in the course of social progress, and, therefore, the interest rate has the same tendency, so far as it is regulated by the rate of profit; and that, furthermore, the interest rate shows a tendency to fall in consequence of the growth of loanable capital, apart from the influence of the rate of profit, it follows that the price of land has a tendency to rise, even independently of the movement of ground rent and the prices of the products of the land, of which rent constitutes a part.

The confusion of ground rent itself with the interest form which it assumes for the buyer of the land — a confusion resulting from complete lack of familiarity with the nature of ground rent — must necessarily lead to the most absurd conclusions. Since landed property is considered in all ancient countries as a particularly genteel form of property, and its purchase also as an eminently safe capital investment, the interest rate at which ground rent is bought is generally lower than that of other long-term investments of capital, so that a buyer of real estate draws, for instance, only 4% on his purchase price, whereas he would draw 5% for the same capital in other investments. In other words, he pays more capital for ground rent than he would for the same annual amount of income from other investments. This leads Mr. Thiers to conclude in his generally very poor work on *La Propriété* (a reprint of his speech in the French National Assembly in 1849 directed against Proudhon) that ground rent is low, whereas it merely proves that its purchase price is high [...]

In practice, naturally, everything appears as ground rent that is paid as lease money by tenant to landlord for the right to cultivate the soil. No matter what the composition of this tribute and no matter what its sources, it has this in common with the actual ground rent — that the monopoly of the so-called landed proprietor of a portion of our planet enables him to levy such tribute and impose such an assessment. It has this in common with the actual ground rent — that it determines the price of land, which, as we have indicated earlier, is nothing but the capitalised income from the lease of the land.

We have already seen that interest for the capital incorporated in the land may constitute such an extraneous component of ground rent [...] But aside from this interest, it is possible that the lease money may conceal in part, and in certain cases in its entirety, i.e., in complete absence of the actual ground rent when the land is, therefore, actually worthless — a deduction from the average profit or from the normal wages, or both. This portion, whether of profit or wages, appears here as ground rent, because instead of falling to the industrial capitalist or the wage worker, as would normally be the case, it is paid to the landlord in the form of lease money. Economically speaking, neither the one nor the other of these portions constitutes ground

rent; but, in practice, it constitutes the landlord's revenue, an economic realisation of his monopoly, much as actual ground rent, and it has just as determining an influence on land prices [...]

We are not speaking now of conditions in which ground rent, the manner of expressing landed property in the capitalist mode of production, formally exists without the existence of the capitalist mode of production itself, i.e., without the tenant himself being an industrial capitalist, nor the type of his management being a capitalist one. Such is the case, e.g., in Ireland. The tenant there is generally a small farmer. What he pays to the landlord in the form of rent frequently absorbs not merely a part of his profit, that is, his own surplus labour (to which he is entitled as possessor of his own instruments of labour), but also a part of his normal wage, which he would otherwise receive for the same amount of labour. Besides, the landlord, who does nothing at all for the improvement of the land, also expropriates his small capital, which the tenant for the most part incorporates in the land through his own labour [...]

Nor are we referring to exceptional circumstances in which the landlord may enforce a high rental — even in countries with capitalist production — that stands in no relation to the yield from the soil. Of such a nature, for example, is the leasing of small patches of land to labourers in English factory districts, either as small gardens or for amateur spare-time farming. (Reports of Inspectors of Factories.)

We are referring to ground rent in countries with developed capitalist production. Among English tenants, for instance, there are a number of small capitalists who are destined and compelled by education, training, tradition, competition, and other circumstances to invest their capital as tenants in agriculture. They are forced to be satisfied with less than the average profit, and to turn over part of it to the landlords as rent. This is the only condition under which they are permitted to invest their capital in the land, in agriculture. Since landlords everywhere exert considerable, and in England even overwhelming, influence on legislation, they are able to exploit this situation for the purpose of victimising the entire class of tenants [...]

A much more general and important fact, however, is the depression of the actual farm labourer's wage below its normal average, so that part of it is deducted to become part of the lease money and thus, in the guise of ground rent, it flows into the pocket of the landlord rather than the labourer. This is, for example, quite generally the case in England and Scotland, with the exception of a few favourably situated counties [...]

[It] should be borne in mind in considering the various forms of manifestation of ground rent, that is, the lease money paid under the heading of ground rent to the landlord for the use of the land for purposes of production or consumption, that the price of things which have in themselves

no value, i.e., are not the product of labour, such as land, or which at least cannot be reproduced by labour, such as antiques and works of art by certain masters, etc., may be determined by many fortuitous combinations. In order to sell a thing, nothing more is required than its capacity to be monopolised and alienated.

There are three main errors to be avoided in studying ground rent, and which obscure its analysis.

1) Confusing the various forms of rent pertaining to different stages of development of the social production process.

Whatever the specific form of rent may be, all types have this in common: the appropriation of rent is that economic form in which landed property is realised, and ground rent, in turn, presupposes the existence of landed property, the ownership of certain portions of our planet by certain individuals. The owner may be an individual representing the community, as in Asia, Egypt, etc.; or this landed property may be merely incidental to the ownership of the immediate producers themselves by some individual as under slavery or serfdom; or it may be a purely private ownership of Nature by non-producers, a mere title to land; or, finally, it may be a relationship to the land which, as in the case of colonists and small peasants owning land, seems to be directly included — in the isolated and not socially developed labour — in the appropriation and production of the products of particular plots of land by the direct producers.

This common element in the various forms of rent, namely that of being the economic realisation of landed property, of legal fiction by grace of which certain individuals have an exclusive right to certain parts of our planet — makes it possible for the differences to escape detection.

2) All ground rent is surplus value, the product of surplus labour. In its undeveloped form as rent in kind it is still directly the surplus product itself. Hence, the mistaken idea that the rent corresponding to the capitalist mode of production — which is always a surplus over and above profit, i.e., above a value portion of commodities which itself consists of surplus value (surplus labour) — that this special and specific component of surplus value is explained by merely explaining the general conditions for the existence of surplus value and profit in general. These conditions are: the direct producers must work beyond the time necessary for reproducing their own labour power, for their own reproduction. They must perform surplus labour in general. This is the subjective condition. The objective condition is that they must be able to perform surplus labour. The natural conditions must be such that a part of their available labour time suffices for their reproduction and self-maintenance as producers, that the production of their necessary means of subsistence shall not consume their whole labour power. The fertility of Nature establishes a limit here, a starting-point, a basis. On the other hand,

the development of the social productive power of their labour forms the other limit. Examined more closely, since the production of means of subsistence is the very first condition of their existence and of all production in general, labour used in this production, that is, agricultural labour in the broadest economic sense, must be fruitful enough so as not to absorb the entire available labour time in the production of means of subsistence for the direct producers, that is, agricultural surplus labour and therefore agricultural surplus product must be possible. Developed further, the total agricultural labour, both necessary and surplus labour, of a segment of society must suffice to produce the necessary subsistence for the whole of society, that is, for non-agricultural labourers too. This means therefore that the major division of labour between agricultural and industrial must be possible; and similarly between tillers of the soil producing means of subsistence and those producing raw materials. Although the labour of the direct producers of means of subsistence breaks up into necessary and surplus labour as far as they themselves are concerned, it represents from the social standpoint only the necessary labour required to produce the means of subsistence. Incidentally, the same is true for all division of labour within society as a whole, as distinct from the division of labour within individual workshops. It is the labour necessary for the production of particular articles, for the satisfaction of some particular need of society for these particular articles. If this division is proportional, then the products of various groups are sold at their values (at a later stage of development they are sold at their prices of production), or at prices which are certain modifications of these values or prices of production determined by general laws. It is indeed the effect of the law of value, not with reference to individual commodities or articles, but to each total product of the particular social spheres of production made independent by the division of labour; so that not only is no more than the necessary labour time used up for each specific commodity, but only the necessary proportional quantity of the total social labour time is used up in the various groups. For the condition remains that the commodity represents use value. But if the use value of individual commodities depends on whether they satisfy a particular need then the use value of the mass of the social product depends on whether it satisfies the quantitatively definite social need for each particular kind of product in an adequate manner, and whether the labour is therefore proportionately distributed among the different spheres in keeping with these social needs, which are quantitatively circumscribed. (This point is to be noted in the distribution of capital among the various spheres of production.) The social need, that is, the use value on a social scale, appears here as a determining factor for the amount of total social labour time which is expended in various specific spheres of production. But it is merely the same law which is already applied in the case of single

commodities, namely, that the use value of a commodity is the basis of its exchange value and thus of its value. This point has a bearing upon the relationship between necessary and surplus labour only in so far as a violation of this proportion makes it impossible to realise the value of the commodity and thus the surplus value contained in it. For instance; let us assume that proportionally too much cotton goods have been produced, although only the labour time necessary under the prevailing conditions is incorporated in this total cloth production. But in general too much social labour has been expended in this particular line; in other words, a portion of this product is useless. It is therefore sold solely as if it had been produced in the necessary proportion. This quantitative limit to the quota of social labour time available for the various particular spheres of production is but a more developed expression of the law of value in general, although the necessary labour time assumes a different meaning here. Only just so much of it is required for the satisfaction of social needs. The limitation occurring here is due to the use value. Society can use only so much of its total labour time for this particular kind of product under prevailing conditions of production. But the subjective and objective conditions of surplus labour and surplus value in general have nothing to do with the particular form of either the profit or the rent. These conditions apply to surplus value as such, no matter what special form it may assume. Hence they do not explain ground rent.

3) It is precisely in the economic realisation of landed property, in the development of ground rent, that the following characteristic peculiarity comes to the fore, namely that its amount is by no means determined by the actions of its recipient, but is determined rather by the independent development of social labour in which the recipient takes no part. It may easily happen, therefore, that something is regarded as a peculiarity of rent (and of the products of agriculture in general), which is really a common feature of all branches of production and all their products where the basis is commodity production — and, in particular, capitalist production, which is in its entirety commodity production [...]

It is in the nature of capitalist production to continually reduce the agricultural population as compared with the non-agricultural, because in industry (in the strict sense) the increase of constant capital in relation to variable capital goes hand in hand with an absolute increase, though relative decrease, in variable capital; on the other hand, in agriculture the variable capital required for the exploitation of a certain plot of land decreases absolutely; it can thus only increase to the extent that new land is taken into cultivation, but this again requires as a prerequisite a still greater growth of the non-agricultural population [...]

Rent can develop as money rent only on the basis of commodity production, in particular capitalist production, and it develops to the same

extent that agricultural production becomes commodity production, that is, to the same extent that non-agricultural production develops independently of agricultural production, for to that degree the agricultural product becomes commodity, exchange value, and value. In so far as commodity production and thus the production of value develops with capitalist production so does the production of surplus value and surplus product. But in the same proportion as the latter develops, landed property acquires the capacity of capturing an ever-increasing portion of this surplus value by means of its land monopoly and thereby, of raising the value of its rent and the price of the land itself. The capitalist still performs an active function in the development of this surplus value and surplus product. But the landowner need only appropriate the growing share in the surplus product and the surplus value, without having contributed anything to this growth [...]

Therefore, if, on the one hand, surplus value or, still more narrowly, the surplus product in general is explained instead of rent, the mistake is made, on the other hand, of ascribing exclusively to agricultural products a characteristic which belongs to all products in their capacity as commodities and values. This is vulgarised still more by those who pass from the general determination of value over to the rea1isation of the value of a specific commodity. Every commodity can realise its value only in the process of circulation, and whether it realises its value, or to what extent it does so, depends on prevailing market conditions.

It is not a singularity of ground rent, then, that agricultural products develop into, and as, values, i.e., that they confront other commodities as commodities, and that non-agricultural products confront them as commodities; or that they develop as specific expressions of social labour. The singularity of ground rent is rather that together with the conditions in which agricultural products develop as values (commodities), and together with the conditions in which their values are realised, there also grows the power of landed property to appropriate an increasing portion of these values, which were created without its assistance; and so an increasing portion of surplus value is transformed into ground rent.

## CHAPTER 38: DIFFERENTIAL RENT. GENERAL REMARKS

In the analysis of ground rent we shall begin with the assumption that products paying such a rent, products in which a portion of the surplus value, and therefore also a portion of the total price, resolves itself into ground rent, i.e., that agricultural as well as mining products are sold at their prices of production like all other commodities. (It suffices for our purposes to confine ourselves to agricultural and mining products.) In other words, their selling prices are made up of the elements of their cost (the value of consumed

constant and variable capital) plus a profit determined by the general rate of profit and calculated on the total advanced capital, whether consumed or not. We assume, then, that average selling prices of these products are equal to their prices of production. The question now arises how it is possible for ground rent to develop under these conditions, i.e., how it is possible for a portion of the profit to become transformed into ground rent, so that a portion of the commodity price falls to the landlord.

In order to demonstrate the general character of this form of ground rent, let us assume that most of the factories of a certain country derive their power from steam-engines, while a smaller number derive it from natural waterfalls. Let us further assume that the price of production in the former amounts to 115 for a quantity of commodities which have consumed a capital of 100. The 15% profit is calculated not solely on the consumed capital of 100, but on the total capital employed in the production of this commodity value. **We have previously shown that this price of production is not determined by the individual cost price of every single industrial producer, but by the average cost price of the commodity under average conditions of capital in the entire sphere of production. It is, in fact, the market price of production, the average market price as distinct from its oscillations. It is in general in the form of the market price, and, furthermore, in the form of the regulating market price, or market price of production, that the nature of the value of commodities asserts itself, its determination not by the labour time necessary in the case of any individual producer for the production of a certain quantity of commodities, or of some individual commodity, but by the socially necessary labour time; that is, by the labour time, required for the production of the socially necessary total quantity of commodity varieties on the market under the existing average conditions of social production.**

As definite figures are immaterial in this case, we shall assume furthermore that the cost price in factories run on water-power is only 90 instead of 100. Since the regulating market price of production of this quantity of commodities = 115, with a profit of 15%, the manufacturers who operate their machines on water power will also sell their commodities at 115, i.e., the average price regulating the market price. Their profit would then be 25 instead of 15; the regulating price of production would allow them a surplus profit of 10% not because they sell their commodities above the price of production, but because they sell them at the price of production, because their commodities are produced, or their capital operates, under exceptionally favourable conditions, i.e., under conditions which are more favourable than the average prevailing in this sphere.

Two things become evident at once:

*First*, the surplus profit of the producers who use a natural waterfall

as motive power is to begin with in the same class with all surplus profit (and we have already analysed this category when discussing prices of production) which is not the fortuitous result of transactions in the circulation process, of the fortuitous fluctuations in market prices. This surplus profit, then, is likewise equal to the difference between the individual price of production of these favoured producers and the general social price of production regulating the market in this entire production sphere. This difference is equal to the excess of the general price of production of the commodities over their individual price of production. The two regulating limits of this excess are, on the one hand, the individual cost price, and thus the individual price of production, and, on the other hand, the general price of production. The value of commodities produced with water-power is smaller because a smaller total quantity of labour is required for their production, i.e., less labour — in materialised form — enters into the constant capital as part of the latter [...]

*Secondly*, thus far, the surplus profit of the manufacturer using natural water-power instead of steam does not differ in any way from any other surplus profit. All normal surplus profit, that is, all surplus profit not due to fortuitous sales or market price fluctuations is determined by the difference between the individual price of production of the commodities of a particular capital and the general price of production, which regulates the market prices of the commodities produced by the capital in this sphere of production in general, or, in other words, the market prices of commodities of the total capital invested in this sphere of production.

But now we come to the difference.

To what circumstance does the industrial capitalist in the present case owe his surplus profit, the surplus resulting for him personally from the price of production regulated by the general rate of profit?

He owes it in the first instance to a natural force — the motive power of the waterfall — which is found readily available in Nature and is not itself a product of labour like the coal which transforms water into steam. The coal, therefore, has value, must be paid for by an equivalent, and has a cost. The waterfall is a natural production agent in the production of which no labour enters.

But this is not all. The manufacturer who operates with steam also employs natural forces which cost him nothing yet make the labour more productive and increase the surplus value and thereby the profit, inasmuch as they thus cheapen the manufacture of the means of subsistence required for the labourers. These natural forces are thus quite as much monopolised by capital as the social natural forces of labour arising from co-operation, division of labour, etc. The manufacturer pays for coal, but not for the capacity of water to alter its physical state, to turn into steam, not for the elasticity of the steam, etc. This monopolisation of natural forces, that is, of

the increase in labour power produced by them, is common to all capital operating with steam-engines. It may increase that portion of the product of labour which represents surplus value in relation to that portion which is transformed into wages. In so far as it does this, it raises the general rate of profit, but it does not create any surplus profit, for this consists of the excess of individual profit over average profit. The fact that the application of a natural force, a waterfall, creates surplus profit in this case, cannot therefore be due solely to the circumstance that the increased productivity of labour here results from the application of a natural force. Other modifying circumstances are necessary.

Conversely. The mere application of natural forces in industry may influence the level of the general rate of profit because it affects the quantity of labour required to produce the necessary means of subsistence. But in itself it does not create any deviation from the general rate of profit, and this is precisely the point in which we are interested here. Furthermore, the surplus profit which some individual capital otherwise realises in a particular sphere of production — for deviations of the rates of profit in various spheres of production are continually balanced out into an average rate — is due, aside from fortuitous deviations, to a reduction in cost price, in production costs. This reduction arises either from the fact that capital is used in greater than average quantities, so that *faux frais* of production are reduced, while the general causes increasing the productiveness of labour (cooperation, division of labour, etc.) can become effective to a higher degree, with more intensity, because their field of activity has become larger; or it may arise from the fact that, aside from the amount of functioning capital, better methods of labour, new inventions, improved machinery, chemical manufacturing secrets, etc., in short, new and improved, better than average means of production and methods of production are used. The reduction in cost price and the surplus profit arising from it are here the result of the manner in which the functioning capital is invested. They result either from the fact that the capital is concentrated in the hands of one person in extraordinarily large quantities (a condition that is cancelled out as soon as equal magnitudes of capital are used on the average), or from the fact that a certain magnitude of capital functions in a particularly productive manner (a condition that disappears as soon as the exceptional method of production becomes general or is surpassed by a still more developed one).

The cause of the surplus profit, then, arises here from the capital itself (which includes the labour set in motion by it) whether it be due to the greater magnitude of capital employed or to its more efficient application; and, as a matter of fact, there is no particular reason why all capital in the same production sphere should not be invested in the same manner. On the contrary, the competition between capitals tends to cancel these differences

more and more. The determination of value by the socially necessary labour time asserts itself through the cheapening of commodities and the compulsion to produce commodities under the same favourable conditions. But matters are different with the surplus profit of an industrial capitalist who makes use of the waterfall. The increased productiveness of the labour used by him comes neither from the capital and labour itself, nor from the mere application of some natural force different from capital and labour but incorporated in the capital. It arises from the greater natural productiveness of labour bound up with the application of a force of Nature, but not a force of Nature that is at the command of all capital in the same sphere of production, as for example the elasticity of steam. In other words, its application is not to be taken for granted whenever capital is generally invested in this sphere of production. On the contrary, it is a monopolisable force of Nature which, like the waterfall, is only at the command of those who have at their disposal particular portions of the earth and its appurtenances. It is by no means within the power of capital to call into existence this natural premise for a greater productivity of labour in the same manner as any capital may transform water into steam. It is found only locally in Nature and, wherever it does not exist, it cannot be established by a definite investment of capital. It is not bound to goods which labour can produce, such as machines and coal, but to specific natural conditions prevailing in certain portions of land. Those manufacturers who own waterfalls exclude those who do not from using this natural force, because land, and particularly land endowed with water-power, is scarce [...]

Now let us assume that the waterfalls, along with the land to which they belong, are held by individuals who are regarded as owners of these portions of the earth, i.e., who are landowners. These owners prevent the investment of capital in the waterfalls and their exploitation by capital. They can permit or forbid such utilisation. But a waterfall cannot be created by capital out of itself. Therefore, the surplus profit which arises from the employment of this waterfall is not due to capital, but to the utilisation of a natural force which can be monopolised, and has been monopolised, by capital. Under these circumstances, the surplus profit is transformed into ground rent, that is, it falls into possession of the owner of a waterfall. If the manufacturer pays the owner of a waterfall £10 annually, then his profit is £15, that is, 15% on the £100 which then make up his cost of production; and he is just as well or possibly better off than all other capitalists in his sphere of production who operate with steam. It would not alter matters one bit if the capitalist himself should be the owner of a waterfall. He would, in such a case, pocket as before the surplus profit of £10 in his capacity as waterfall owner, and not in his capacity as capitalist; and precisely because this surplus does not stem from his capital as such, but rather from the control of a limited natural force distinct from his capital which can be monopolised, is it

transformed into ground rent.

*First*, it is evident that this rent is always a differential rent, for it does not enter as a determining factor into the general production price of commodities, but rather is based on it. It invariably arises from the difference between the individual production price of a particular capital having command over the monopolised natural force, on the one hand, and the general production price of the total capital invested in the sphere of production concerned, on the other.

*Secondly*, this ground rent does not arise from the absolute increase in the productiveness of employed capital, or labour appropriated by it, since this can only reduce the value of commodities; it is due to the greater relative fruitfulness of specific separate capitals invested in a certain production sphere, as compared with investments of capital which are excluded from these exceptional and natural conditions favouring productiveness. For instance, if the use of steam should offer overwhelming advantages not offered by the use of water-power, despite the fact that coal has value and the water-power has not, and if these advantages more than compensated for the expense, then, the water-power would not be used and could not produce any surplus profit, and therefore could not produce any rent.

*Thirdly*, the natural force is not the source of surplus profit, but only its natural basis, because this natural basis permits an exceptional increase in the productiveness of labour. In the same way, use value is in general the bearer of exchange value, but not its cause. If the same use value could be obtained without labour, it would have no exchange value, yet it would retain, as before, the same natural usefulness as use value. On the other hand, nothing can have exchange value unless it has use value, i.e., unless it is a natural bearer of labour. Were it not for the fact that the various values are averaged out into prices of production, and the various individual prices of production into a general price of production regulating the market, the mere increase in productivity of labour through utilisation of the waterfall would merely lower the price of commodities produced with the aid of this waterfall, without increasing the share of profit contained in these commodities. Similarly, on the other hand, this increased productivity of labour itself would not be converted into surplus value were it not for the fact that capital appropriates the natural and social productivity of the labour used by it as its own.

*Fourthly*, the private ownership of the waterfall in itself has nothing to do with the creation of the surplus value (profit) portion, and therefore, of the price of the commodity in general, which is produced by means of the waterfall. This surplus profit would also exist if landed property did not exist; for instance, if the land on which the waterfall is situated were used by the manufacturer as unclaimed land. Hence landed property does not create the

portion of value which is transformed into surplus profit, but merely enables the landowner, the owner of the waterfall, to coax this surplus profit out of the pocket of the manufacturer and into his own. It is not the cause of the creation of such surplus profit, but is the cause of its transformation into the form of ground rent, and therefore of the appropriation of this portion of the profit, or commodity price, by the owner of the land or waterfall.

*Fifthly*, it is evident that the price of the waterfall, that is, the price which the landowner would receive were he to sell it to a third party or even to the manufacturer himself, does not immediately enter into the production price of the commodities, although it does enter into the individual cost price of the manufacturer; because the rent arises here from the price of production of similar commodities produced by steam machinery, and this price is regulated independently of the waterfall. Furthermore, this price of the waterfall on the whole is an irrational expression, but behind it is hidden a real economic relationship. The waterfall, like land in general, and like any natural force, has no value because it does not represent any materialised labour, and therefore, it has no price, which is normally no more than the expression of value in money terms. Where there is no value, there is also *eo ipso* nothing to be expressed in money. This price is nothing more than the capitalised rent. Landownership enables the landowner to appropriate the difference between the individual profit and average profit. The profit thus acquired, which is renewed every year, may be capitalised, and appears then as the price of the natural force itself. If the surplus profit realised by the manufacturer using the waterfall amounts to £10 per year, and the average interest is 5%, then these £10 represent the annual interest on a capital of £200 and the capitalisation of the annual £10 which the waterfall enables its owner to appropriate from the manufacturer, appears then as the capital value of the waterfall itself. That it is not the waterfall itself which has value, but that its price is a mere reflection of the appropriated surplus profit capitalistically calculated, becomes at once evident from the fact that the price of £200 represents merely the product obtained by multiplying a surplus profit of £10 by 20 years, whereas, other conditions remaining equal, the same waterfall will enable its owner to appropriate these £10 every year for an indefinite number of years — 30 years, 100 years, or x years; and, whereas, on the other hand, should some new method of production not applicable with water-power reduce the cost price of commodities produced by steam machinery from £100 to £90, the surplus profit, and thereby the rent, and thus the price of the waterfall, would disappear.

Now that we have described the general concept of differential rent, we shall pass on to its consideration in agriculture proper. What applies to agriculture will also apply on the whole to mining.

## CHAPTER 39: FIRST FORM OF DIFFERENTIAL RENT (DIFFERENTIAL RENT I)

Ricardo is quite right in the following observations:

"Rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labour" (Principles, p. 59).

[He means differential rent, for he assumes that no other rent but differential rent exists.] He should have added, "on equal areas of land" in so far as it is a matter of ground rent and not surplus profit in general.

In other words, surplus profit, if normal and not due to accidental occurrences in the circulation process, is always produced as a difference between the products of two equal quantities of capital and labour, and this surplus profit is transformed into ground rent when two equal quantities of capital and labour are employed on equal areas of land with unequal results. Moreover, it is by no means absolutely necessary for this surplus profit to arise from the unequal results of equal quantities of invested capital. The various investments may also employ unequal quantities of capital. Indeed, this is generally the case. But equal proportions, for instance £100 of each, produce unequal results; that is, their rates of profit are different. This is the general prerequisite for the existence of surplus profit in any sphere of capital investment. The second prerequisite is the transformation of this surplus profit into the form of ground rent (of rent in general as a form distinct from profit); it must be investigated in each case when, how, under what conditions this transformation takes place [...]

We shall first consider the unequal results of equal quantities of capital applied to different plots of land of equal size; or, in the case of unequal size, results calculated on the basis of equal areas.

The two general causes of these unequal results — quite independent of capital — are: 1) *Fertility*. (With reference to this first point, it will be necessary to discuss what is meant by natural fertility of land and what factors are involved.) 2) The *location* of the land. This is a decisive factor in the case of colonies and in general determines the sequence in which plots of land can be cultivated. Furthermore, it is evident that these two different causes of differential rent — fertility and location — may work in opposite directions. A certain plot of land may be very favourably located and yet be very poor in fertility, and vice versa. This circumstance is important, for it explains how it is possible that bringing into cultivation the land of a certain country may equally well proceed from the better to the worse land as vice versa. Finally, it is clear that the progress of social production in general has, on the one hand, the effect of evening out differences arising from location as a cause of ground rent, by creating local markets and improving locations by establishing communication and transportation facilities; on the other hand, it

increases the differences in individual locations of plots of land by separating agriculture from manufacturing and forming large centres of production, on the one hand, while relatively isolating agricultural districts, on the other [...]

Let us assume the existence of four kinds of soil: A, B, C, D. Let us furthermore assume the price of one quarter of wheat = £3, or 60 shillings. Since the rent is solely differential rent, this price of 60 shillings per quarter for the worst soil is equal to the price of production, that is, equal to the capital plus average profit. Let A be this worst soil, which yields 1 quarter = 60 shillings for each 50 shillings spent; hence the profit amounts to 10 shillings, or 20%.

Let B yield 2 quarters = 120 shillings for the same expenditure. This would mean 70 shillings of profit, or a surplus profit of 60 shillings.

Let C yield 3 quarters = 180 shillings for the same expenditure; total profit = 130 shillings; surplus profit = 120 shillings.

Let D yield 4 quarters = 240 shillings = 180 shillings of surplus profit.

We would then have the following sequence:

| Type of Soil | Product | | Capital Advanced | Profit | | Rent | |
|---|---|---|---|---|---|---|---|
| | Quarters | Shillings | | Quarters | Shillings | Quarters | Shillings |
| A | 1 | 60 | 50 | 1/6 | 10 | - | - |
| B | 2 | 120 | 50 | 1 1/6 | 70 | 1 | 60 |
| C | 3 | 180 | 50 | 2 1/6 | 130 | 2 | 120 |
| D | 4 | 240 | 50 | 3 1/6 | 90 | 3 | 180 |
| Total | 10 | 600 | | | | 6 | 360 |

The respective rents are: D = 190sh. — 10sh., or the difference between D and A; C = 130sh. — 10sh., or the difference between C and A; B = 70sh. — 10sh., or the difference between B and A; and the total rent for B, C, D = 6 quarters = 360 shillings, equal to the sum of the differences between D and A, C and A, B and A.

This sequence, which represents a given product in a given condition may, considered abstractly (we have already offered the reasons why this may be the case in reality), descend from D to A, from fertile to less and less fertile soil, or rise from A to D, from relatively poor to more and more fertile soil, or, finally, may fluctuate, i.e., now rising, now descending — for instance from D to C, from C to A, and from A to B.

The process in the case of a descending sequence was as follows: The price of a quarter of wheat rose gradually from, say, 15 shillings to 60 shillings. As soon as the 4 quarters produced by D (we may consider these 4 quarters as so many million quarters) no longer sufficed, the price of wheat rose to a point where the supply shortage could be produced by C. That is to

say, the price of wheat must have risen to 20 shillings per quarter. When it had risen to 30 shillings per quarter, B could be taken under cultivation, and when it reached 60 shillings A could be taken under cultivation; and the capital invested did not have to content itself with a rate of profit lower than 20%. In this manner, a rent was established for D, first of 5 shillings per quarter = 20 shillings for the 4 quarters produced by it; then of 15 shillings per quarter = 60 shillings, then of 45 shillings per quarter = 180 shillings for 4 quarters.

If the rate of profit of D originally was similarly = 20 %, then its total profit on 4 quarters of wheat was also but 10 shillings, but this represented more grain when the price was 15 shillings than it does when the price is 60 shillings. But since the grain enters into the reproduction of labour power, and part of each quarter has to make good some portion of wages and another constant capital, the surplus value under these conditions was higher, and thus other things being equal the rate of profit too. (The matter of rate of profit will have to be specially analysed, and in greater detail.)

On the other hand, if the sequence were in the reverse order, that is, if the process initiated from A, then the price of wheat at first would rise above 60 shillings per quarter when new land would have to be taken under cultivation. But since the necessary supply would be produced by B, a supply of 2 quarters, the price would fall to 60 shillings again, for B produced wheat at a cost of 30 shillings per quarter, but sold it at 60 shillings because the supply just sufficed to cover the demand. Thus a rent was formed, first of 60 shillings for B, and in the same way for C and D; it is assumed throughout that the market price remained at 60 shillings, although C and D produced wheat having an actual value of 20 and 15 shillings per quarter respectively, because the supply of the one quarter produced by A was needed as much as ever to satisfy the total demand. In this case, the increase in demand above supply, which was first satisfied by A, then by A and B, would not have made it possible to cultivate B, C and D successively, but would merely have caused a general extension of the sphere of cultivation, and the more fertile lands might only later come under cultivation.

In the first sequence, an increase in price would raise the rent and decrease the rate of profit. Such a decrease might be entirely or partially checked by counteracting circumstances. This point will have to be treated later in more detail. It should not be forgotten that the general rate of profit is not determined uniformly in all spheres of production by the surplus value. It is not the agricultural profit which determines industrial profit, but vice versa. But of this more anon.

In the second sequence the rate of profit on invested capital would remain the same. The amount of profit would be represented by less grain; but the relative price of grain, compared with that of other commodities,

would have risen. However, the increase in profit wherever such an increase takes place, becomes separated from the profit in the form of rent, instead of flowing into the pockets of the capitalist tenant farmer and appearing as a growing profit. The price of grain, however, could remain unchanged under the conditions assumed here.

The development and growth of differential rent would remain the same for fixed as well as for increasing prices, and for a continuous progression from worse to better soils as well as for a continuous retrogression from better to worse soils.

Thus far we have assumed: 1) that the price rises in one sequence and remains stationary in the other; 2) that there is a continuous progression from better to worse soil, or from worse to better soil [...]

As soon as all the land in a given country has been appropriated, and investments of capital in land, cultivation, and population have reached a definite level — all given conditions as soon as the capitalist mode of production becomes the prevailing one and also encompasses agriculture — the price of uncultivated land of varying quality (merely assuming differential rent to exist) is determined by the price of the cultivated plots of land of the same quality and equivalent location. The price is the same — after deducting the cost of bringing the new land into cultivation — even though this land does not yield any rent. The price of the land is, indeed, nothing but the capitalised rent. But even in the case of cultivated land, the price pays only for future rents, as, for instance, when the prevalent interest rate is 5% and the rent for twenty years is paid at one time in advance. When land is sold, it is sold as land yielding rent, and the prospective character of the rent (which is here considered as a product of the soil, but it only seems to be that) does not distinguish the uncultivated from the cultivated land. The price of the uncultivated land, like its rent the price of which represents the contracted form of the latter is quite illusory as long as the land is not actually used. But it is thus determined a priori and is realised as soon as a purchaser is found. Hence, while the actual average rent in a given country is determined by its actual average annual rental and the relation of the latter to the total cultivated area, the price of the uncultivated land is determined by the price of the cultivated land, and is therefore but a reflection of the capital invested in the cultivated land and the results obtained therefrom. Since all land with the exception of the worst yields rent (and this rent, as we shall see under the head of differential rent II, increases with the quantity of capital and corresponding intensity of cultivation), the nominal price of uncultivated plots of land is thus formed, and they thus become commodities, a source of wealth for their owners. This explains at the same time, why the price of land increases in a whole region, even in the uncultivated part (Opdyke). Land speculation, for instance, in the United States, is based solely on this

reflection thrown by capital and labour on uncultivated land.

[Progress] in extending cultivated land generally takes place either toward inferior soil or on the various given types of soil in varying proportions, depending on the manner in which they are met. Extension on inferior soil is naturally never made voluntarily, but can only result from rising prices, assuming a capitalist mode of production, and can only result from necessity under any other mode of production. However, this is not absolutely so. Poor soil may be preferred to a relatively better soil on account of location, which is of decisive importance for every extension of cultivation in young countries; furthermore, even though the soil formation in a certain region may generally be classified as fertile, it may nevertheless consist of a motley confusion of better and worse soils, so that the inferior soil may have to be cultivated if only because it is found in the immediate vicinity of the superior soil. If inferior soil is surrounded by superior soil, then the latter gives it the advantage of location in comparison with more fertile soil which is not yet, or is about to become, part of the cultivated area. Thus, the State of Michigan was one of the first Western States to become an exporter of grain. Yet its soil on the whole is poor. But its proximity to the State of New York and its water-ways via the Lakes and Erie Canal initially gave it the advantage over the States endowed by Nature with more fertile soil, but situated farther to the West [...]

## CHAPTER 40: SECOND FORM OF DIFFERENTIAL RENT (DIFFERENTIAL RENT II)

Thus far we have considered differential rent only as the result of varying productivity of equal amounts of capital invested in equal areas of land of different fertility, so that differential rent was determined by the difference between the yield from the capital invested in the worst, rentless soil and that from the capital invested in superior soil. We had side by side capitals invested in different plots of land, so that every new investment of capital signified a more extensive cultivation of the soil, an expansion of cultivated area. In the last analysis, however, differential rent was by its nature merely the result of the different productivity of equal capitals invested in land. But can it make any difference if capitals of different productivity are invested successively in the same plot of land or side by side in different plots of land, provided the results are the same?

To begin with, there is no denying that, in so far as the formation of surplus profit is concerned, it is immaterial whether £3 in production price per acre of A yield 1 qr, so that £3 is the price of production and the regulating market price of 1 qr, while £3 in production price per acre of B yield 2 qrs, and thereby £3 of surplus profit, similarly, £3 in production price

per acre of C yield 3 qrs and £6 of surplus profit, and, finally, £3 in production price per acre of D yield 4 qrs and £9 of surplus profit; or whether the same result is achieved by applying these £12 in production price, or £10 of capital, with the same success in the same sequence upon one and the same acre. It is in both cases a capital of £10, whose value portions of £2½ each are successively invested — whether in four acres of varying fertility side by side, or successively in one and the same acre of land — and because of their varying outputs, one portion yields no surplus profit, whereas the other portions yield surplus profit proportionate to their difference in yield with respect to rentless investment.

The surplus profit and the various rates of surplus profit for the different value portions of capital are formed in the same manner in both cases. And the rent is nothing but a form of this surplus profit, which constitutes its substance. But at any rate, in the second method, there are some difficulties concerning the transformation of surplus profit into rent, this change of form, which includes the transfer of surplus profit from the capitalist tenant to the landowner. This accounts for the obstinate resistance of English tenants to official agricultural statistics. And it accounts for their struggle against the landlords over the determination of actual results derived from their capital investment (Morton). For rent is fixed when land is leased, and after that the surplus profit arising from successive investments of capital flows into the pockets of the tenant as long as the lease lasts. This is why the tenants have fought for long leases, and, on the other hand, due to the greater power of the landlords, an increase in the number of tenancies at will has taken place, i.e., leases which can be cancelled annually.

It is therefore evident from the very outset that, even if immaterial for the law of formation of surplus profit, it makes a considerable difference for the transformation of surplus profit into ground rent whether equal capitals are invested side by side in equal areas of land with unequal results, or whether they are invested successively in the same land. The latter method confines this transformation, on the one hand, within narrower limits, on the other hand, within more variable limits. For this reason, the work of the tax-assessor, as Morton shows in his *Resources of Estates*, becomes a very important, complicated and difficult profession in countries practising intensive cultivation (and, economically speaking, we mean nothing more by intensive cultivation than the concentration of capital upon the same plot rather than its distribution among several adjoining pieces of land). If soil improvements are of a more permanent nature the artificially increased differential fertility of the soil coincides with its natural differential fertility as soon as the lease expires, and therefore the assessment of the rent corresponds to the determination of the rent on plots of different fertilities in general. On the other hand, in so far as the formation of surplus profit is

determined by the magnitude of operating capital, the amount of rent for a certain amount of operating capital is added to the average rent of the country and thus provision is made for the new tenant to command sufficient capital to continue cultivation in the same intensive manner.

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In the study of differential rent II, the following points are still to be emphasised.

*First*, its basis and point of departure, not just historically, but also in so far as concerns its movements at any given period of time, is differential rent I, that is, the simultaneous cultivation side by side of soils of unequal fertility and location; in other words, the simultaneous application, side by side, of unequal portions of the total agricultural capital upon plots of land of unequal quality.

Historically this is self-evident. In the colonies, colonists have but little capital to invest; the principal production agents are labour and land. Every individual head of family seeks for himself and his kin an independent field of employment alongside his fellow-colonists. This must generally be the case in agriculture proper even under pre-capitalist modes of production. In the case of sheep-herding and cattle-raising, in general, as independent lines of production, exploitation of the soil is more or less common and extensive from the very outset. The capitalist mode of production has for its point of departure former modes of production in which the means of production were, in fact or legally, the property of the tiller himself, in a word, from a handicraft-like pursuit of agriculture. It is in the nature of things that the latter gives way but gradually to the concentration of means of production and their transformation into capital, as against direct producers transformed into wage labourers. In so far as the capitalist mode of production is manifested here typically, it occurs at first particularly in sheep-herding and cattle-raising. But it is thus not manifested in a concentration of capital upon a relatively small area of land, but in production on a larger scale, economising in the expense of keeping horses, and in other production costs; but, in fact, not by investing more capital in the same land. Furthermore, in accordance with the natural laws of field husbandry, capital — used here, at the same time, in the sense of means of production already produced — becomes the decisive element in soil cultivation when cultivation has reached a certain level of development and the soil has been correspondingly exhausted. So long as the tilled area is small in comparison with the untilled, and so long as the soil strength has not been exhausted (and this is the case when cattle-raising and meat consumption prevail in the period before agriculture proper and plant nutrition have become dominant), the new developing mode of production is opposed to peasant production

mainly in the extensiveness of the land being tilled for a capitalist, in other words, again in the extensive application of capital to larger areas of land. It should therefore be remembered from the outset that differential rent I is the historical basis which serves as a point of departure. On the other hand, the movement of differential rent II at any given moment occurs only within a sphere which is itself but the variegated basis of differential rent I.

*Secondly*, in the differential rent in form II, the differences in distribution of capital (and ability to obtain credit) among tenants are added to the differences in fertility. In manufacturing proper, each line of business rapidly develops its own minimum volume of business and a corresponding minimum of capital, below which no individual business can be conducted successfully. In the same way, each line of business develops a normal average amount of capital above this minimum, which the bulk of producers should, and do, command. A larger volume of capital can produce extra profit; a smaller volume does not so much as yield the average profit. The capitalist mode of production spreads in agriculture but slowly and unevenly, as may be observed in England, the classic land of the capitalist mode of production in agriculture. In so far as the free importation of grain does not exist, or its effect is but limited because the volume is small, producers working inferior soil, and thus under worse than average conditions of production, determine the market price. A large portion of the total mass of capital invested in husbandry, and in general available to it, is in their hands.

It is true that the peasant, for example, expends much labour on his small plot of land. But it is labour isolated from objective social and material conditions of productivity, labour robbed and stripped of these conditions.

This circumstance enables the actual capitalist tenants to appropriate a portion of surplus profit — a fact which would not obtain, at least so far as this point is concerned, if the capitalist mode of production were as evenly developed in agriculture as in manufacture.

Let us first consider just the formation of surplus profit with differential rent II, without for the present bothering about the conditions under which the transformation of this surplus profit into ground rent may take place.

It is then evident that differential rent II is merely differently expressed differential rent I, but identical to it in substance. The variation in fertility of various soil types exerts its influence in the case of differential rent I only in so far as unequal results are attained by capitals invested in the soil, i.e., the amount of products obtained either with respect to equal magnitudes of capital, or proportionate amounts. Whether this inequality takes place for various capitals invested successively in the same land or for capitals invested in several plots of differing soil type — this can change nothing in the difference in fertility nor in its product and can therefore change nothing

in the formation of differential rent for the more productively invested portions of capital. It is still the soil which, now as before, shows different fertility with the same investment of capital, save that here the same soil performs for a capital successively invested in different portions what various kinds of soil do in the case of differential rent I for different equal portions of social capital invested in them [...]

## CHAPTER 45: ABSOLUTE GROUND RENT

In the analysis of differential rent we proceeded from the assumption that the worst soil does not pay any ground rent; or, to put it more generally, only such land pays ground rent whose product has an individual price of production below the price of production regulating the market, so that in this manner a surplus profit arises which is transformed into rent. It is to be noted, to begin with, that the law of differential rent as such is entirely independent of the correctness or incorrectness of this assumption.

Let us call the general price of production, by which the market is regulated, P. Then, P coincides with the individual price of production of the output of the worst soil A; i.e., its price pays for the constant and variable capital consumed in production plus the average profit ( = profit of enterprise plus interest).

The rent in this case is equal to zero. The individual price of production of the next better soil B is = P′, and P > P′; that is, P pays for more than the actual price of production of the product of soil B. Let us now assume that P - P′ = d; d, the excess of P over P′, is therefore the surplus profit which the farmer of soil type B realises. This d is transformed into rent, which must be paid to the landlord. Let P′′ be the actual price of production of the third type of soil C, and P - P′′ = 2d; then this 2d is converted into rent; similarly, let P′′′ be the individual price of production of the fourth type of soil D, and P - P′′′ = 3d, which is transformed into ground rent, etc. Now let us assume the premise for soil A, that rent = 0 and therefore the price of its product = P + 0, is erroneous. Assume rather that it, too, yields rent = r. In that case, two different conclusions follow.

*First*: The price of the product of soil A would not be regulated by the price of production on the latter, but would include an excess above this price, i.e., would be = P + r. Because assuming the capitalist mode of production to be functioning normally, that is, assuming that the excess r which the farmer pays to the landlord represents neither a deduction from wages nor from the average profit of capital, the farmer can only pay it by selling the product above its price of production, thus, yielding him surplus profit if he did not have to turn over this excess to the landlord in the form of rent. The regulating market price of the total output on the market derived

from all soils would then not be the price of production which capital generally yields in all spheres of production, i.e., a price equal to costs plus average profit, but rather the price of production plus the rent, P + r, and not P. For the price of the product of soil A represents generally the limit of the regulating general market price, i.e., the price at which the total product can be supplied, and to that extent it regulates the price of this total product.

But *secondly*: Although the general price of agricultural products would in this case be significantly modified, the law of differential rent would nevertheless in no way lose its force. For if the price of the product of soil A, and thereby the general market price = P + r, the price for soils B, C, D, etc., would likewise = P + r. But since P - P′ = d for soil B, then (P + r) - (P′ + r) would likewise = d, and P - P′′ = (P + r) - (P′′ + r) = 2d for soil C; and finally P - P′′′ = (P + r) - (P′′′ + r) = 3d for soil D, etc. Thus the differential rent would be the same as before and would be regulated by the same law, although the rent would include an element independent of this law and would show a general increase together with the price of the agricultural product. It follows, then, that no matter what the case may be as regards the rent of the least fertile soils, the law of differential rent is not only independent of it, but that the only manner of grasping differential rent in keeping with its character is to let the rent on soil A = 0. Whether this actually = 0 or > 0 is immaterial so far as the differential rent is concerned, and, in fact, does not come into consideration.

The law of differential rent, then, is independent of the results of the following study.

If we were now to inquire more deeply into the basis of the assumption that the product of the worst soil A does not yield any rent, the answer would of necessity be as follows: If the market price of the agricultural product, say grain, attains that level where an additional investment of capital in soil A results in the usual price of production, i.e., the usual average profit on the capital is yielded, then this condition suffices for investing the additional capital in soil A. In other words, this condition is sufficient for the capitalist to invest new capital yielding the usual profit and to employ it in the normal manner.

It should be noted here that in this case, too, the market price must be higher than the price of production of A. For as soon as the additional supply is created, it is evident that the relation between supply and demand becomes altered. Formerly the supply was insufficient. Now it is sufficient. Hence the price must fall. In order to fall, it must have been higher than the price of production of A. But due to the fact that soil A newly taken under cultivation is less fertile, the price does not fall again as low as when the price of production of soil B regulated the market. The price of production of A constitutes the limit, not for the temporary but for the relatively permanent

rise of the market price. On the other hand, if the new soil taken under cultivation is more fertile than the hitherto regulating soil A, and yet only suffices to meet the increased demand, then the market price remains unchanged. The investigation of the question whether the poorest type of soil yields rent, however, coincides in this case too with our present inquiry, for here too the assumption that soil A does not yield any rent would be explained by the fact that the market price is sufficient for the capitalist farmer to exactly cover, with this price, the invested capital plus the average profit; in brief, it would be explained by the fact that the market price yields him the price of production of his commodities.

At any rate, the capitalist farmer can cultivate soil A under these conditions, inasmuch as he, as capitalist, has such power of decision. The prerequisite for the normal expansion of capital in soil A is now present. But from the premise that the capitalist farmer can now invest capital in soil A under average conditions for the expansion of capital, even if he did not have to pay any rent, it nowise follows that this land, belonging to category A, is now at the disposal of the farmer without further ado. The fact that the tenant farmer could realise the usual profit on his capital did he not have to pay any rent, is by no means a basis for the landlord to lend his land gratis to the farmer and to become so philanthropic as to grant *crédit gratuit* for the sake of a business friendship. Such an assumption would mean the abstraction of landed property, the elimination of landownership, and it is precisely the existence of the latter that constitutes a limitation to the investment of capital and the free expansion of capital in the land. This limitation does not at all disappear before the simple reflection of the farmer that the level of grain prices would enable him to realise the usual profit from the investment of his capital in the exploitation of soil A did he not have to pay any rent; in other words, if he could proceed in effect as though landed property did not exist. But differential rent presupposes the existence of a monopoly in land ownership, landed property as a limitation to capital, for without it surplus profit would not be transformed into ground rent nor fall to the share of the landlord instead of the farmer. And landed property as a limitation continues to exist even when rent in the form of differential rent disappears, i.e., on soil A. If we consider the cases in a country with capitalist production, where the investment of capital in the land can take place without payment of rent, we shall find that they are all based on a *de facto* abolition of landed property, if not also the legal abolition; this, however, can only take place under very specific circumstances which are by their very nature accidental. [For example, when] the landlord is himself a capitalist, or the capitalist is himself a landlord. In this case he may himself manage his land as soon as market price has risen sufficiently to enable him to get, from what is now soil A, the price of production, that is, replacement of capital plus average profit. But

why? Because for him landed property does not constitute an obstacle to the investment of capital. He can treat his land simply as an element of Nature and therefore be guided solely by considerations of expansion of his capital, by capitalist considerations. Such cases occur in practice, but only as exceptions. Just as capitalist cultivation of the soil presupposes the separation of functioning capital from landed property, so does it as a rule exclude self-management of landed property [...]

Differential rent has the peculiarity that landed property here merely intercepts the surplus profit which would otherwise flow into the pocket of the farmer, and which the latter may actually pocket under certain circumstances during the period of his lease. Landed property is here merely the cause for transferring a portion of the commodity price which arises without the property having anything to do with it (indeed, in consequence of the fact that the price of production which regulates the market price is determined by competition) and which resolves itself into surplus profit — the cause for transferring this portion of the price from one person to another, from the capitalist to the landlord. But landed property is not the cause which creates this portion of the price, or the rise in price upon which this portion of the price is premised. On the other hand, if the worst soil A cannot be cultivated — although its cultivation would yield the price of production — until it produces something in excess of the price of production, rent, then landed property is the creative cause of *this* rise in price. *Landed property itself has created rent*. This fact is not altered, if [...] the rent now paid on soil A constitutes differential rent compared with the last additional investment of capital in old leaseholds, which pay only the price of production. For the circumstance that soil A cannot be cultivated until the regulating market price has risen high enough to permit rent to be yielded from soil A — only this circumstance is the basis here for the fact that the market price rises to a point which enables the last investments in the old leaseholds to yield, indeed, only their price of production, but a price of production which, at the same time, yields rent on soil A. The fact that the latter has to pay rent at all is, in this case, the cause for the differential rent between soil A and the last investments in the old leaseholds.

When stating, in general, that soil A does not pay any rent — assuming the price of grain is regulated by the price of production — we mean rent in the categorical sense of the word. If the farmer pays "lease money" which constitutes a deduction from the normal wages of his labourers, or from his own normal average profit, he does not pay rent, i.e., an independent component of the price of his commodities distinct from wages and profit. We have already indicated that this continually takes place in practice. In so far as the wages of the agricultural labourers in a given country are, in general, depressed below the normal average level of wages,

so that a deduction from wages, a part of the wages, as a general rule enters into rent, this does not constitute an exceptional case for the farmer cultivating the worst soil. In the same price of production which makes cultivation of the worst soil possible these low wages already form a constituent element, and the sale of the product at the price of production does not therefore enable the farmer cultivating this soil to pay any rent. The landlord can also lease his land to some labourer, who may be satisfied to pay to the former in the form of rent, all or the largest part of that which he realises in the selling price over and above the wages. In all these cases, however, no real rent is paid in spite of the fact that lease money is paid. But wherever conditions correspond to those under the capitalist mode of production, rent and lease money must coincide. Yet it is precisely this normal condition which must be analysed here [...]

The relation of the price of production of a commodity to its value is determined solely by the ratio of the variable part of the capital with which the commodity is produced to its constant part, or by the organic composition of the capital producing it. If the composition of the capital in a given sphere of production is lower than that of the average social capital, i.e., if its variable portion, which is used for wages, is larger in its relation to the constant portion, used for the material conditions of labour, than is the case in the average social capital, then the value of its product must lie above the price of production. In other words, because such capital employs more living labour, it produces more surplus value, and therefore more profit, assuming equal exploitation of labour, than an equally large aliquot portion of the social average capital. The value of its product, therefore, is above the price of production, since this price of production is equal to capital replacement plus average profit, and the average profit is lower than the profit produced in this commodity. The surplus value produced by the average social capital is less than the surplus value produced by a capital of this lower composition. The opposite is the case when the capital invested in a certain sphere of production is of a bigger composition than the social average capital. The value of commodities produced by it lies below their price of production, which is generally the case with products of the most developed industries.

If the capital in a certain sphere of production is of a lower composition than the average social capital, then this is, in the first place, merely another way of saying that the productivity of the social labour in this particular sphere of production is below the average; for the level of productivity attained is manifested in the relative preponderance of constant over variable capital, or in the continual decrease — for the given capital — of the portion used for wages. On the other hand, if the capital in a certain sphere of production is of a higher composition, then this reflects a

development of productiveness that is above the average.

Leaving aside actual works of art, whose consideration by their very nature is excluded from our discussion, it is self-evident, moreover, that different spheres of production require different proportions of constant and variable capital in accordance with their specific technical features, and that living labour must play a bigger role in some, and smaller in others. For instance, in the extractive industries, which must be clearly distinguished from agriculture, raw material as an element of constant capital is wholly absent, and even auxiliary material rarely plays an important role. In the mining industry, however, the other part of constant capital, i.e., fixed capital, plays an important role. Nevertheless, here too, progress may be measured by the relative increase of constant capital in relation to variable capital.

If **the composition of capital in agriculture proper is lower than that of the average social capital**, then, *prima facie*, this expresses the fact that in countries with developed production agriculture has not progressed to the same extent as the processing industries. Such a fact could be explained — aside from all other circumstances, including in part decisive economic ones — by the earlier and more rapid development of the mechanical sciences, and in particular their application compared with the later and in part quite recent development of chemistry, geology and physiology, and again, in particular, their application to agriculture. Incidentally, it is an indubitable and long-known fact that the progress of agriculture itself is constantly expressed by a relative growth of constant capital as compared with variable capital. Whether **the composition of agricultural capital is lower than that of the average social capital** in a specific country where capitalist production prevails, for instance England, is a question which can only be decided statistically, and for our purposes it is superfluous to go into it in detail. In any case, it is theoretically established that **the value of agricultural products can be higher than their price of production only on this assumption**. In other words, **a capital of a certain size in agriculture produces more surplus value, or what amounts to the same, sets in motion and commands more surplus labour (and with it employs more living labour generally) than a capital of the same size of average social composition**.

**This assumption, then, suffices for that form of rent which we are analysing here**, and which can obtain only so long as this assumption holds good. Wherever this assumption no longer holds, the corresponding form of rent likewise no longer holds.

However, the mere existence of an excess in the value of agricultural products over their price of production would not in itself suffice to explain the existence of a ground rent which is independent of differences in fertility of various soil types and in successive investments of capital on the same

land — a rent, in short, which is to be clearly distinguished in concept from differential rent and which we may therefore call *absolute rent*. Quite a number of manufactured products are characterised by the fact that their value is higher than their price of production, without thereby yielding any excess above the average profit, or a surplus profit, which could be converted into rent. Conversely, the existence and concept of price of production and general rate of profit, which it implies, rest upon the fact that individual commodities are not sold at their value. **Prices of production arise from an equalisation of the values of commodities. After replacing the respective capital values used up in the various spheres of production, this distributes the entire surplus value, not in proportion to the amount produced in the individual spheres of production and thus incorporated in their commodities, but in proportion to the magnitude of advanced capitals. Only in this manner do average profit and price of production arise**, whose characteristic element the former is. It is the perpetual tendency of capitals to bring about through competition this equalisation in the distribution of surplus value produced by the total capital, and to overcome all obstacles to this equalisation. Hence it is their tendency to tolerate only such surplus profits as arise, under all circumstances, not from the difference between the values and prices of production of commodities but rather from the difference between the general price of production governing the market and the individual prices of production differing from it; surplus profits which obtain within a certain sphere of production, therefore, and not between two different spheres, and thus do not affect the general prices of production of the various spheres, i.e., the general rate of profit, but rather presuppose the transformation of values into prices of production and a general rate of profit. This supposition rests, however, as previously discussed, upon the constantly changing proportional distribution of the total social capital among the various spheres of production, upon the perpetual inflow and outflow of capitals, upon their transferability from one sphere to another, in short, upon their free movement between the various spheres of production, which represent so many available fields of investment for the independent components of the total social capital. The premise in this case is that no barrier, or just an accidental and temporary barrier, interferes with the competition of capitals — for instance, in a sphere of production, in which the commodity values are higher than the prices of production, or where the surplus value produced exceeds the average profit — to reduce the value to the price of production and thereby proportionally distribute the excess surplus value of this sphere of production among all spheres exploited by capital. **But if the reverse occurs, if capital meets an alien force which it can but partially, or not at all, overcome, and which limits its investment in certain spheres, admitting it only under conditions which wholly or**

**partly exclude that general equalisation of surplus value to an average profit, then it is evident that the excess of the value of commodities in such spheres of production over their price of production would give rise to a surplus profit, which could be converted into rent and such made independent with respect to profit. Such an alien force and barrier are presented by landed property, when confronting capital in its endeavour to invest in land**; such a force is the landlord vis-à-vis the capitalist.

Landed property is here the barrier which does not permit any new investment of capital in hitherto uncultivated or unrented land without levying a tax, or in other words, without demanding a rent, although the land to be newly brought under cultivation may belong to a category which does not yield any differential rent and which, were it not for landed property, could have been cultivated even at a small increase in market price, so that the regulating market price would have netted to the cultivator of this worst soil solely his price of production. But owing to the barrier raised by landed property, the market price must rise to a level at which the land can yield a surplus over the price of production, i.e., yield a rent. However, since the value of the commodities produced by agricultural capital is higher than their price of production, according to our assumption, this rent (save for one case which we shall discuss forthwith) forms the excess of value over the price of production, or a part of it. Whether the rent equals the entire difference between the value and price of production, or only a greater or lesser part of it, will depend wholly on the relation between supply and demand and on the area of land newly taken under cultivation. So long as the rent does not equal the excess of the value of agricultural products over their price of production, a portion of this excess will always enter into the general equalisation and proportional distribution of all surplus value among the various individual capitals. As soon as the rent does equal the excess of the value over the price of production, this entire portion of surplus value over and above the average profit will be withdrawn from this equalisation. But whether this absolute rent equals the whole excess of value over the price of production, or just a part of it, the agricultural products will always be sold at a monopoly price, not because their price exceeds their value, but because it equals their value, or because their price is lower than their value but higher than their price of production. Their monopoly would consist in the fact that, unlike other products of industry whose value is higher than the general price of production, they are not levelled out to the price of production. Since one portion of the value, as well as of price of production, is an actually given constant, namely the cost price, representing the capital = k used up in production, their difference consists in the other, the variable portion, the surplus value, which equals p, the profit, in the price of production, i.e., equals the total surplus value calculated on the social capital and on every

individual capital as an aliquot part of the social capital; but which in the value of commodities equals the actual surplus value created by this particular capital, and forms an integral part of the commodity values produced by this capital. If the value of commodities is higher than their price of production, then the price of production = k + p, and the value = k + p + d, so that p + d = the surplus value contained therein. The difference between the value and the price of production, therefore, = d, the excess of surplus value created by this capital over the surplus value allocated to it through the general rate of profit. It follows from this that the price of agricultural products may lie higher than their price of production, without reaching their value. It follows, furthermore, that a permanent increase in the price of agricultural products may take place up to a certain point, before their price reaches their value. It follows likewise that the excess in the value of agricultural products over their price of production can become a determining element of their general market price solely as a consequence of the monopoly in landed property. It follows, finally, that in this case the increase in the price of the product is not the cause of rent, but rather that rent is the cause of the increase in the price of the product. If the price of the product from a unit area of the worst soil = P + r, then all differential rents will rise by corresponding multiples of r, since the assumption is that P + r becomes the regulating market price [...]

Although landed property may drive the price of agricultural produce above its price of production, it does not depend on this, but rather on the general state of the market, to what degree market price exceeds the price of production and approaches the value, and to what extent therefore the surplus value created in agriculture over and above the given average profit shall either be transformed into rent or enter into the general equalisation of the surplus value to average profit. At any rate this **absolute rent** arising out of the excess of value over the price of production is but a portion of the agricultural surplus value, a conversion of this surplus value into rent, its being filched by the landlord; just as the **differential rent** arises out of the conversion of surplus profit into rent, its being filched by the landlord under a generally regulating price of production. **These two forms of rent are the only normal ones. Apart from them the rent can be based only upon** an actual **monopoly price**, which is determined neither by price of production nor by value of commodities, but by the buyers' needs and ability to pay. Its analysis belongs under the theory of competition, where the actual movement of market prices is considered.

If all the land suitable for agriculture in a certain country were leased — assuming the capitalist mode of production and normal conditions to be general — there would not be any land not paying rent; but there might be some capitals, certain parts of capitals invested in land, that might not yield

any rent. For as soon as the land has been rented, landed property ceases to act as an absolute barrier against the investment of necessary capital. Still, it continues to act as a relative barrier even after that, in so far as the reversion to the landlord of the capital incorporated in the land circumscribes the activity of the tenant within very definite limits. Only in this case all rent would be transformed into differential rent, although this would not be a differential rent determined by any difference in soil fertility, but rather by the difference between the surplus profits arising from the last investments of capital in a particular soil type and the rent paid for the lease of the worst quality land. Landed property acts as an absolute barrier only to the extent that the landlord exacts a tribute for making land at all accessible to the investment of capital. When such access has been gained, he can no longer set any absolute limits to the size of any investment of capital in a given plot of land. In general, housing construction meets a barrier in the ownership by a third party of the land upon which the houses are to be built. But, once this land has been leased for the purpose of housing construction, it depends upon the tenant whether he will build a large or a small house.

If the average composition of agricultural capital were equal to, or higher than, that of the average social capital, then absolute rent — again in the sense just described — would disappear; i.e., rent which differs equally from differential rent as well as that based upon an actual monopoly price. The value of agricultural produce, then, would not lie above its price of production, and the agricultural capital would not set any more labour in motion, and therefore would also not realise any more surplus labour than the non-agricultural capital. The same would take place, were the composition of agricultural capital to become equal to that of the average social capital with the progress of civilisation [...]

## PART 7: REVENUES AND THEIR SOURCES

## CHAPTER 48: THE TRINITY FORMULA

### I

Capital — profit (profit of enterprise plus interest), land — ground rent, labour — wages, this is the trinity formula which comprises all the secrets of the social production process.

Furthermore, since as previously demonstrated interest appears as the specific characteristic product of capital and profit of enterprise on the contrary appears as wages independent of capital, the above trinity formula reduces itself more specifically to the following:

Capital — interest, land — ground rent, labour — wages, where

profit, the specific characteristic form of surplus value belonging to the capitalist mode of production, is fortunately eliminated.

On closer examination of this economic trinity, we find the following:

First, the alleged sources of the annually available wealth belong to widely dissimilar spheres and are not at all analogous with one another. They have about the same relation to each other as lawyer’s fees, red beets and music.

Capital, land, labour! However, **capital is not a thing, but** rather a definite **social** production **relation**, belonging to a definite historical formation of society, which is manifested in a thing and lends this thing a specific social character. Capital is not the sum of the material and produced means of production. Capital is rather the means of production transformed into capital, which in themselves are no more capital than gold or silver in itself is money. It is the means of production monopolised by a certain section of society, confronting living labour power as products and working conditions rendered independent of this very labour power, which are personified through this antithesis in capital. It is not merely the products of labourers turned into independent powers, products as rulers and buyers of their producers, but rather also the social forces and the [related] form of this labour, which confront the labourers as properties of their products. Here, then, we have a definite and, at first glance, very mystical, social form, of one of the factors in a historically produced social production process.

And now alongside of this we have the land, inorganic nature as such, *rudis indigestaque moles*, in all its primeval wildness. Value is labour. Therefore surplus value cannot be earth. Absolute fertility of the soil effects nothing more than the following: a certain quantity of labour produces a certain product — in accordance with the natural fertility of the soil. The difference in soil fertility causes the same quantities of labour and capital, hence the same value, to be manifested in different quantities of agricultural products; that is, causes these products to have different individual values. The equalisation of these individual values into market values is responsible for the fact that the "advantages of fertile over inferior soil ... are transferred from the cultivator or consumer to the landlord". (Ricardo, *Principles*, London, 1821, p.62.)

And finally, as third party in this union, a mere ghost — "the" Labour, which is no more than an abstraction and taken by itself does not exist at all, or, if we take [that which is behind it], the productive activity of human beings in general, by which they promote the interchange with Nature, divested not only of every social form and well-defined character, but even in its bare natural existence, independent of society, removed from all societies, and as an expression and confirmation of life which the still non-social man in general has in common with the one who is in any way social.

## II

[...] But how should land create value, i.e., a socially defined quantity of labour, and moreover that particular portion of the value of its own products which forms the rent? Land, e.g., takes part as an agent of production in creating a use value, a material product, wheat. But it has nothing to do with the production of the *value of wheat*. In so far as value is represented by wheat, the latter is merely considered as a definite quantity of materialised social labour, regardless of the particular substance in which this labour is manifested or of the particular use value of this substance. This nowise contradicts that 1) other circumstances being equal, the cheapness or dearness of wheat depends upon the productivity of the soil. The productivity of agricultural labour is dependent on natural conditions, and the same quantity of labour is represented by more or fewer products, use values, in accordance with such productivity. How large the quantity of labour represented in one bushel of wheat depends upon the number of bushels yielded by the same quantity of labour. It depends, in this case, upon the soil productivity in what quantities of product the value shall be manifested. But this value is given, independent of this distribution. Value is represented in use value; and use value is a prerequisite for the creation of value; but it is folly to create an antithesis by placing a use value, like land, on one side and on the other side value, and a particular portion of value at that. [...]

## III

Vulgar economy actually does no more than interpret, systematise and defend in doctrinaire fashion the conceptions of the agents of bourgeois production who are entrapped in bourgeois production relations. It should not astonish us, then, that vulgar economy feels particularly at home in the estranged outward appearances of economic relations in which these *prima facie* absurd and perfect contradictions appear and that these relations seem the more self-evident the more their internal relationships are concealed from it, although they are understandable to the popular mind. But all science would be superfluous if the outward appearance and the essence of things directly coincided. Thus, vulgar economy has not the slightest suspicion that the trinity which it takes as its point of departure, namely, land — rent, capital — interest, labour — wages or the price of labour, are *prima facie* three impossible combinations. First we have the use value *land*, which has no value, and the exchange value *rent*: so that a social relation conceived as a thing is made proportional to Nature, i.e., two incommensurable magnitudes are supposed to stand in a given ratio to one another. Then *capital — interest*.

If capital is conceived as a certain sum of values represented independently by money, then it is *prima facie* nonsense to say that a certain value should be worth more than it is worth. It is precisely in the form: capital — interest that all intermediate links are eliminated, and capital is reduced to its most general formula, which therefore in itself is also inexplicable and absurd. The vulgar economist prefers the formula capital — interest, with its occult quality of making a value unequal to itself, to the formula capital — profit, precisely for the reason that this already more nearly approaches actual capitalist relations. Then again, driven by the disturbing thought that 4 is not 5 and that 100 taler cannot possibly be 110 taler, he flees from capital as value to the material substance of capital; to its use value as a condition of production of labour, to machinery, raw materials, etc. Thus, he is able once more to substitute in place of the first incomprehensible relation, whereby 4 = 5, a wholly incommensurable one between a use value, a thing on one side, and a definite social production relation, surplus value, on the other, as in the case of landed property. As soon as the vulgar economist arrives at this incommensurable relation, everything becomes clear to him, and he no longer feels the need for further thought. For he has arrived precisely at the "rational" in bourgeois conception. Finally, *labour — wages*, or price of labour, is an expression, as shown in Book I, which *prima facie* contradicts the conception of value as well as of price — the latter generally being but a definite expression of value. And "price of labour" is just as irrational as a yellow logarithm. But here the vulgar economist is all the more satisfied, because he has gained the profound insight of the bourgeois, namely, that he pays money for labour, and since precisely the contradiction between the formula and the conception of value relieves him from all obligation to understand the latter.

We have seen that the capitalist process of production is a historically determined form of the social process of production in general. The latter is as much a production process of material conditions of human life as a process taking place under specific historical and economic production relations, producing and reproducing these production relations themselves, and thereby also the bearers of this process, their material conditions of existence and their mutual relations, i.e., their particular socio-economic form. For the aggregate of these relations, in which the agents of this production stand with respect to Nature and to one another, and in which they produce, is precisely society, considered from the standpoint of its economic structure. Like all its predecessors, the capitalist process of production proceeds under definite material conditions, which are, however, simultaneously the bearers of definite social relations entered into by individuals in the process of reproducing their life. Those conditions, like these relations, are on the one hand prerequisites, on the other hand results

and creations of the capitalist process of production; they are produced and reproduced by it. We saw also that capital — and the capitalist is merely capital personified and functions in the process of production solely as the agent of capital — in its corresponding social process of production, pumps a definite quantity of surplus labour out of the direct producers, or labourers; capital obtains this surplus labour without an equivalent, and in essence it always remains forced labour — no matter how much it may seem to result from free contractual agreement. This surplus labour appears as surplus value, and this surplus value exists as a surplus product. Surplus labour in general, as labour performed over and above the given requirements, must always remain. In the capitalist as well as in the slave system, etc., it merely assumes an antagonistic form and is supplemented by complete idleness of a stratum of society. A definite quantity of surplus labour is required as insurance against accidents, and by the necessary and progressive expansion of the process of reproduction in keeping with the development of the needs and the growth of population, which is called accumulation from the viewpoint of the capitalist. It is one of the civilising aspects of capital that it enforces this surplus labour in a manner and under conditions which are more advantageous to the development of the productive forces, social relations, and the creation of the elements for a new and higher form than under the preceding forms of slavery, serfdom, etc. Thus it gives rise to a stage, on the one hand, in which coercion and monopolisation of social development (including its material and intellectual advantages) by one portion of society at the expense of the other are eliminated; on the other hand, it creates the material means and embryonic conditions, making it possible in a higher form of society to combine this surplus labour with a greater reduction of time devoted to material labour in general. For, depending on the development of labour productivity, surplus labour may be large in a small total working day, and relatively small in a large total working day. If the necessary labour time = 3 and the surplus labour = 3, then the total working day = 6 and the rate of surplus labour = 100%. If the necessary labour = 9 and the surplus labour = 3, then the total working day = 12 and the rate of surplus labour only = 33⅓%. In that case, it depends upon the labour productivity how much use value shall be produced in a definite time, hence also in a definite surplus labour time. The actual wealth of society, and the possibility of constantly expanding its reproduction process, therefore, do not depend upon the duration of surplus labour, but upon its productivity and the more or less copious conditions of production under which it is performed. In fact, the realm of freedom actually begins only where labour which is determined by necessity and mundane considerations ceases; thus in the very nature of things it lies beyond the sphere of actual material production. Just as the savage must wrestle with Nature to satisfy his wants, to maintain and

reproduce life, so must civilised man, and he must do so in all social formations and under all possible modes of production. With his development this realm of physical necessity expands as a result of his wants; but, at the same time, the forces of production which satisfy these wants also increase. Freedom in this field can only consist in socialised man, the associated producers, rationally regulating their interchange with Nature, bringing it under their common control, instead of being ruled by it as by the blind forces of Nature; and achieving this with the least expenditure of energy and under conditions most favourable to, and worthy of, their human nature. But it nonetheless still remains a realm of necessity. Beyond it begins that development of human energy which is an end in itself, the true realm of freedom, which, however, can blossom forth only with this realm of necessity as its basis. The shortening of the working day is its basic prerequisite.

In a capitalist society, this surplus value, or this surplus product (leaving aside chance fluctuations in its distribution and considering only its regulating law, its standardising limits), is divided among capitalists as dividends proportionate to the share of the social capital each holds. In this form surplus value appears as average profit which falls to the share of capital, an average profit which in turn divides into profit of enterprise and interest, and which under these two categories may fall into the laps of different kinds of capitalists. This appropriation and distribution of surplus value, or surplus product, on the part of capital, however, has its barrier in landed property. Just as the operating capitalist pumps surplus labour, and thereby surplus value and surplus product in the form of profit, out of the labourer, so the landlord in turn pumps a portion of this surplus value, or surplus product, out of the capitalist in the form of rent in accordance with the laws already elabourated.

Hence, when speaking here of **profit as that portion of surplus value falling to the share of capital, we mean average profit (equal to profit of enterprise plus interest) which is already limited by the deduction of rent from the aggregate profit (identical in mass with aggregate surplus value); the deduction of rent is assumed. Profit of capital (profit of enterprise plus interest) and ground rent are thus no more than particular components of surplus value, categories by which surplus value is differentiated depending on whether it falls to the share of capital or landed property**, headings which in no whit however alter its nature. Added together, these form the sum of social surplus value. Capital pumps the surplus labour, which is represented by surplus value and surplus product, directly out of the labourers. Thus, in this sense, it may be regarded as the producer of surplus value. Landed property has nothing to do with the actual process of production. Its role is confined to transferring a portion of the produced surplus value from the pockets of capital to its own. However,

the landlord plays a role in the capitalist process of production not merely through the pressure he exerts upon capital, nor merely because large landed property is a prerequisite and condition of capitalist production since it is a prerequisite and condition of the expropriation of the labourer from the means of production, but particularly because he appears as the personification of one of the most essential conditions of production.

Finally, the labourer in the capacity of owner and seller of his individual labour power receives a portion of the product under the label of wages, in which that portion of his labour appears which we call necessary labour, i.e., that required for the maintenance and reproduction of this labour power, be the conditions of this maintenance and reproduction scanty or bountiful, favourable or unfavourable.

Whatever may be the disparity of these relations in other respects, they all have this in common: Capital yields a profit year after year to the capitalist, land a ground rent to the landlord, and labour power, under normal conditions and so long as it remains useful labour power, a wage to the labourer. These three portions of total value annually produced, and the corresponding portions of the annually created total product (leaving aside for the present any consideration of accumulation), may be annually consumed by their respective owners, without exhausting the source of their reproduction. They are like the annually consumable fruits of a perennial tree, or rather three trees; they form the annual incomes of three classes, capitalist, landowner and labourer, revenues distributed by the functioning capitalist in his capacity as direct extorter of surplus labour and employer of labour in general. Thus, capital appears to the capitalist, land to the landlord, and labour power, or rather labour itself, to the labourer (since he actually sells labour power only as it is manifested, and since the price of labour power, as previously shown, inevitably appears as the price of labour under the capitalist mode of production), as three different sources of their specific revenues, namely, profit, ground rent and wages. They are really so in the sense that capital is a perennial pumping-machine of surplus labour for the capitalist, land a perennial magnet for the landlord, attracting a portion of the surplus value pumped out by capital, and finally, labour the constantly self-renewing condition and ever self-renewing means of acquiring under the title of wages a portion of the value created by the labourer and thus a part of the social product measured by this portion of value, i.e., the necessities of life. They are so, furthermore, in the sense that capital fixes a portion of the value and thereby of the product of the annual labour in the form of profit; landed property fixes another portion in the form of rent; and wage labour fixes a third portion in the form of wages, and precisely by this transformation converts them into revenues of the capitalist, landowner, and labourer, without, however, creating the substance itself which is transformed into

these various categories. The distribution rather presupposes the existence of this substance, namely, the total value of the annual product, which is nothing but materialised social labour. Nevertheless, it is not in this form that the matter appears to the agents of production, the bearers of the various functions in the production process, but rather in a distorted form. Why this takes place will be developed in the further course of our analysis. Capital landed property and labour appear to those agents of production as three different, independent sources, from which as such there arise three different components of the annually produced value — and thereby the product in which it exists; thus, from which there arise not merely the different forms of this value as revenues falling to the share of particular factors in the social process of production, but from which this value itself arises, and thereby the substance of these forms of revenue [...]

It might seem as if a rational relation were expressed at least in "labour — wages". But this is no more the case than with "land — ground rent". In so far as labour is value-creating, and is manifested in the value of commodities, it has nothing to do with the distribution of this value among various categories. In so far as it has the specifically social character of wage labour, it is not value-creating. It has already been shown in general that wages of labour, or price of labour, is but an irrational expression for the value, or price of labour power; and the specific social conditions, under which this labour power is sold, have nothing to do with labour as a general agent in production. Labour is also materialised in that value component of a commodity which as wages forms the price of labour power; it creates this portion just as much as the other portions of the product; but it is materialised in this portion no more and no differently than in the portions forming rent or profit. And, in general, when we establish labour as value-creating, we do not consider it in its concrete form as a condition of production, but in its social delimitation which differs from that of wage labour.

Even the expression "capital — profit" is incorrect here. If capital is viewed in the only relation in which it produces surplus value, namely, its relation to the labourer whereby it extorts surplus labour by compulsion exerted upon labour power, i.e., the wage labourer, then this surplus value comprises, outside of profit (profit of enterprise plus interest), also rent, in short the entire undivided surplus value. Here, on the other hand, as a source of revenue, it is placed only in relation to that portion falling to the share of the capitalist. This is not the surplus value which it extracts generally but only that portion which it extracts for the capitalist. Still more does all connection vanish no sooner the formula is transformed into "capital — interest" [...]

In the case of the simplest categories of the capitalist mode of production, and even of commodity production, in the case of commodities

and money, we have already pointed out the mystifying character that transforms the social relations, for which the material elements of wealth serve as bearers in production, into properties of these things themselves (commodities) and still more pronouncedly transforms the production relation itself into a thing (money). All forms of society, in so far as they reach the stage of commodity production and money circulation, take part in this perversion. But under the capitalist mode of production and in the case of capital, which forms its dominant category, its determining production relation, this enchanted and perverted world develops still more. If one considers capital, to begin with, in the actual process of production as a means of extracting surplus labour, then this relationship is still very simple, and the actual connection impresses itself upon the bearers of this process, the capitalists themselves, and remains in their consciousness. The violent struggle over the limits of the working day demonstrates this strikingly. But even within this non-mediated sphere, the sphere of direct action between labour and capital, matters do not rest in this simplicity. With the development of relative surplus value in the actual specifically capitalist mode of production, whereby the productive powers of social labour are developed, these productive powers and the social interrelations of labour in the direct labour process seem transferred from labour to capital. Capital thus becomes a very mystic being since all of labour's social productive forces appear to be due to capital, rather than labour as such, and seem to issue from the womb of capital itself. Then the process of circulation intervenes, with its changes of substance and form, on which all parts of capital, even agricultural capital, devolve to the same degree that the specifically capitalist mode of production develops. This is a sphere where the relations under which value is originally produced are pushed completely into the background. In the direct process of production the capitalist already acts simultaneously as producer of commodities and manager of commodity production. Hence this process of production appears to him by no means simply as a process of producing surplus value. But whatever may be the surplus value extorted by capital in the actual production process and appearing in commodities, the value and surplus value contained in the commodities must first be realised in the circulation process. And both the restitution of the values advanced in production and, particularly, the surplus value contained in the commodities seem not merely to be realised in the circulation, but actually to arise from it; an appearance which is especially reinforced by two circumstances: first, the profit made in selling depends on cheating, deceit, inside knowledge, skill and a thousand favourable market opportunities; and then by the circumstance that added here to labour time is a second determining element — time of circulation. This acts, in fact, only as a negative barrier against the formation of value and surplus value, but it

has the appearance of being as definite a basis as labour itself and of introducing a determining element that is independent of labour and resulting from the nature of capital. In Book II we naturally had to present this sphere of circulation merely with reference to the form determinations which it created and to demonstrate the further development of the structure of capital taking place in this sphere. But in reality this sphere is the sphere of competition, which, considered in each individual case, is dominated by chance; where, then, the inner law, which prevails in these accidents and regulates them, is only visible when these accidents are grouped together in large numbers, where it remains, therefore, invisible and unintelligible to the individual agents in production. But furthermore: the actual process of production, as a unity of the direct production process and the circulation process, gives rise to new formations, in which the vein of internal connections is increasingly lost, the production relations are rendered independent of one another, and the component values become ossified into forms independent of one another.

The conversion of surplus value into profit, as we have seen, is determined as much by the process of circulation as by the process of production. Surplus value, in the form of profit, is no longer related back to that portion of capital invested in labour from which it arises, but to the total capital. The rate of profit is regulated by laws of its own, which permit, or even require, it to change while the rate of surplus value remains unaltered. All this obscures more and more the true nature of surplus value and thus the actual mechanism of capital. Still more is this achieved through the transformation of profit into average profit and of values into prices of production, into the regulating averages of market prices. A complicated social process intervenes here, the equalisation process of capitals, which divorces the relative average prices of the commodities from their values, as well as the average profits in the various spheres of production (quite aside from the individual investments of capital in each particular sphere of production) from the actual exploitation of labour by the particular capitals. Not only does it appear so, but it is true in fact that the average price of commodities differs from their value, thus from the labour realised in them, and the average profit of a particular capital differs from the surplus value which this capital has extracted from the labourers employed by it. The value of commodities appears, directly, solely in the influence of fluctuating productivity of labour upon the rise and fall of the prices of production, upon their movement and not upon their ultimate limits. Profit seems to be determined only secondarily by direct exploitation of labour, in so far as the latter permits the capitalist to realise a profit deviating from the average profit at the regulating market prices, which apparently prevail independent of such exploitation. Normal average profits themselves seem immanent in capital

and independent of exploitation; abnormal exploitation, or even average exploitation under favourable, exceptional conditions, seems to determine only the deviations from average profit, not this profit itself. The division of profit into profit of enterprise and interest (not to mention the intervention of commercial profit and profit from money-dealing, which are founded upon circulation and appear to arise completely from it, and not from the process of production itself) consummates the individualisation of the form of surplus value, the ossification of its form as opposed to its substance, its essence. One portion of profit, as opposed to the other, separates itself entirely from the relationship of capital as such and appears as arising not out of the function of exploiting wage labour, but out of the wage labour of the capitalist himself. In contrast thereto, interest then seems to be independent both of the labourer's wage labour and the capitalist's own labour, and to arise from capital as its own independent source. If capital originally appeared on the surface of circulation as a fetishism of capital, as a value-creating value, so it now appears again in the form of interest-bearing capital, as in its most estranged and characteristic form. Wherefore also the formula capital — interest, as the third to land — rent and labour — wages, is much more consistent than capital — profit, since in profit there still remains a recollection of its origin, which is not only extinguished in interest, but is also placed in a form thoroughly antithetical to this origin.

Finally, capital as an independent source of surplus value is joined by landed property, which acts as a barrier to average profit and transfers a portion of surplus value to a class that neither works itself, nor directly exploits labour, nor can find morally edifying rationalisations, as in the case of interest-bearing capital, e.g., risk and sacrifice of lending capital to others. Since here a part of the surplus value seems to be bound up directly with a natural element, the land, rather than with social relations, the form of mutual estrangement and ossification of the various parts of surplus value is completed, the inner connection completely disrupted, and its source entirely buried, precisely because the relations of production, which are bound to the various material elements of the production process, have been rendered mutually independent.

In capital — profit, or still better capital — interest, land — rent, labour — wages, in this economic trinity represented as the connection between the component parts of value and wealth in general and its sources, we have the complete mystification of the capitalist mode of production, the conversion of social relations into things, the direct coalescence of the material production relations with their historical and social determination. It is an enchanted, perverted, topsy-turvy world, in which Monsieur le Capital and Madame la Terre do their ghost-walking as social characters and at the same time directly as mere things. It is the great merit of classical economy

to have destroyed this false appearance and illusion, this mutual independence and ossification of the various social elements of wealth, this personification of things and conversion of production relations into entities, this religion of everyday life. It did so by reducing interest to a portion of profit, and rent to the surplus above average profit, so that both of them converge in surplus value; and by representing the process of circulation as a mere metamorphosis of forms, and finally reducing value and surplus value of commodities to labour in the direct production process. Nevertheless even the best spokesmen of classical economy remain more or less in the grip of the world of illusion which their criticism had dissolved, as cannot be otherwise from a bourgeois standpoint, and thus they all fall more or less into inconsistencies, half-truths and unsolved contradictions. On the other hand, it is just as natural for the actual agents of production to feel completely at home in these estranged and irrational forms of capital — interest, land — rent, labour — wages, since these are precisely the forms of illusion in which they move about and find their daily occupation. It is therefore just as natural that vulgar economy, which is no more than a didactic, more or less dogmatic, translation of everyday conceptions of the actual agents of production, and which arranges them in a certain rational order, should see precisely in this trinity, which is devoid of all inner connection, the natural and indubitable lofty basis for its shallow pompousness. This formula simultaneously corresponds to the interests of the ruling classes by proclaiming the physical necessity and eternal justification of their sources of revenue and elevating them to a dogma.

In our description of how production relations are converted into entities and rendered independent in relation to the agents of production, we leave aside the manner in which the interrelations, due to the world market, its conjunctures, movements of market prices, periods of credit, industrial and commercial cycles, alternations of prosperity and crisis, appear to them as overwhelming natural laws that irresistibly enforce their will over them, and confront them as blind necessity. We leave this aside because the actual movement of competition belongs beyond our scope, and we need present only the inner organisation of the capitalist mode of production, in its ideal average, as it were [...]