Marx’s *Capital* Volume One

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Marx’s *Capital* Volume One
The Process of Production of Capital

Part I.
Commodities and Money

Chapter 1 §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.
>
> Marx, 1867

With these words Marx began the first section of Chapter 1, subtitled “The Two Factors of a Commodity: Use-value and value (The substance of value and the magnitude of value).”

The Political Economists had shown that political economy is the science of value. Marx shows that the commodity, the simplest form of value, well known to the ordinary consciousness of any denizen of bourgeois society, is the *unit* and substance of wealth, and the *prius* or starting point for the building of a system of political economy as a whole. Provided all other forms of value can be shown to be species of commodity, then the commodity also represents the Universal. All just as Hegel advised.

Like Ricardo, who began with “Chapter 1. Value,” and claimed that all the features of bourgeois society were forms of value, Marx begins his system of Political Economy from value, but he specifically begins from the simplest social form of value found in bourgeois society, the commodity (Marx, 1881), and from *this alone*. There is no mention of money until Section 3 of Chapter 1, let alone price, wages, capital and so on. In contrast, Ricardo had introduced these other basic concepts from the very beginning, as empirically given facts. Marx will focus his attention on analysis of this basic and historically first form of value, and move on to deriving other, more developed forms of value only later in the work – from the Universal to the Particular.

To proceed from this beginning, Marx analyses the commodity, and reveals its internal contradiction (just as Hegel did in the *Encyclopaedia*) in order to create the basis to synthesise all the other concepts of political economy.

> The utility of a thing makes it a use value. … independent of the amount of labour required … 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. … they are, in addition, the material depositories of exchange value.
>
> loc. cit.

In fact, a commodity must be of use to *someone else* other than the producer in order to be a commodity and have 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 … the exchange values of commodities must be capable of being expressed in terms of something common to them all, of which thing they represent a greater or less quantity. … 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. … all are reduced to one and the same sort of labour, human labour in the abstract. … When looked at as crystals of this social substance, common to them all, they are – Values.
>
> loc. cit.

In this first section, Marx proves that the value of a commodity is determined by the socially average labour-time required for its production by consideration of the division of the whole social labour. He has makes no mention of price at this point. Under conditions where labour is more productive and therefore can produce the same use-value in less time, then the value of each commodity is reduced correspondingly.

It is not the *actual* labour expended on producing a given commodity which gives that commodity its value, but rather the *average* labour time, or, from the point of view of the country as a whole, the *total* labour time required to be produce *all* of the given products required. This value is determined through the process of exchange on the market and is realised only at the moment of exchange.

A commodity produced for one's own production is useful but does not have *value*; likewise, the tithe-corn provided by a peasant for the feudal landlord does not have value because it is not exchanged. Gold and diamonds are valuable because a great deal of labour is required to find them, but virgin soil, the air and sunshine given by Nature have no value. "A thing can be a use value, without having value."

It is in this sense that it is said that the *substance* of value is *abstract* human labour, independently of the skill and intensity or the particular kind of labour that goes into the production of a given individual commodity.

Section 2 is entitled the "Two-fold character of the labour embodied in commodities." Marx shows that the particular quality of labour, be that tailoring or brewing, corresponds to the use-value embodied in a commodity. However, just as a single person can divide their day between tailoring and brewing, the total social labour can be divided in whatever proportion is required to meet the total needs of the community. Therefore, in determining the quantity of labour embodied in a commodity, all that matters is the socially average labour time required for its production under existing conditions of production. Labour which is more skilled or more intense counts for the purpose of measuring its value only as “simple labour intensified,” i.e., as a multiplied quantity of the same socially average labour. This is what is meant by “abstract labour.” All labour in bourgeois society has both the character of the use-value it produces and the character of being a certain quantity of abstract labour.

If conditions of labour change so that one and the same coat can be produced in half the time, then the value of a coat is halved.

> An increase in the quantity of use values is an increase of material wealth. With two coats two men can be clothed, with one coat only one man. Nevertheless, an increased quantity of material wealth may correspond to a simultaneous fall in the magnitude of its value. This antagonistic movement has its origin in the two-fold character of labour.
>
> loc. cit.

This observation is worthy of emphasising: if a particular kind of labour is improved, for example by a technical innovation, then the quantity of wealth created is increased, but its value is reduced! Thus, what Marx has disclosed within the commodity as a unit of value is a genuine contradiction: the *antagonism* between wealth-creating and value-creating.

Note that competition has not entered into consideration at all so far. Marx is effectively talking as if the community was one great enterprise dividing the labour time of its many independent producers between the production of various wanted commodities, and exchanging them at their value.

Section 3 is entitled “The form of value or exchange value.” Here Marx expresses the above contradiction as a commodity having *two forms*: the physical or natural form which makes it useful, and their value form. The remainder of this section is a quasi-historical exposition of the development of the value form from its beginning in an accidental trade between individuals up to the universal form, money.

I say *quasi*-historical because it is clearly an outcome of both Marx’s study of relatively well-known facts about different historical forms of life and his logical inquisition of the commodity relation, what I have called a “categorical genealogy.” This differs from the “real history” and is the same kind of logical-historical examination which Hegel used in the “Philosophy of Spirit.” Here the sequence of categories is the same as the sequence found in history.

I am not going to précis this rather long section, although it has been the focus of much interest from the point of view of identifying Hegelian categories. What Marx establishes here is the genesis of the form of value from the accidental form with one commodity emerging as a general measure of the value of all other commodities, to the universal form, the *money-form*, in which one commodity is spontaneously singled out from all other commodities to act as the universal equivalent, expressing the relative value of all other commodities.

The historical narrative is broken off when this commodity has come to be gold. Gold is suitable for this role because of its extensive divisibility, its relative scarcity, its durability, its manifest purity and uniformity of quality and its specific weight. Thanks to the world market in gold, an ounce of gold represents a certain value, a certain quantity of abstract labour, and this value is to be the measure of all other products of labour of whatever type.

The value of money, i.e., gold, is not constant, but for example, will decline in the event of a gold rush bringing large amounts of relatively cheap gold on to the market, and fall again when new deposits of gold become scarce and require much labour to find and mine. All that remains constant is the unit of abstract labour: time.

Section 4 is entitled: “The fetishism of commodities and the secret thereof.” This passage is not essential to the systematic exposition of forms of value in *Capital*, but was included because it sheds light on the nature of bourgeois ideology.

Marx likens the role of commodities (including *all* forms of value) in bourgeois society to fetishism, the belief held by religious people that material objects – icons, documents, buildings, and so on, have spiritual powers of their own that can control and intervene in human affairs.

> 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.
>
> loc. cit.

The social division of labour in bourgeois society means that people are collaborating in production with people with whom they have no personal contact. Thus, their own (collective) product assumes the appearance of a power over them, and one, moreover, wielded by an alien class, and thus the appearance of being an alien power. This is in contrast to Hegel, who believed that the appearance of a worker’s product on the market gave the worker some form of recognition. Hegel’s blind spot was the result of conditions where the class antagonism between employers and employees had not developed and where the social division of labour was as yet undeveloped in Germany.

Despite this alienation, the notion of the moral equality of all human beings, the principle wielded against feudal privilege by the bourgeois revolution, finds its material basis in commodity production:

> The fact, that in the particular form of production with which we are dealing, viz., the production of commodities, the specific social character of private labour carried on independently, consists in the equality of every kind of that labour, by virtue of its being human labour, which character, therefore, assumes in the product the form of value
>
> loc. cit.

As a result of millions of such value-interactions every day, the notion of the equality of all human labour takes on the significance of an axiom.

Summary of *Capital*, Volume One, Chapter 1

The above synopsis hardly does justice to Marx’s rich text, but my main point is to indicate where and how Marx is guided by or differs from Hegel.

It is clear as daylight that Marx has followed Hegel's advice as set out in the first chapter of this book. His critique of Political Economy, culminating in his critique of Ricardo demonstrated that Political Economy was the division of science whose subject matter was essentially value, and that it was by the examination of value, that the physiology of bourgeois society was to be revealed. As Hegel specified, value was to be analysed into all its parts and the simplest component part of value chosen as the unit of value and made the starting point for analysis. Analysis of this unit must proceed initially without bringing it into relation with any other concept, revealing only what was contained within *it*.

The whole trajectory of Political Economy culminated in Ricardo's work and convinced Marx that it was indeed labour time which was the substance of value. Ricardo had failed to complete the task of reconstructing Political Economy on this basis because he had proceeded haphazardly, mixing up value with profit and price from the beginning before analysing the commodity form of value *in its own right*, abstracted from the historical conditions in which it is found in modernity. Marx makes only passing reference to price, noting that "exchange value *appears* to be something accidental."

Given that bourgeois society itself had historically grown out of commodity exchange through a passage across many different forms of society in which commodities and money played a subordinate role underlines the importance of beginning, as Marx did, from analysis of the commodity.

Actual exchange of material commodities was as rare in Marx's times as it is today. The starting point was not determined empirically as the most common economic relation. If we were to take purchase and sale of services by electronic transfer as our starting point we would never get to the bottom of it all. Insofar as economic life has moved on since the 1860s, what is required is a *further development*, but from this same starting point, analysis of the simplest economic relation between people, the commodity.

In this chapter, Marx considered only the production and exchange of commodities at their value. Wage labour and capital are not yet examined. The chapter thus represents an analytical abstraction in which many independent producers (artisans and agricultural labourers) exchange their own produce and are paid, as Marx notes in §4, according to their labour time. This analytical abstraction is an image of the petit-bourgeois ideal, like the kind of society envisioned by the French anarchist and contemporary of Marx, Pierre-Joseph Proudhon.

The contradiction Marx has uncovered in the commodity relation is the beginning of the analysis but by no means the end. It is wrong to suggest as others have that the entirety of *Capital* is based simply on the analysis of the commodity. As we noted in our brief review of Marx's critique of Ricardo, a number of problems remained to be solved, and in each case these problems would become the focus of *new* insights and new divisions of the subject matter.

Nonetheless, the fundamental antagonism between wealth and value which Marx discovered within the commodity runs right through bourgeois society and capitalism, encapsulating as it does the fundamental antagonism between the capitalist mode of exploitation and the developing forces of production, that is, the labour process itself.

Chapter 2. Exchange

The opening lines of Chapter 2 are a précis of the early sections of Hegel's *Philosophy of Right*, with property originating in first possession, a person's will objectified in property, exchange entailing mutual recognition and constituting a contract based on mutual consent. However, Marx is arguing that it is the act of *exchange* which is the first judicial (i.e., genuinely human) relation, rather than simply private *property*, as it was for Hegel.

> The persons exist for one another merely as representatives of, and, therefore. as owners of, commodities. In the course of our investigation we shall find, in general, that the characters who appear on the economic stage are but the personifications of the economic relations that exist between them.
>
> Marx, 1867, Chapter 2

It is the act of exchange which realises the exchange value and proves that the commodity does indeed contain a use-value. Marx says that the act of exchange is simultaneously private (in that it realises the wants of each party) and social, in that the establishment of the value and its use-value is a social act, in fact, with implications across the entire community. In this way Marx continues the logical-historical narrative from §3 of Chapter 1 ("The intermediate steps of the process vanish in the result and leave no trace behind "), and shows how beginning with accidental acts of exchange, one commodity must emerge as the universal equivalent, money, which separates itself from all other commodities.

Money is a commodity, albeit a special commodity. But if one had started with money alongside the commodity, rather than starting with the commodity alone, then the nature of money would have remained mysterious.

Chapter 3. Money

In this section, Marx reviews the various functions of money which had emerged historically, but from the character of money as the universal equivalent commodity money is: the measure of values, the medium of circulation, hoarding, a symbol of value, the means of payment and universal, i.e., worldwide money, acting as a national reserve, and facilitating exchange between countries even in times of crisis.

This ends Part I of *Capital* Volume One.

Summary of Part I

Marx's division of Capital into *parts* is quite deliberate. In this Part I, Marx has established the concept of "value" in its simplest form, commodities, and demonstrated that money, the subject of endless confusion and mysticism, is a *type of commodity*, and subject to the nature of commodities. At this point money is taken to be gold. The particular nature of paper money and other varieties of currency is left to later stages in the development.

All other forms of value lie ahead and must be synthesised from the concept of value so far established.

Moreover, the society of independent producers exchanging their products at their value outlined is an analytical abstraction. But at the same it is a certain *viable form of life* governed by the ideal of the independence and equality of all human beings. The economic law established in Part I is also an ethical norm, specifically the ethical norm carried by the bourgeois revolution.

Part II
The Transformation of Money into Capital

Chapter 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. ...
>
> 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. ... 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.
>
> Marx, Chapter 4, 1867

Following the method demonstrated by Hegel is his *Logic*, we see that Marx has established value in the circulation of commodities and the formation of money as the logical, historical and immediate preconditions of capital. On this basis alone, Marx is able to introduce a novel definition of capital: *buying in order to sell* (M—C—M) instead of selling in order to buy (C—M—C) characteristic of the form of society presupposed in Part I. That this activity arises from the circulation of commodities mediated by money is clear. To this very day, capital remains money which is put into circulation to be withdrawn again, “buying in order to sell.” Marx defined capital solely in terms of the concepts already established: value, commodities, circulation and money. As a result, Marx has been able to define *capital in general* – be it industrial capital or merchant capital, but distinguished from traditional landed property, for example. As Hegel demanded, Marx moves from the general to the particular. But first he must define universal capital – that individual form of capital which exists alongside other forms of capital, but which is universal.

Whereas the circuit (C—M—C) ends with a different commodity than that with which it began and each cycle proceeds independently of the previous cycle, (M—C—M) ends with the same commodity it began with. This would be absurd, unless the circuit ends with an *expanded* sum of money, M' or M+ΔM.

> 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.
>
> op. cit.

Whereas the person who sells in order to buy will be satisfied with the commodity they have acquired and will begin a new cycle only when stimulated by a new need, the buyer who aims to recover their money completes the cycle with an expanded sum of the same money ready to repeat the same cycle in an expanded form. “Money ends the movement only to begin it again. … The circulation of capital has therefore no limits. ”

> Because [capital] is value, it has acquired the occult quality of being able to add value to itself. It brings forth living offspring, or, at the least, lays golden eggs.
>
> op. cit.

Marx makes clear that the person who buys in order to sell dearer is nothing but the personification of an economic category. Money in circulation is only *potential* capital.

> As the conscious representative of this movement, the possessor of money becomes a capitalist. His person, or rather his pocket, is the point from which the money starts and to which it returns. … he functions as a capitalist, that is, as capital personified and endowed with consciousness and a will.
>
> op. cit.

Incidentally, Marx has also defined “surplus value,” ΔM, but has not yet revealed its *source*.

Chapter 5. Contradictions in the General Formula of Capital

Despite the illusions of the bourgeoisie, surplus value cannot arise from the circulation of money, exchanging commodities at their value, with or without the medium of money. If a commodity is sold above its value, and thereby the buyer makes a gain, this is only by swindling the buyer, who has lost just as much as the seller gained. No new value is created by swindling.

It is only by buying in order to sell more dearly that surplus value can be extracted from circulation. This is the first step in the solution of the foremost problem of political economy: the source of surplus value.

In the case of M—C—M, the merchant has “parasitically shoved” themself between seller and buyer, and there are a myriad of ways in which the merchant can see to it that he makes a gain at the cost to his supplier and customer. Likewise, the usurer makes a profit, but only thanks to the loss on the part of their debtors.

Although merchant’s capital and usurer’s capital are “derivative forms” of capital, “these two forms appear in the course of history before the modern standard form of capital.” Here history runs counter to logic in this instance.

Since surplus value cannot be created in circulation, “something must take place in the background, which is not apparent in the circulation itself.” He can add the value of his own labour, but this does not explain “self-expanding value.”

The surplus appears to originate “both in circulation, but yet not in circulation.”

With this Marx now names this *embryo* [*Schmetterlingsentfaltung*] of capital, the prius, germ cell or universal individual, which at this embryonic moment is literally a person, whom Marx calls “Moneybags.”

> 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.
>
> loc. cit.

From the point of view of understanding the Hegelian roots of *Capital* it is vital to grasp this moment. Just as in the first Preface to *Capital*, Marx referred to the commodity as the “economic cell form” of value, explicitly alluding to Hegel’s *der Keim* (seed), he again explicitly alludes to *der Keim*, this time as an *embryo*, marking the starting point of a *new division* of science.

It is wrong to see the commodity form of value as the germ cell of *capitalism*. The germ cell of value, yes, and thus the germ cell of bourgeois society and the ethos of the moral equality of all people. But the arrival of Moneybags is a new departure, and sets in train a new phenomenon.

As the germ cell of the unit of capital, the capitalist firm, Moneybags is just as significant as the commodity itself. The simplest unit of universal capital.

Chapter 6. The Buying and Selling of Labour-Power

This chapter addresses an outstanding problem in Political Economy, the *source of surplus value*, highlighted by the contradiction Marx has identified in capital: surplus value cannot appear in circulation nor outside of circulation, but only in the process of putting money into circulation and then withdrawing money from circulation.

Marx finds the solution to this problem by focusing on the buying and selling of *one* commodity amongst all others, labour-power (just as he defined value by focusing on one form of value amongst others, the commodity). Marx said the Political Economists had failed to grasp the particular nature of the labour found in the economy which Marx has described as “abstract labour.” Now he makes a further analysis of the nature of abstract labour.

Political Economists had already determined that the value of labour-power was determined by the cost of the means of subsistence of a labourer. However, the Political Economists had made no distinction between living labour, consumed by the capitalist, and labour power – the commodity purchased on the market at its value.

> In order that he [the worker] 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.
>
> Marx, 1867, Chapter 6.

Without distinguishing between living labour and labour power, the source of surplus value remained utterly mysterious and the source of all kinds of magical thinking and logical gymnastics.

This contradiction within the concept of "labour" as both the application of "labour power" and "living labour" completes Part 2 on the essential nature of modern industrial capital. Usury and merchant capitals were merely undeveloped forms of capital, which creamed off a share of an existing labour process. Industrial capital, on the other hand, takes over and uses the labour process for its own ends, by the buying and consumption of labour power.

In outlining this process, Marx points to the social and historical conditions that are necessary for the capitalist to be able to buy "free" labour-power at its value and realise the product on the market. Such an activity is incompatible with the conditions presupposed in Part I in which the labourers were all independent producers owning their own means of production and in command of their own labour. Before the conditions described in Part II could flourish, the labourers had to be deprived of their means of production.

> Capital, therefore, announces from its first appearance a new epoch in the process of social production.
>
> loc. cit.

The value of labour-power, dependent on the cost of the means of subsistence of a worker, differs somewhat from the value of other commodities however.

> 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, and depend therefore to a great extent on the degree of civilisation of a country, more particularly on the conditions under which, and consequently on the habits and degree of comfort in which, the class of free labourers has been formed. 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.
>
> loc. cit.

Not only does the cost of labour-power include the cost of the worker's physical needs, but also the cost of raising the next generation of workers, and their education as required by the modern labour process.

> 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. ...
>
> He, who before was the money-owner, now strides in front as capitalist; the possessor of labour-power follows as his labourer. The one with an air of importance, smirking, intent on business; the other, timid and holding back, like one who is bringing his own hide to market and has nothing to expect but — a hiding.
>
> loc. cit.

Summary of Part II

Part II is a *distinct division of the subject matter*. In Part I, the germ cell of value was the commodity; in Part II, the germ cell of capital (Mr. Moneybags) is the unit of capital, the single capitalist firm. The embryo of capital is a new prius, which will appear out of the process of circulation of commodities once money participates in circulation.

The ethical life presupposed in Part I is a society of independent producers exchanging their products at value; the ethical life of Part II is a society in which "free" (free also of means of production) labourers sell their labour-power on the market to units of capital which consume that labour-power as living labour applied to means of production which is the private property of the capitalist. *The independent capitalist producer has now replaced the independent artisan* but is still in its embryonic form as the single entrepreneur.

Part II was made possible by analysis of the kind of labour that arises in a community in which capital has appeared; "labour" is both "labour-power," the capacity to labour whose value depends on the worker's cost of living, *and* "living labour," consumed by the capitalist by it being applied to its means of production.

At this point, it remains the case that we have a society made of independent producers selling their products at their value. Surplus value in the form of profit arises because the value of the ingredients of the labour process is less than the value of its product.

Marx has identified the site of production of surplus value, but has yet to reveal *how* this surplus value arises and what determines it *magnitude*. This is the outstanding contradiction in Part II.

The progress of Marx's critique of the science of value is proceeding exactly as per Hegel's advice in The *Logic* – identifying a unit, analysing that unit, and identifying problems or contradictions which arise from analysis without the introduction of any new material. At each stage of the reconstruction we find a viable way of life with its own characteristic ethos, even though it may never have been an historically dominant form of state.

Part III
The Production of Absolute Surplus-Value

Chapter 7. The Labour-Process and the Process of Producing Surplus-Value

In §1 of this chapter Marx presents an analysis of the labour process as:

> the everlasting Nature-imposed condition of human existence, and therefore is independent of every social phase of that existence, or rather, is common to every such phase.
>
> Marx, 1867

The analysis is interesting in itself but functions merely to set the scene for §2 which must address the contradiction identified in Part II, the production of surplus value in the use of labour-power. Marx notes the two facts which distinguish the labour process as it exists under capital from the general nature of labour common to all social formations. "The labour-process, turned into the process by which the capitalist consumes labour-power, exhibits two characteristic phenomena":

> First, the labourer works under the control of the capitalist

and

> Secondly, the product is the property of the capitalist and not that of the labourer, its immediate producer. … From the instant he steps into the workshop, the use-value of his labour-power, and therefore also its use, which is labour, belongs to the capitalist. By the purchase of labour-power, the capitalist incorporates labour, as a living ferment, with the lifeless constituents of the product. From his point of view, the labour-process is nothing more than the consumption of the commodity purchased, *i. e.,* of labour-power.
>
> op. cit.

In Part II, Marx had already shown that *this* is the site at which surplus value is produced, and it remains now to show *how* this is possible in a society in which all commodities are exchanged at their value.

§2. The production of surplus value

Marx shows that the value of the product is the sum total of the value of the materials *transformed* in production of each product and the proportion of the value of the machinery necessary to be *used up* in the production of each product plus the labour-time (the number of days of abstract or average labour) *consumed* in the production of the product.

The value of one day's labour-power (*i.e.* the value of the necessaries of life daily required on average by the labourer) will be embodied in the product after a certain number of hours. That is, after a certain number of hours, say six hours, the worker has produced *the equivalent of one day's labour-power,* their day's wage. Once the capitalist has sold the product at its value and paid the worker their wage, both the capitalist and the worker have recovered their costs, *i.e.*, the value of their contribution to the product.

However, the capitalist entered into the bargain, and paid the worker for the use of their labour-power, with the hope of getting something for his "service" in providing access to the means of production, but at this point the labourer is ready to go home, having met his needs for the day. Before Mr. Moneybags had entered the picture, that is exactly what the worker (or journeyman) would probably do: go home.

However,

> What really influenced [the capitalist] 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.
>
> op. cit.

The capitalist forces the worker to continue working for the *rest of the day*, but does not pay the labourer for these additional hours. The capitalist is the owner of the entire product of say, 12 hours' exercise of labour-power, and therefore on sale of the product will realise the value, not only of the ingredients purchased for the production of the commodity, but as well of, say, 4 hours' of unpaid labour.

> 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.
>
> op. cit.

The quantity of surplus value appropriated by the capitalist each day is equal to the number hours of unpaid labour forced out of the worker each day. The capitalist pays only for the number of hours labour socially necessary for the reproduction of the worker's energy, at the present stage of development of the labour process this is less the the number of hours actually worked.

Conclusion from Chapter 7

Marx lays a lot of irony and polemics on to this passage, but the essence is clear. The source of surplus value is the labour-time worked over and above that which is socially necessary for the reproduction of the worker's own life, appropriated as part of the entire product, surplus labour-time. This *unpaid labour-time* is *surplus value.*

The problem set at the end of Part II is now resolved into the question of unpaid labour, essentially, the excessive length of the working day. The enormous importance of this discovery lies in the fact that the length of the working day is something which is within the practical reach of the industrial workers' movement. In 1856, in Melbourne, the international 8-hour Movement had been launched, and the struggle to reduce the length of the working day has now been shown to be the substance of the exploitation of the working class by capital through *unpaid labour-time.* An immensely practical discovery!

Unpaid labour time is the germ cell from which the exploitation of the working class by capital grows. It's not a "combination of factors," just unpaid labour time.

The error that the Political Economists had made in being unable to see how this surplus labour-time is exploited was their failure to distinguish between *labour-power* – the product which the worker sells to the capitalist for their use, and living *labour* manifested once the labourer is put to work at the will of the capitalist.

The rest of Part III must now examine unpaid labour time, and how both the rate and mass of surplus value acquired by capital develops from this germ cell.

Chapter 8. Constant Capital and Variable Capital

Marx criticised Ricardo for failing to distinguish between profit (on capital) and surplus value (extracted from the employment of wage labour). To do this, Marx analysed the unit of capital into its component parts.

> The labourer adds fresh value to the subject of his labour by expending upon it a given amount of additional labour, no matter what the specific character and utility of that labour may be. On the other hand, the values of the means of production used up in the process are preserved, and present themselves afresh as constituent parts of the value of the product; the values of the cotton and the spindle, for instance, re-appear again in the value of the yarn. The value of the means of production is therefore preserved, by being transferred to the product. …
>
> By the simple addition of a certain quantity of labour, new value is added, and by the quality of this added labour, the original values of the means of production are preserved in the product.
>
> Marx, 1867, Chapter 8

The value of the means of production, both the material transformed and the machinery used up, *reappears* in the value of the product, unchanged in its magnitude by the transformation in its form brought about about by labour, the application of labour-power. This Marx calls "constant 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.*
>
> op. cit.

Whilst

> 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.*
>
> op. cit.

Throughout this chapter Marx repeatedly emphasises that the specific quality of the labour-power applied in the production process, be that spinning or tailoring, is irrelevant to the quantities of value embodied in the product. This analysis is equally applicable to *all* commodity production, dependent only on quantities of abstract labour.

This analysis of the unit of capital into three components: constant capital, variable capital (i.e., wages) and surplus labour-time is the key to Marx's distinction between profit and surplus value.

Chapter 9. The Rate of Surplus-Value

This chapter is divided into four sections, each devoted to different aspects of surplus value and its substance, surplus labour-time.

§1 is entitled "The degree of exploitation of labour-power."

> 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 (s) to the variable capital (v), or is expressed by s/v. ... 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."
>
> Marx, 1867, Chapter 9

The proportion of the time the worker needs to reproduce the equivalent of her wage is called the "necessary" labour time; during the second period of the working day which is no longer necessary for the labourer, and produces no value for herself, "and to the labour expended during that time, I give the name of surplus-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.
>
> loc. cit.

§2 makes the point that as the value of the product is so divided that the product itself is likewise divided between constant capital, labour necessary for the reproduction of the worker's own life and surplus labour, which the capitalist converts into money.

Both these sections are filled out with interminable examples of how these quantities are realised and divided between capitalist and worker.

§3 is entitled "Senior's last hour," pours scorn on the Political Economist Nassau W. Senior who in 1836 expressed outrage at the newly passed Factory Act and "the still more menacing Ten-hours' agitation." Marx simply making the point of how conscious the bourgeoisie was of the value of the surplus labour time.

§4 on "Surplus produce" emphasises again that the surplus value and surplus product is properly measured against the *necessary* labour time:

> 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.
>
> loc. cit.

Chapter 10. The Working Day

This chapter is 34,000 words occupying 10% of Volume One of *Capital*. It adds little to the logical derivation of Marx's critique of political economy. However, it is crammed with empirical data documenting the horrific practices of the British industrial capitalist and the mighty struggle of the nascent workers' movement against the excessive length of the working day. The chapter makes it abundantly clear that Marx believes that this issue, specifically the Ten Hours Movement, is the central struggle against capitalist exploitation. There is, on the other hand, very little to be found in *Capital* on the wages struggle, far less the Socialist movement's struggle against capital as a whole.

Chapter 11. The Rate and Mass of Surplus-Value

Here Marx shows that the total mass of surplus value extracted from workers by one unit of capital per working day is equal to the *rate of exploitation* times the number of workers employed. This rate of exploitation is the same whether computed in terms surplus as a proportion to wages, or the ratio of unpaid labour to necessary labour time.

It is always supposed that the value of an average labour-power is constant. By nature, there is an absolute limit to the length of the working day (24 hours), so the only means a capitalist has of increasing the mass of surplus product or value obtained is to employ more workers. Given average workers and products sold at their value, the only way a capital can increase the share of surplus value they can lay hands on is by increasing his expenditure on wages or extending the working day. The amount of material used up in production has absolutely no effect on the amount of surplus value obtained. In any given community, a labourer's cost of subsistence is the same wherever she may be employed, and the length of the working day is either legislated or set by custom, so it follows that whatever trade a capitalist may be engaged in, the rate of surplus value will be the same, all else being equal.

Here Marx draws attention to the fact that in different trades (Marx compares spinning cotton and baking bread) the amount of constant capital consumed in the product of each day's labour varies widely, and yet:

> 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
>
> loc. cit. Chapter 11

This is the "stumbling block" on which Ricardo came to grief, for Ricardo had written into Chapter 1 of his book the empirical fact that the rate of profit is universal and the value of labour time, and therefore the rate of surplus value, is also universal. He failed to observe, as Marx has shown, that these two data are in flagrant contradiction!

> The labour which is set in motion by the total capital of a society, day in, day out, may be regarded as a single collective working day. ... With a given length of this working day, whether its limits are fixed physically or socially, the mass of surplus-value can only be increased by increasing the number of labourers, *i.e.*, of the labouring population, [but] by the possible lengthening of the working day. It will, however, be seen in the following chapter that this law only holds for the form of surplus-value dealt with up to the present.
>
> loc. cit.

Here Marx stops to dwell for a moment on how it is that Mr. Moneybags has entered into this situation. He points out that in order to produce surplus value a certain sum of money must be in the hands of an individual, enough to cover, Marx reckons, the wages of one worker for a year and buy sufficient means of production. But in this event, Mr. Moneybags would be able to live only at a fraction of the level of a common labourer (presuming that the rate of exploitation is less than 100%), and consequently enough money for the wages and means production for a year's work by at least several labourers is necessary before you can get into this game. "A certain stage of capitalist production necessitates that the capitalist be able to devote the whole of the time during which he functions as a capitalist, i.e., as personified capital, to the appropriation and therefore control of the labour of others, and to the selling of the products of this labour." And Marx observes that:

> The guilds of the middle ages therefore tried to prevent by force the transformation of the master of a trade into a capitalist, by limiting the number of labourers that could be employed by one master within a very small maximum. The possessor of money or commodities actually turns into a capitalist in such cases only where the minimum sum advanced for production greatly exceeds the maximum of the middle ages.
>
> loc. cit.

The sum of money necessary to transform oneself into a capitalist varies from one trade to another but historically it is continuously increasing with the development of the technique.

Over time, capital took on an increasingly coercive character so as to compel workers to do more work than their way of living required. The character of the productive process changed so as to absorb increasing numbers of workers and the capitalist intervenes in every way possible to compel "free" labourers to enter his factory.

Summary of Part III

Part III is again a *new division of the subject matter* of political economy.

Part II had identified the employment of labour power by a capitalist as the site of production of surplus value, so Part III had to analyse the labour process as it is found in capitalism to reveal how surplus value is realised in this process. To do this Marx identified a *new* germ cell, *unpaid labour time*. Unpaid labour time is not inherent in commodity production, indeed, commodity production had existed for centuries thanks to bare-faced compulsion, and participation in artisan or commercial workshops was a way to *escape* forced labour. Unpaid labour time was a *new* insight, a new germ cell.

Marx then proceeded to analyse this new unit, still under conditions of commodities being sold at their value and on the assumption, consistent with the concept of "abstract labour," that all workers share much the same conditions of life, gaining their subsistence from like sources such that their labour power is sold at an average prices and affords an average subsistent standard of living according to the customs and practices of the day.

The unit of unpaid labour time originates from division of value into constant capital (passed in unchanged quantity from the means of production into the product), variable capital (the total age bill) and surplus value corresponding to the unpaid labour time.

This leads Marx to consideration of the (length of the) working day, clearly signalled by Marx as the central bone of contention between worker and capitalist. It is as a result of this conflict that capital had broken out of the constraints of the mediaeval guild and now shamelessly forced the proletarian to work as many hours as can be found in the day in order to appropriate unpaid labour time. At the same time, Mr. Moneybags has shed his chrysalis and taken flight as the fully fledged industrial capitalist.

At this moment Marx can point to the contradiction between the social norms in which commodities are exchanged at their value and concomitantly, the capitalist appropriates surplus according to a socially average rate of surplus value, and the well-known empirical fact that the capitalist enjoys a uniform s*ocially average rate of profit* of capital invested, *irrespective* of the proportion of that capital which is invested in wages and was therefore the source of the unpaid labour, which is the substance of the surplus product acquired.

> For the solution of this apparent contradiction, many intermediate terms are as yet wanted.
>
> op. cit.

In fact, the reader must wait till Volume Three for this contradiction to be resolved. In the meantime, Marx must analyse surplus labour time and discover the determinants of its magnitude – which is after all, the sole driver of capitalist development.

The form of society presupposed by Part IV, one in which impoverished proletarians are forced to work excessively long hours in the factory is aptly encapsulated by "unpaid labour." However, we find here an empirical contradiction manifested in the uniform rate of profit. We are still dealing with analytical abstractions.

Part IV
The Production of Relative Surplus-Value

Chapter 12. The Concept of Relative Surplus-Value

Marx had already referred to surplus-value as "absolute surplus value" without defining what was meant by "absolute." Unpaid labour time is the difference between the length of the working day and the necessary labour time, both of which appear to be constrained by absolute limits.

This is the problem which must be resolved in Pare Four – the *necessary labour time* is the new unit/germ cell to be analysed.

Just as Ricardo and the other Political Economists had treated the value of wages as a fixed quantity being the subsistence level of the average worker, Marx has also up to this point taken the necessary labour time as a given datum. Certainly there is nothing a capitalist can do about the magnitude of necessary labour time of the workers he employs; if he pays the worker any less, the worker will not be able to live.

In the earliest phase of capitalist development, a master would simply gather as many workers as he could into a workshop, work them as long as possible and reap profit from their unpaid labour. The constant pressure to increase the productivity of their employees by investing in technique failed to lead to increased profit, as was shown in Part III. This contradiction unleashed a new tendency in capitalism – its drive to revolutionise the means of production. (See "The Direct Process of Production," the "unpublished draft Sixth Chapter of *Capital*," Marx 1864).

> a fall in the value of labour-power implies, however, that the same necessaries of life which were formerly produced in ten hours, can now be produced in nine hours. But this is impossible without an increase in the productiveness of labour. ... an alteration in the labour-process, of such a kind as to shorten the labour-time socially necessary for the production of a commodity. ... 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.
>
> Marx, 1867, Chapter 12

The individual capitalist can do nothing to reduce the necessary labour time (and thereby expand the unpaid labour time) of his own employees. But *collectively*, as a result of their shared practice of reducing the costs of production of each use-value, the cost of producing the use-values which constitute the necessary labour of their own employees leads to a gradual reduction in necessary labour time. It is in particular the cost of production of those products which constitute the basic needs of working people which has the effect of reducing necessary labour time. This takes place despite the lack of interest of any capitalist in reducing the costs of living for working people.

> 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.
>
> op. cit.

The addition to unpaid labour achieved by reduction of the value of wages is called *relative surplus value*, relative because it is achieved by changing the proportions into which the working day is divided, rather than by simply adding unpaid labour time. Further,

> 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. … 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.
>
> op. cit.

Chapter 13. Co-operation

As alluded to earlier, a revolution in the capitalist development of the labour process takes place as a result of capitalists' efforts to reduce the necessary labour time embodied in their products

> 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.
>
> Marx, 1867, Chapter 13

The employment of large numbers of workers makes the differences between one or another worker irrelevant; labour more and more resembles the "abstract labour" implicit in capitalist development. Moreover, in these large enterprises, it is no longer the case that each product is the work of one employee, for the product has passed through many hands in the process of production and each person's labour is but an "aliquot part" of the necessary labour of the product.

> Thus the laws of the production of value are only fully realised for the individual producer, when he produces as a capitalist, and employs a number of workmen together, whose labour, by its collective nature, is at once stamped as average social labour.
>
> op. cit.

The *principles* implicit in bourgeois society laid out in earlier chapters have now become the *actuality* of capitalist production. Marx remarks:

> The march of our analysis compels this splitting up of the subject-matter, a splitting up that is quite in keeping with the spirit of capitalist production.
>
> op. cit.

Capital now makes use not only of the economies of size but also the power of cooperative labour. As a result, the concentration of large masses of workers together becomes a pre-condition for participation in the production process, and:

> 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. ... 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.
>
> op. cit.

Chapter 14. Division of Labour and Manufacture

Having reflected on the kind of world which capitalism has created through the combination of their military-like command of the mass of the population with their unceasing revolutionizing of the labour process, Marx continues here to reflect on the nature of modern manufacturing, now sharply different from the relics of the old handicraft type of manufacture from which it emerged. Marx uses an historical review of the development of manufacture through various phases from the middle of the 16th century up to his own time to trace the evolution of modern industrial manufacture. This essay is not relevant to the Hegelian roots of Marx's method so I will leave it be.

The Remaining Parts of Volume One of *Capital*

Part Six is devoted to analysis of wages, and aims to prove that the use of piece-work makes no fundamental change in the nature of wages as payment for labour-time, but is merely a method of disciplining the workforce.

Part Seven is on the accumulation of capital, moving from simple reproduction, through the accumulation of surplus value to formulate the "General Law of Capitalist Development." Here Marx reviews the historical development of capitalism, highlighting how capitalist development has revolutionised daily life, the class structure of the country and the labour process itself. Everywhere its impact has been both modernizing and devastating to the lives of the masses.

Part Seven is again an historical review, this time covering primitive accumulation, the sheer robbery by which the initial masses of money were gathered in the hands of a few individuals and the impoverished mass of unemployed labourers whose labour could be exploited concentrated in the towns. The point is that the methods of primitive accumulation created the conditions for modern industrial capitalism, but did away with the conditions for their own method of enrichment. By its nature, robbery only works once. Industrial capital continuously reproduces the conditions for its own existence, and this is one of the problems which must be addressed in Volume Two of *Capital*.

This part also deals with the activity of the capitalists in Parliament and in colonisation.

Interesting as all this is, it is a product of Marx's lifetime study of capitalist development, but in the first four parts, the development of the principles in Volume One of *Capital* have been completed. I will now review what has been achieved by *Capital* Volume One with respect to Marx's conceptual reconstruction of capitalism.

Capital Volume One, Conclusion

Marx has revealed the fundamental laws of capitalist development by the application of Hegel's method as set out in the passage of the *Logic* entitled "The Idea of the True," and based on a study of the history of bourgeois development and a critique of science of value, Political Economy.

The germ cell which marked the starting point for political economy was the simplest social form of value, the *commodity*. Simple commodity production was an analytical abstraction corresponding to the earliest development of the bourgeoisie in the guilds and companies of mediaeval times – *bourgeois society*. The crucial outcome of this phase of development was the the circulation of commodities, and of *money* as a universal commodity, and the development of the forces of production to a point where *capitalist* development had become possible.

Volume One does not follow the development of money beyond gold. That gold has long since proved inadequate for most of the demands of post-modern capitalism for a means of payment, etc., simply means that it will be necessary to go *further*, and does not invalidate Marx's analysis as far as it went. Likewise, *Capital* is written on the assumption of a national economy sharing the same currency, and imported materials were what you could call "boundary objects."

On this topic, it should also be mentioned that Marx does not analyse the use-value of a commodity, even though he subjected its exchange value to analysis extensively. The commodity is thus taken to be the typical industrial product: tons of steel, yards of cloth and numbers of shoes. In Chapter 16 he says: "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," thus making it clear that a commodity can be a service, so long as it is made for exchange. In his times, schools were generally run by churches, and the "service industry" was largely oriented to the personal consumption of surplus value by the wealthy. But if you were going to extend *Capital* to today's condition, an analysis of the use-value is needed.

The germ cell which marked the starting point of a new division of the subject matter in Part II was a new form of value, *capital*, beginning from a germ cell in the form of Mr. Moneybags, the embryonic capitalist firm and the unit of capital. Moneybags bought commodities in order to sell more dearly: M—C—M'. Mr. Moneybags' appearance corresponded to the transformation of the mediaeval guild master into a capitalist, alongside the merchant capitalist and the usurer.

It may seem that the employment of wage-labour is not the sole or even best way of amassing capital. However, once we make a distinction between capitalists s*haring surplus value amongst themselves* and *extracting* surplus value in the first place, Marx will be seen to be correct.

The germ cell which marked the starting point for Part III was *unpaid labour time*, a new form of value, surplus-value. Unpaid labour arises only in the conditions of the exploitation of labour-power in the process of capital accumulation. Industrial capital is the universal form of capital, surpassing usurious and commercial capital, which nonetheless continued to exist alongside it.

Looked at from the present day, with all our computers, apps. and automatons, this may sound like an anachronism. Don't fool yourself. The widely recognised mental health crisis is testimony to the appetite capitalism has for our vital energies, and they are measured fundamentally by time.

The germ cell which marked the starting point for Part IV was *necessary labour time*. Analysis of the necessary labour time shows that the revolutionising of the forces of production by capital leads to a gradual reduction in the number of hours of average labour required to produce the equivalent of the necessities of life for the labourer of the time.

* * *

Forgive me dear reader if I could suggest that even if you are reading Marx or any kind of economic text for the first time this line of argument is abundantly clear. Granted, comparing it to the facts of present-day or historical capitalism is another matter. Indeed, Marx himself has already pointed out that the development of Volume One stands in contradiction to the well-known empirical fact that the rate of profit on capital bears no relation to the portion of that capital taken by wages. Perhaps you are doubtful, but the line of argument is clear, is it not?

And yet, not only have you read and understood Marx's epoch-making work, but you have also seen how it was composed according to the method of Hegel's *Logic*. You may never have read the material referred to in the first three chapters of this book though, so perhaps you have just have to have taken my word on this.

I will just make a couple of points.

First of all, the method of deduction applied by Marx is not the formal syllogistic type of logic taught in school. The first difficulty in using this type of logic is *selecting* the right datum from which to begin the analysis. Hegel characterised the prius or "germ cell." In 1867, everyone knew about the commodity, and by 1821 Ricardo had even established commodities as the starting point for analysis! Nevertheless, in general, *selecting* this datum is somewhat a matter of art, so to speak. In this case Marx had the benefit of an established, if problematic, science. Further, Hegel demanded that having selected the prius, the researcher must resist the temptation to throw on to the table "other factors," but instead retain the focus strictly to the analysis of the unit, disclosing what is *within* the unit. Marx was the first to bring this discipline, learnt from Hegel's *Logic*, to economic science.

The researcher must analyse this datum, and here again what to do is somewhat of an art; the researcher must identify a *contradiction* within the subject matter. And not just any contradiction, but one which takes the researcher one more step towards understanding and "reconstructing" the whole phenomenon. Analysis of the germ cell uncovers other empirically given features of the phenomenon now shown to be necessary features beginning from the germ cell. This analysis prepares the way for synthesis of additional features of the phenomenon.

In the first chapter, I discussed how Hegel advised the researcher how to select the unit and reveal its internal contradiction. In the *Logic* and the *Encyclopaedia* as a whole, Hegel gave us literally hundreds of examples of how to do this. Every subject matter has a different content and every science built on this content is unique. But just as we practice our scales before we try to play Beethoven on the piano, so we can study Hegel's *Logic* to become fluent in this kind of logic. There is no formula for this.

So the whole line of argument in Volume One of *Capital* is "Hegelian," supplemented in the latter part of the work with reflections on the historical development of capitalism.

Secondly, Marx has already drawn attention to the fact that the uniform rate of surplus value, derived from the analysis of value as abstract labour-time, is in flagrant contradiction to the empirical fact that the rate of profit on capital which is generally uniform across an economy. So what are we left with at the end of Volume One, especially given that Volumes Two and Three would not be published by Engels till about 30 years after Marx's death?

It is in the nature of the "rate of surplus value" that it is a characteristic not of an individual capitalist firm but of an *entire economy* – with its natural resources, its human material and customs and habits. The rate of surplus value is not calculated on the basis of any capitalist's wage bill or the total value of any capitalist's product. It depends on the *socially average labour embodied in the customary subsistence life of an average worker in the community*. Part IV would not make sense otherwise.

We are accustomed however to associating the "rate of profit on capital" with an *individual* unit of capital, an individual firm. This irrespective of the fact that the profit of each capitalist will approximate a general rate of profit which tends to be uniform across the economy, across different industries, with different proportions of living labour in the production process of each sector of the economy.

But the relation between the rate of profit and the socially determined rate of surplus value depends on the "organic composition of capital," the proportion of constant capital in the total investment of capital. This is a contradiction which Marx has told us will not be resolved until later, and in the meantime the calculation of the rate of profit as given in Volume One is not correct! If every unit of capital had the same proportion of capital invested in constant capital there would there be a uniform ratio between the rate of profit and the rate of surplus value. But this of course not the case.

However! All of Marx's calculations are based on *averages*, that is to say, totals taken across the whole economy, divided by the number of … workers, capitals, products, or whatever. The logic is watertight insofar as it refers to the *total* mass of surplus value, the total necessary labour and total means of production across the whole economy. Marx has computed *exactly* the mass of surplus value appropriated by the capitalist class every year and shared amongst themselves, and *exactly* the amount of social labour which has been devoted to the subsistence of the working population, and *exactly* the annual value of the means of production consumed.

That is, Marx has analysed the *universal* capital, having begun from the germ cell formed when Mr. Moneybags began to exploit labour-power by forcing his employees to work for unpaid labour – the universal form of capital.

> The progress, proper to the Notion, from universal to particular, is the basis and the possibility of a *synthetic science*, of a *system* and of *systematic cognition*. (Hegel, 1816, §1733)

This is no small accomplishment. All that remains now is to show how the various classes *divide their share of the product amongst themselves* and how *the various classes and their means of production are reproduced* year after year. (After all, all that has been determined is the distribution of the product of one cycle of production. That still leaves the problem of reproducing the conditions for the next cycle. If the capitalists simply consumed the product for their own enjoyment that would be the end of capitalism.

One final comment. The historical thread guiding this analysis is surely unmistakeable? This history is not that of the succession of different modes of production throughout history, but the historical development of *each of the specific relations* which have reached their zenith in modern capitalism. The result is a narrative which is both logical and historical at the same time, a "categorical genealogy."

So two problems remain outstanding: the reproduction of the conditions of production after each cycle of production and the sharing of the surplus value amongst sections of the capitalist class. Only then will the great contradiction between the rate of surplus value and the rate of profit be resolved.

The solution of each of these problems will prove again to involve specific new ethical regimes.