# Principles of Political Economy

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## *Theory of a Purely Capitalist Society*

Kōzō Uno

*Late Professor of Political Economy,*
*Institute of Social Science,*
*University of Tokyo*

TRANSLATED FROM THE JAPANESE BY
THOMAS T. SEKINE

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# TRANSLATOR'S FOREWORD

The following is a complete translation of Kōzō Uno's *Keizai Genron* originally published in Japanese in 1964. This volume, sometimes called 'new' *Principles* by the Japanese followers of Uno, is more than three times smaller in size than his earlier book with the same title, which appeared in two volumes in 1950 and 1952. The older *Principles* sold close to 50,000 copies before its edition was suspended with the publication of this book, and was one of the most controversial and influential writings among Marxian scholars in postwar Japan. Uno originally intended to undertake a major revision of his older *Principles*, and the present volume was supposed to map out a general framework for that operation. Unfortunately the deterioration of his health since the late 1960s made it impossible for the author to carry out his wish before his death in February 1977.

The two *Principles* together with other works of Uno continue to exercise a potent influence on Japanese studies in Marxian political economy. It would be unfortunate if, because of the language barrier, his valuable theoretical and methodological contributions had to remain inaccessible much longer to the Western public. The present translation is the first attempt at letting Uno speak a language other than his own. This formidable task the translator had to face with his extremely limited knowledge of English. Uno uses not a few private locutions in addition to the Hegelian-Marxian technical terms which are already generally unfamiliar to the English-speaking reader. Uno's masterly command of dialectical reasoning, by itself far from congenial to the empirically-oriented English way of thinking, often finds expression in manners of speech peculiar to the Japanese language. Thus the reader might occasionally feel that Uno's argument shifts somewhat abruptly in an unexpected direction. Yet interpretations and paraphrasing must be kept to the bare minimum in a translation of this kind in which an accurate rendition of the original meaning cannot be sacrificed for readability. The translator would like to have done better on almost all pages, though hoping at the same time that even through his faltering style the cogency and the dignity of the original thought will shine through undiminished.

Because of the long period of illness which eventually terminated his life it was not possible for Professor Uno himself to examine this translation in detail, although he has once gone through an earlier version and made some important suggestions. It was, therefore, five of his former students, namely Professors K. Watanabe, T. Sakurai, S. Yamaguchi, M. Itoh and K. Mawatari who carefully compared my translation with the original text so as to ensure that no gross misinterpretation has crept in. The translator wishes to thank them for their kind advice, while assuming full responsibility for whatever errors that might still remain. He is also grateful to his student, Mr. Patrick Dunne, for his competent assistance on stylistic and editorial matters.

For all the quotations from Marx's *Capital* (vol 1, 1963; vol 2, 1967; vol 3, 1966), *A Contribution to the Critique of Political Economy* (1970), and *Theories of Surplus Value* the English editions of the Progress Publishers, Moscow, have been used. A glossary of technical terms is provided in the appendix for the convenience of the reader together with a methodological essay on Uno's dialectic.

# TRANSLATOR'S INTRODUCTION

## I

With the Restoration of Meiji (1868) Japan left her feudal polity behind and reorganised herself as a modern state, intent upon the absorption of Western knowledge, eager to close the technological gap that kept her apart from the more advanced nations of the West. In the University of Tokyo which was inaugurated in 1877 political economy was at first taught by European instructors. Among them was a German professor who arrived in 1882 with credentials from Lorenz von Stein to introduce the teachings of the late historical school for the first time into Japan. Two years later Wadagaki Kenzō returned from his studies in Germany to consolidate this tradition. When in 1896 the first economic association was founded in Japan under the name of *Shakai-seisaku-gakkai*, it was almost a replica of the *Verein für Sozialpolitik* which Schmoller had established in 1873 and which remained the most prestigious economic association in Germany until its forced dissolution under Nazi pressure in 1935. The founding members of its Japanese counterpart, Kanai En, Kuwata Kumazō, Takano Iwasaburō, Fukuda Tokuzō and others, all studied *Sozialpolitik* in Germany from such eminent scholars of the late historical school as Gustav Schmoller, Adolf Wagner, and Lujo Brentano. The German influence was not restricted to economics. The Imperial Constitution drafted under the guidance of Karl Friedrich Roesler, an adviser to the Japanese Government, and promulgated in 1889 was also distinctly modelled after the Bismarkian constitution. Japan, emerging late in the nineteenth century as a modern state, had many useful lessons to learn from the statecraft of Imperial Germany. Accelerated industrialisation in both countries required the training of competent bureaucrats with eyes open to social problems. *Sozialpolitik* was much better suited for that purpose than the classical political economy of the Anglo-Saxon tradition, not to speak of the mathematical psychics of the marginalist school.

Modern Japan in her early phase of upsurge through the Sino-Japanese and the Russo-Japanese wars inevitably intensified social conflicts and fomented vigorous socialist movements. In 1890, 1897, and 1918 spontaneous popular riots inflamed by the high price of rice spread through the country. In 1901 the first attempt at the formation of a social democratic party was ruthlessly suppressed by the authorities. In 1908 twenty-six socialists were arrested for an alleged plot to assassinate the emperor and twelve of them, including the eminent anarchist Kōtoku Shūsui, were summarily executed. It was only after the third rice riot that a modicum of constitutional democracy surfaced in the Japanese political scene, mitigating the high-handedness and relentlessness of the anti-socialist repression.

The professors of *Sozialpolitik* were often official spokesmen against socialism, yet many were not impervious to the pervasive grievances that the socialists articulated. Again as in Germany the tendency for a *Kathedersozialismus* was evident. Kawakami Hajime who had studied in Tokyo at the turn of the century and had taught at Kyoto University since 1908 became the first Marxist professor of economics in Japan in 1919. In the same year the Christian founder of the successful Kurashiki Textile Co., Ōhara Majosaburō, financed the opening of the Ōhara Institute of Social Affairs, which under the direction of Takano Iwasaburō employed many young Marxian economists. Takano was a professor of *Sozialpolitik* and was also the brother of Takano Fusatarō, an American-trained journalist, who in 1897 actively campaigned with Katayama Sen for the organisation of labour. When Uno Kōzō entered the University of Tokyo, most senior professors still taught *Sozialpolitik*, but junior members of the faculty included such young Turks of Marxian political economy as Morito Tatsuo, Kushida Tamizō, and Ōuchi Hyōe. In 1920 Morito's article on Kuropotkin's social thought grated the nerves of the authorities and a three-month jail term was handed out to him by the court. Kushida was already prominent as an enlightened critic of his former teacher Kawakami. Sakisaka Itsurō, a fellow student of Uno was probably quite a bit ahead of him in the reading of Marxist literature. It was shortly after that time that the leadership of the Japanese economics profession shifted from the German-trained social policy men to the new generation of self-taught Marxists. The *Shakai Seisaku Gakkai* disappeared in 1924, having outlived its usefulness.

Uno was a studious man. He went to all his lectures and took careful notes, even though he was never impressed by *Sozialpolitik* or anything else taught at the university. He spent the rest of his time reading novels as well as a few philosophical books of the neo-Kantian brand. While newspaper reports on social upheavals attracted his attention, he was by nature not inclined to participate in political activities. Nor did he contemplate an academic career, believing that others were more adept at handling intellectual matters. After graduation he joined Ōhara Institute only to find out that he was not particularly talented in methods of empirical research on economic and social problems either. But one fixed idea that had formed during his student days still lingered. That was a sort of intellectual obligation to read and understand Marx's *Capital*. When in 1922 he married Professor Takano's daughter, he decided to go to Germany, which was made easier by the falling value of the mark, not so much to learn more of German economics but to have free time to concentrate on the reading of *Capital*. Indeed in Berlin he attended lectures of Cunow, Meyer, Sombart, Schumacher, and Wagemann but only enough to maintain his student status which entitled him to some tax-free meals. The two years in Germany were nevertheless an eye-opening experience for him; for it was there that he finally read *Capital* and this determined his future. In 1924 he returned to Japan and was appointed an assistant professor of economic policy at Tōhoku University.

Earlier in 1922 the Japanese Communist Party was founded under the direct guidance of the Comintern, which gave the party the so-called 1922 Thesis, a programme presumably drafted by Bukharin. A prominent member of the new-born party was Yamakawa Hitoshi who came from Uno's hometown Kurashiki. The party, however, was soon to be in disarray as in the following year as the authorities arrested most of its leaders. Coming out of prison its influential members such as Yamakawa and Sakai decided that the time was not yet ripe for a revolutionary party in Japan and that the major effort must be focussed on legitimate educational activities aimed at the awakening of the masses. The proposal to disband the communist party was, of course, categorically rejected by the Comintern which eventually succeeded in the reconstruction of the party in 1927. The Yamakawa faction opposed the 1927 programme and left the party. A rift thus opened between the party faithfuls and the legitimate Marxists who followed Yamakawa in his effort to publish a new journal called *Rōnō* (Workers and Peasants). In the meantime the short-lived Indian summer of the Taishō period democracy ended abruptly with the Japanese invasion of Manchuria (1931). With each passing year thereafter, the militarists consolidated their political position, gradually depriving not only the socialists but also in the end the liberals and the humanitarians of their right to free speech. In view of the Manchurian Affair, the Comintern drafted a new Thesis in 1932 to direct the activities of the Japanese Communist Party.

These Theses (or the Comintern-drafted communist party programmes) of 1922, 1927, and 1932 all included analyses of the current state of Japanese capitalism and exercised a tremendous influence on Japanese Marxist scholars. Already at the stage of the 1927 Thesis, Noro and Hattori had published important works on contemporary issues of Japanese economic history. But as soon as the 1932 Thesis was digested, those faithful to the party platform issued seven related volumes of decisive studies on all aspects of Japanese capitalism, upholding and confirming the Comintern view. The contributors to these volumes, called *Nihon Shihonshugi Kōza*, led by Yamada Moritarō and Hirano Yoshitarō were known as the Kōzaha group Marxists. They were, of course, at odds with the group of non-party Marxists such as Kushida Tamizō and Sakisaka Itsurō who were called the Rōnōha group Marxists. The controversy between the two groups involved virtually all Marxist scholars, economists and historians, of that time and continued up to 1937 when further publication of Marxist literature was no longer possible. In that year the authorities arrested 400 persons involved in the anti-fascist popular front movement and 45 more, mainly professors and students, suspected of actively supporting the movement. Uno was one of them.

By this time academic freedom was virtually extinct. Marxian scholars withdrew to their studies and maintained silence. If they ever published, they only talked of Ricardo or Hegel instead of directly referring to Marx and Engels. Earlier when the prestigious *Shakai Seisaku Gakkai* ceased its operation in 1924, Fukuda Tokuzō, once the leading spokesman of that association, had realised that the German historical school no longer effectively stemmed the Marxist tide and he devoted the rest of his life to the training of his students in the economics of the marginalist school. In the late 1930s the politically less sensitive marginalists gained some ascendancy over the then reticent Marxists in the Japanese economics profession. For this, the Marxists never forgave the marginalists.

## II

The Kōzaha-Rōnōha controversy over the nature of Japanese capitalism sheds important light on the intellectual tradition of the Japanese Marxists. The evaluation of Japanese capitalism as stated in the Comintern Theses was based on rather superficial observations by outsiders. Refreshing as they were to many Japanese Marxists who were for the first time exposed to a systematic application of the Marxian method to the analysis of their own country's affairs, these Theses contained quite a few facile interpretations of the backwardness of Japanese capitalism directly inferred from the experience of Czarist Russia. But Kōzaha theorists accepted them without qualms. Thus when their positions were systematically formulated, it transpired that according to them Japanese capitalism was essentially feudal. The Imperial Restoration of Meiji was a feudal reorganisation which introduced an absolutist monarchy, and not a bourgeois revolution. The development of Japanese capitalism was thus severely constrained by feudal landownership which lay at its base. Hence followed the doctrine of two-stage revolution: it was necessary to promote a bourgeois democratic revolution to first release Japan from her feudal fetters, and then to direct the same revolution towards the realisation of socialist goals. This view was effectively criticised by the Rōnōha dissenters who immediately saw the impossibility of the claim that capitalism should exist at all on a feudal base. They saw correctly that the Restoration was a bourgeois revolution which replaced feudal landownership with capitalistic landownership. It was true that a great many feudal elements still remained in Japanese agriculture, but, as the Rōnōha viewed it, all pre-capitalist relations would eventually disappear with the development of capitalism. The question thus posed was whether the feudal elements in prewar Japan were essential ingredients of Japanese capitalism or merely temporary phenomena destined to abolish themselves. The activists were more inclined to the former view while the academics generally tended to support the latter. Both had the same image of a normal capitalist society which they had learned from *Capital*; they differed in their evaluation of the deviations from it that Japanese society then exhibited.

In retrospect, however, the problem is not all that simple. When a country like Japan is absorbed towards the end of the nineteenth century into the orbit of the world-historic development of capitalism, it does not repeat the economic history of England. There is no time to go through the British-style primitive accumulation, nor is there the technical conditions that make free trade among small competing enterprises the most effective way to accumulate capital. Even Germany, which challenged the British economic hegemony in the latter half of the nineteenth century, never realised free trade. Instead she resorted to protectionism and monopolistic practices of all sorts from the beginning in order to develop her industrial potential. Since (as will be explained in this book) capitalism is a commodity-economic management of real economic life, if this latter is not based on light textile industries as in mid-nineteenth century England, 'normal' capitalist society readily conformable to the theoretical specifications of Marx's *Capital* cannot be reproduced. This however does not mean that the development of capitalism becomes impossible with the advent of heavy industries. It means on the contrary that capitalism *can* then develop without purifying itself, that is to say, without necessarily assimilating the precapitalist remains into itself. Thus not only in Japan but also in Germany, Russia, and many other countries, the development of capitalism in the world-historic stage of imperialism preserved rather than abolished traditional agriculture. This was because the form of finance-capital, with its peculiar mode of accumulation through the joint-stock company system, was capable of securing the commoditisation of labour-power without revolutionising the existing form of agriculture.

This fundamental point was overlooked by both the Kōzaha and the Rōnōha. Uno, who did not participate in the controversy over Japanese capitalism but who quietly observed it as he taught economic policy at Tōhoku, knew better. From the beginning Uno was not interested in teaching economic policies in the style of the German historical school. He arranged his lectures so as to highlight the different types of economic policies as they occur in the mercantilist, the liberal, and the imperialist stage of capitalist development. To Uno the concept of the stage had been of fundamental methodological importance since his student days in Berlin, when he was struck by the different ways in which the two best known classics of Marxian political economy, Marx's *Capital* and Lenin's *Imperialism*, were written. Had Marx treated only the liberal stage of capitalism, as Lenin later treated its imperialist stage, such a vast difference in the methods of exposition would not have been possible. It at once occurred to Uno that *Capital* contains the theory of a purely capitalist society in addition to mere characterisations of the liberal stage of capitalist development. Why then was it not possible for Lenin to also begin with the analysis of the commodity and to deduce the necessity of imperialism through the purely commodity-economic logic? The answer dawned on Uno only after a carefuly study of Hilferding's *Das Finanzkapital*. In this work Hilferding had indeed tried to deduce finance-capital, the dominant form of capital in the imperialist stage of capitalist development, directly from Marx's theories of money and credit, and had been strikingly unsuccessful. He had tried to do the impossible, namely, to deduce the *history* of capitalist development from the *logic* of the commodity-economy. This is precisely, as Uno realised, what Lenin had astutely circumvented. The logic of the commodity-economy can only synthesise a purely capitalist society in which use-values are totally subsumed under the form of value, not any concrete capitalist society that exists in history. The latter more or less deviates from the former depending on the use-value character of real economic life which is by and large an historical product.

Uno's doctrine, therefore, demands a separation of the pure theory (the theory of a purely capitalist society) from the stages-theory (the specifications of the stage-characteristics of capitalist development). The apparent simplicity of this method and its obvious effectiveness in solving the riddle of prewar Japanese capitalism must, however, not mislead one into a facile understanding of Uno's doctrine. Uno is not the only one to have noticed that the theory of *Capital* often presupposes a purely capitalist society; it does not take a man of his calibre to merely realise that there are three stages to the development of capitalism. That the pure theory and the stages-theory must *somehow* be distinguished can be a serendipitous discovery to any ordinary thinker, but that by itself does not constitute Uno's doctrine. What is fundamental to Uno's contribution is the actual demonstration of the self-containedness of a purely capitalist society as a theoretical system. Only by virtue of this demonstration, which involves an immanent critique of *Capital* itself, does the proposed separation of the pure from the stages theory acquire a real meaning. The appreciation of Uno's method must, therefore, begin with the study of his pure theory. If one is not sure why Uno rejects Hilferding's account of the 'necessity of money,' or why Uno takes exception to Marx's own demonstration of the labour theory of value, or what significance one should attach to Uno's reformulation of the measure-of-value function of money as a departure from Marx's, it is altogether futile to talk of the separation of the pure theory from the analysis of the stages in the sense of Uno.

## III

When Uno was arrested in 1938 he was also suspended from his post at the University, to which he did not return even after his acquittal in 1940. During the war-time years he worked for private economic research institutes, publishing nothing. Even before 1938 he did not publish much. Thus in 1947 when he became a professor of political economy at the newly established Institute of Social Science of the University of Tokyo, Uno in his forty-ninth year of age was less well-known than many of his contemporaries. But throughout the adverse years Uno never ceased to think. Indeed he was the kind of man who was most productive when apparently doing nothing. The uninterrupted flow of his works since 1947 testifies to his immense intellectual accumulation during his forced hibernation. Between 1947 and 1954 he published no less than ten books in addition to numerous articles. These contain the essence of his thought which he later elaborated and polished in other works. It is well known that Uno was at his best in relaxed conversations; he loved to chat endlessly with colleagues and students in coffee-shops about all sorts of things. Perhaps it was his way of gathering information and testing his ideas. But his mind worked independently often far beyond anyone's reach, and he was hardly ever influenced by what was topical or urgent to many. Thus when Uno's doctrine emerged in the early 1950s no one really understood it. Marxists, for the first time freed from political restrictions in postwar Japan, found too many exciting things to do. To many of them political activities were as important as academic research if not more so, since the Marxist doctrine emphasises the unity of theory and practice. In 1951 the Communist Party adopted a new programme, to which the regrouped Kōzaha responded with the publication, between 1953 and 1955, of eleven new volumes on Japanese capitalism now under U.S. domination. Uno's call for a distinction of theory from ideology was untimely. It not only remained unheeded but rather sparked vitriolic reproaches.

Although theoretically, Uno can in no way be classified as a Rōnōha Marxist, he is often so regarded by social historians because most other academics arrested with him in 1938 belonged to the Rōnōha. This meant that postward adherents of the Kōzaha found Uno particularly objectionable, and they unstintingly showered insults on him unaware that in so doing they were giving Uno a better chance to expand on his views. In theoretical work passion is no match for the cool thinking of which Uno was a master. By the end of the 1950s Uno had won all arguments, amply demonstrating the impregnability of his theoretical position. Convinced ideologues, however, never change their minds if they lose theoretical arguments; they do not even notice it. Only political stalemate leads them to self-criticisms. It was the eclipse of the Comintern in the late 1950s as the unchallenged authority of the world communist movement that broke the solidarity of the Party-based Kōzaha theorists in Japan. The ensuing disarray and confusion of traditional Marxism worked in favour of Uno's doctrine which increasingly gained popularity through the 1960s, in particular among Marxists of the new generation. By the end of the decade Uno was no longer a lone heretic but rather a respected authority of Marxian political economy.

The Japanese economics profession is now much more complex than it was before the war. For one thing it is divided roughly half and half between orthodox economics and Marxian political economy. Even within the Marxian camp there are economists of diverse background and persuasion. The erstwhile Kōzaha and Rōnōha are split into many independent factions; there are quasi-Keynesian under-consumptionists as well as Okishio-style mathematical Marxists. Some blend together harmoniously while others sparkle in contrasting colours. Even the so-called Uno Schoolmen are not necessarily united, there being a considerable degree of idiosyncratic dispersion. At this moment it is hard to tell what lasting imprint Uno has left for the future development of Marxian political economy in Japan. That, however, is a matter of small concern to the Western reader. In any case it is obvious to me that whoever carries Uno's tradition creatively in the future must first go beyond him in the pure theory; for this latter is the core of Uno's contribution of which other parts are strictly derivative. The Japanese Uno School which diverts so much of its energy to derivative issues while adding nothing new to what Uno has already accomplished in the pure theory does not appear to me to be likely to produce an immanent criticism of Uno, as Uno himself did of Marx. The time has now come to release Uno's thought from the Japanese language in order to make it a common asset of international scholarship.

The present volume contains the quintessence of Uno's pure theory though perhaps in an excessively condensed form. I originally intended to elaborate on the text with a large number of detailed notes. On second thought, however, I decided not to encumber the reader with what could easily be my biased exegeses but rather to let the text speak for itself. It is my sincere hope that this book will stir up active discussions on all aspects of Marxian economic theory in the West. Now that Uno is no longer with us, it is my duty to respond to all criticisms that may be directed at this book. I will gladly do so provided that they raise substantive issues of theory and method. It is, however, only fair to protect Uno from futile pseudo-criticisms of the kind that he had already received in abundance in Japan such as the charges of a new revisionism or of a textual misinterpretation of *Capital*. Uno always admired genuine revolutionaries for their courage and devotion to the cause, but not professional writers of radical opinions to whom ideological struggles (not quite as risky as naked action) are more fulfilling than the pursuit of objective knowledge. In this book Uno tries to go beyond the ideological elements of Marxism from which he intends to be free. He can, therefore, be criticised only if he himself fails to separate economic theory from ideology as he promises, and certainly not in the opposite case. Neither can he be criticised for not offering a textually faithful account of *Capital*, since Uno does not intend to do so. He states quite explicitly that his aim is not to reproduce Marx's theory as it is written but rather to change it freely in a manner that makes more sense to him. He can, therefore, be blamed only if he contradicts himself, not if he contradicts Marx. I shall be glad if this book is read not only by Marxists but also by orthodox economists. In that case I wish to remind prospective orthodox critics of the vast difference between Uno's scientific method and theirs as I have tried to explain in my appendix essay on Uno's dialectic.

# INTRODUCTION

1. Political economy has developed as a science specifically designed to clarify the various phenomena peculiar to a commodity-economy. It does not propose to theorise the general norms of economic life, according to which men produce, distribute, and consume material means of livelihood so as to ensure their existence. But these general norms are nonetheless made apparent when political economy studies a capitalist society whose economic functioning is governed by the peculiarly commodity-economic forms. Since economic life in a capitalist society functions under the forms peculiar to a commodity-economic, there arise phenomena that are not immediately comprehensible; a scientific enquiry is, therefore, called for to clarify these phenomena. Economic life in ancient and medieval societies prior to capitalism, by contrast, was only partially affected by commodity-economic activities; medieval societies, for instance, were predominantly influenced by extra-economic and political forces. For this reason no scientific analysis is required to account for the economic functioning of these societies, nor can any general norm of economic life be abstracted from the observation of these societies. Only in a capitalist society is economic life entirely self-governing, albeit under the peculiarly commodity-economic forms, so that political economy which studies such a society can simultaneously expose the general norms as well as the specifically capitalistic forms of economic life. Political economy, in other words, reveals the economic base of all societies whether ancient, medieval, or modern as the *substructure* (to use the terminology of Marx's materialistic conception of history) by exhibiting the self-containedness of the capitalist economic system.[1]

2. The general norms of economic life must, however, not be confused with empirical and scientific knowledge capable of serving a technical purpose such as, for instance, the advancement of productive powers. It is true that the application of the knowledge derived from the natural sciences for the purpose of advancing productive powers has been particularly successful in capitalist societies. If the rise of productive powers accelerates the development of the commodity-economy, that development in turn contributes to the progress of the natural sciences whose application to industry further enhances productive powers. The industrial application of science and technology presupposes a knowledge of economic phenomena which has also been accumulated with increasing precision and sophistication. Such economic knowledge capable of commodity-economic exploitation, however, does not define the scope of political economy, nor does it consist of the general economic norms that

political economy reveals. Typical questions that political economy seeks to answer are, for example, the following: Why has such a spectacular advancement in productive powers been made possible under capitalism? What economic factors explain the capitalistic adoption of new productive techniques? How is capitalist society affected by the accelerated rise of productive powers? In other words, political economy answers only such questions as are directly related with the peculiarly commodity-economic phenomena. By deliberately restricting its scope to the commodity-economy, however, political economy reveals the general norms of economic life common to all societies, including pre-capitalist societies in which commodity circulation affected no more than a modest part of the economy, as well as a socialist society in which the commodity-economic relation will have been superseded. What political economy exposes by means of the laws of a commodity-economy are, in fact, nothing other than the behavioural norms of economic life shared by, and forming the 'substance' so to speak of all human societies, but appearing with transparent clarity only in a capitalist society, i.e., a society totally governed by the commodity-economic forms. Political economy states the laws of a commodity-economy as such because only as such are the laws capable of scientific confirmation.[2]

3. It is common knowledge that a commodity-economy which constitutes the subject-matter of political economy existed to some extent even in pre-capitalist societies, operating as a supplementary, though alien, economic activity to the prevalent mode of production. As Marx correctly observes, a commodity-economy always arose from the exchange of products among independent economic communities. But the impersonalisation (or reification) of human relations brought about by the exchange of material things enabled the commodity-economy quickly to expand its scope, so that it soon permeated these communities, disintegrating their traditional form of economic organisation. Thus throughout the ancient and medieval eras the commodity-economy evolved to a considerable extent, exercising a destructive influence on the prevailing social order, indeed often thwarting the normal development of the society. In early modern times, the commodity-economy of Western Europe was vigorously stimulated by international trade relations, of which such countries as Spain, Portugal, and the Netherlands formed the core. The evolution of commerce, however, soon realised in England a most radical commodity-economy, in which the process of production itself was reorganised into that of commodity production, and in which the basic human relation of the whole society too was redefined on a commodity-economic basis. Here at last capitalist society was formed. With the genesis of capitalism, however, the knowledge of economic phenomena, which had been as fragmentary and as partial as the commodity-economy itself and hence inevitably superficial, discovered a new basis upon which it could erect a unified and independent science. The

subject-matter of political economy, as ought to be expected of any social and historical science, was thus formed historically.[3]

4. Even political economy in its early phase of development as a science in response to the evolution of the commodity-economy aimed at a practical enquiry into the material means of securing the wealth and the might of a modern state, the formation of which stabilised the newly emerging and complex social relations. But the search for capitalist production-relations underlying the modern state required political economy to override national interests and delve objectively into the general structure of a capitalist economy. With the further development of capitalism, political economy thus increasingly turned its attention to the clarification of the laws that govern the motion of a capitalist economy, i.e., to the pursuit of strictly scientific principles. William Petty's *A Treatise of Taxes and Contributions* (1662), Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), and David Ricardo's *On the Principles of Political Economy and Taxation* (1817) are the major works representing this process of the development of political economy into a rigorous science. For example, the emphasis on such a normative policy-issue as taxation, which cannot be fully explained by the laws of capitalism, gradually diminished in these works. But the so-called Classical Political Economy, represented by Smith, Ricardo, and others, still could not envisage capitalism as an historical process; the study of economic principles was, therefore, hampered by the presumption that capitalist society was the only ideal form of human society. Yet even the classical exposition of capitalist society espoused the rejection of all arbitrary interventions of the State for untrammelled development of the capitalistic commodity-economy.

5. The development of capitalism in England from the seventeenth and the eighteenth century to the middle of the nineteenth century reflected, indeed, the process in which the economy of the traditional 'small producers,' largely dominated by feudal and medieval social relations, evolved into a capitalist commodity-economy, i.e., the process in which the commodity-economy increasingly realised its purer and more rational form, promising a social order of equality and freedom. Thus the classical view that capitalist society was the only ideal society was not ill-founded in the perspective of that period of capitalist evolution. But the illusion was shattered after the 1820s, when it became obvious to everyone that capitalist society was not exempt from the decennial cycle of violent eruptions in the form of industrial crises. This disillusion gave rise to socialism on the one hand, and the vulgarisation of political economy on the other. Vulgar economics quickly relinquished the scientific investigations of Classical Political Economy and turned to the apologetics of capitalism with glorified platitudes and verbiage. The scientific tradition of political economy was, however, inherited by Karl Marx (1818–83), whose *Capital* was written with the avowed objective of securing a

scientific groundwork for socialism. Marx's critical method enabled political economy for the first time to view capitalism as an historical process, in which context alone the mechanism of a commodity-economy is capable to total comprehension. Political economy was finally put on the right track in its search for the theory of pure capitalism as a self-contained scientific system.

6. Yet even Marx could not quite predict the profound transformation of capitalism that was to occur towards the end of the nineteenth century and thereafter. In *Capital*, therefore, he took it for granted than an increasingly purer form of capitalist society would emerge with the development of capitalism. Not only was this forecast consistent with the historical experience of capitalist development through the seventeenth and the eighteenth century to Marx's own time but a pure theory designed to explain the general nature of capitalism requires the methodological hypothesis that capitalism increasingly tends to perfection. Yet the actual history of capitalism did not materialise this hypothesis. For after the 1870s the era of finance-capital evolved, at which stage a high level of capitalist development no longer required the elimination of the traditional class of 'small producers'. Thus arose a stage of capitalist development at which the actual course of history diverged from the methodological presupposition of an increasingly purer capitalist society. Faced with this reality, political economy now demands, in addition to the abstract theory of pure capitalism, a new branch of investigation which enquires into the more concrete characteristics of the stages of capitalist development. The so-called doctrine of imperialism in Marxist political economy can be reformulated as an example of the stages-theory, although the relation between the stage-theory of imperialism and the pure theory of capitalism was never clearly understood by the original proponents of the doctrine of imperialism.[4]

7. At this point it becomes clear how the study of political economy ought to be structured. *First*, the pure theory of capitalism must presuppose the abstract context of a purely capitalist society made up of the three major classes of capitalists, workers, and landowners in order to account for the laws peculiar to capitalism and the dynamics of their operation. The pure theory, which corresponds to what has traditionally been called the 'principles' of political economy, in effect reconstructs a system of all the basic categories generally associated with any capitalist commodity-economy in order to show their organic interrelations. The pure theory, in other words, reproduces a theoretical capitalist society, the self-containedness of which conclusively demonstrates the ability of capitalism to form an historical society. *Secondly*, political economy must direct its attention to the process of capitalist development in which all economic phenomena, representing the abstract principles of capital, always appear under more concrete and stage-characteristic forms. In the actual process of capitalist development, as already mentioned, the

tendency for capitalism to approximate its purest image prevailed only up to a certain point over the factors persistently resisting integration into the commodity-economy. After that point was passed, those factors gained the upper hand, frustrating the realisation of pure capitalism. Actual economic phenomena always feature certain aspects that fail to be fully explained by the pure theory; those aspects became particularly important after the road to pure capitalism was blocked. Such specialised branches of political economy as commercial, industrial, agricultural, and colonial policies together with financial institutions, public finance, and *sozialpolitik* must all presuppose the stages-theory of capitalist development; for these specialised branches study the various aspects of the capitalist economy, as they appear differently at each of the three historical stages, in the light of the world-historic 'type' set by the nation leading the current development of capitalism.[5] *Finally*, with all these preparations, political economy can apply itself to its ultimate aim, namely, the empirical analysis of the actual state of capitalism either in the world as a whole or in each different country.[6]

8. Thus it has been explained that the study of political economy must be conducted at three distinct levels of abstraction, with the pure theory of capitalism at the most abstract level, the empirical analysis of the current state of capitalist economy at the least abstract level, and the stages-theory of capitalist development mediating them. The acceptance of this method also suggests that the economic history of pre-capitalist societies must be studied primarily as the process in which the commodity-economy eroded from without the specific modes of production of these societies. The economic history of pre-capitalist societies is not a mere history of commerce but the history of the world in which the commodity-economy plays the leading part, bringing together isolated communities and integrating them into a unified economy of expanding social scope, until eventually a capitalist society evolves on a nation-wide scale. The world-historic process of extending the scope of the commodity-economy culminates in capitalist society, completing Marx's so-called 'prehistory of human society'. Political economy correspondingly accomplishes the total comprehension of economic life in capitalism; for here at last the economic process appears in its pure form i.e., under the commodity-economic form. With this accomplishment, moreover, political economy scientifically confirms the feasibility of socialism. It must be stressed once again that political economy, being a social science, studies an historical process made up of the purposive activities of men. This means that political economy does not aim at, nor is it capable of, a technical utilisation of its findings, even though such a utilisation is often expected of the findings of a natural science. By disclosing the economic structure of capitalism and the laws governing its motion, political economy, however, intimates that the imposition of blind commodity-economic forces on the economic life of men is dispensable, and indeed replaceable by

direct management in accordance with the behavioural principles of free men. In other words, political economy proves its utility by showing the feasibility of socialism; this is the sole practical use to which the science of political economy can be put.

9. The general norms of economic life are revealed by political economy which studies capitalism because the laws of capitalism see to it that these norms are satisfied under the peculiarly commodity-economic forms. The general economic norms do not reveal themselves except under these forms. But the commodity-economy, the forms of which are required to disclose the general economic norms, does not evolve from within the production-process of a society, i.e., from the root of its economic life. It arises, as already pointed out, from the exchange-relation between one production-process and another. The forms of human relation peculiar to commodity exchanges then influence the production-processes by reaction, sink slowly into them, and finally take possession of them; the commodity-economy thus secures the substantive base of its operation in a production-process by gradually encroaching upon it from the outside. It is for this reason that the pure theory of capitalism cannot begin with a doctrine of production, despite the widely-held view to the contrary that political economy should first examine the process of production which forms the real base of any economic process. Marx's *Capital*, Volume One, though entitled 'The Production-Process of Capital,' begins in fact with the discussion of such circulation-forms as commodities, money, and capital; only after the development of the form of capital does it turn to the analysis of the labour-process which is common to all societies, finally opening the real treatment of the production-process of capital. It cannot be doubted that Marx had an accurate grasp of the true nature of the commodity-economy, although there remain some methodological ambiguities in *Capital* [for instance: the misleading title of the first volume de-emphasises the primacy of the circulation-forms; the premature and unnecessary reference to the labour theory of value in the early part of *Capital* frequently beclouds the discussion of commodity circulation, etc.].[7] The pure theory of capitalism must, in any case, begin with the doctrine of circulation in which the forms of circulation alone are to be examined. The doctrine of production can then treat the production-process that conforms to these circulation-forms.

## Notes

[1] Prior to stating his materialistic conception of history in the celebrated Preface to *A Contribution to The Critique of Political Economy* (1859), Marx has the following to say:

My inquiry led me to the conclusion that neither legal relations nor political forms could be comprehended whether by themselves or on the basis of a so-called general development of the human mind, but that on the contrary they originate in the material conditions of life, the totality of which Hegel, following the examples of English and French thinkers of the eighteenth century, embraces within the term 'civil society'; that the anatomy of this civil society, has to be sought in political economy (*A Contribution, etc.*, Moscow, 1970, p. 20).

The materialistic conception of history, needless to say, is a philosophy of history, the scope of which is not restricted to 'civil society' but encompasses all societies, ancient, medieval, and modern alike. Yet the conception is not built on the vague notion of elements which are common to all societies in human history. Although I regret that Marx fails to elaborate on this point, it is truly remarkable that he seeks in political economy the 'anatomy of the civil society' [i.e., the analysis of 'the totality of the material conditions of life']. It is in keeping with this view of Marx to expect that political economy should scientifically corroborate the materialistic conception of history. Political economy indeed exposes, albeit under the peculiarly commodity-economic forms, the general norms of economic life in a self-contained system, making it possible to view the economic base of a society in isolation i.e., independently from the so-called superstructure. At the same time, political economy appreciates the historical limitation of a commodity-economy, and particularly of a capitalist commodity-economy, by studying the forms specific to such an economy. If other social sciences such as jurisprudence and politics are founded upon political economy, the primacy of political economy stems from the fact that the object of its study is an historically particular society instead of societies in general.

[2] In political economy the general norms of economic life and the specific laws of a commodity-economy (*keizai-gensoku* and *keizai-hohsoku*) must be clearly distinguished. But they should not be regarded as unrelated; for, in fact, the general norms of economic life reveal themselves only in the laws peculiar to the forms of a commodity-economy. Consider, for example, the adoption of an economically advantageous machine. The machine itself possesses the property of saving human labour due to the technical application of natural scientific laws. It conforms to the general norms of economic life if this machine is actually adopted for its economic advantage. In a capitalist society, however, the adoption of the machine is compelled by commodity-economic considerations, i.e., by the working of the laws of capitalism and not directly by a normative decision as to how society's economic activity ought to be organised. These social norms of economic activity, which must be realised in one form or another in any society, are automatically satisfied under the compulsion of the capitalistic laws. It is this fact that makes the science of political economy possible. It is also this fact that enables political economy to demonstrate the economic superiority of capitalist society over prior societies and to confirm the feasibility of socialism, which proposes to substitute for the commodity-economic laws conscious economic planning by the direct producers, in realising the general norms of economic life.

The important relation between the laws of capitalism and the general norms of economy is all too often overlooked by those who, in the name of economic science, wish to directly study the general norms of economic life. In their unreasonable attempt at clarifying without mediation the general economic norms common to all societies, they reduce the commodity-economic relations to a set of vacuous working hypotheses, ignoring the truly peculiar phenomena of a commodity-economy. By deliberately neglecting the historical character of a commodity-economy, they profess to follow the scientific method which has been confirmed in the natural sciences. The method of the natural sciences, however, does not permit a complete exposure of reality which can only be approximated with advancing knowledge. Even though empirical knowledge of natural phenomena is often capable of useful technical applications, the same cannot be expected of the knowledge of society [which must be totally comprehended]. For political economy, unlike a branch of natural science, must study an historical process in which the purposive and conscious activities of men form a social relation. Those who forget this fundamental fact unjustifiably believe that the technological use of economic knowledge in the light of their hypotheses constitutes a practical application of economic theory, and then blame the complexity of reality as soon as their endeavour, in most cases frustrated by unforseen events, fails to achieve the desired effect. In the so-called science of economics, even the crucial concept of capital seems incapable of an unambiguous determination. The true science of political economy which theorises an historical process does not permit a pragmatic or utilitarian use of its theory.

[3] A commodity-economy which emerges at the contact-point of various independent communities does not, however, filter uniformly into those communities. Instead it fills certain lacunae in these communities as it makes tortuous inroads upon them. Of course, commodity-exchanges are efficient vehicles of transmission of new productive methods not only within a given community but also from one community to another, so that even in pre-capitalist societies commodity circulation was often an important catalyst of economic development. This does not negate the fact that the process of development of these societies was largely autonomous. In his formulation of the materialistic conception of history in the Preface to *A Contribution to the Critique of Political Economy*, Marx distinguishes 'the Asiatic, ancient, feudal and modern bourgeois modes of production' as 'epochs marking progress in the economic development of society' (*op. cit.*, p. 21). In all these epochs, with the exception of the last, a commodity-economy was no more than a subsidiary economic activity. Even though the scope of commodity-economic activity gradually expanded in those pre-modern epochs, the development of the corresponding modes of production cannot be mainly attributed to the growth of the commodity-economy. Neither can the transition from the feudal to the modern-bourgeois mode of production be explained by the development of commerce as such. The inception of the modern-bourgeois mode of production, assisted as it was by the international trade relations of early modern times, which involved such countries as Spain and Portugal, did not actually take place in either country, nor even in the Netherlands. It took place only in England, an historically significant fact which must not be overlooked. The role of the commodity-economy in the historical process of economic development prior to the entrenchment of capitalism should be clarified by studies in economic history. The pure theory of capitalism provides these studies with the frame of reference for evaluating their historical findings.

[4] The so-called Revisionism inspired by Eduard Bernstein (1850–1932) claimed towards the end of the nineteenth century that Marx's economic doctrines had already become inapplicable to the analysis of the phenomena characteristic of the contemporary stage of capitalist development. This view was founded on a shallow understanding of Marx's theories and could be easily refuted by Karl Kautsky (1854–1938) and others who represented Marxist orthodoxy at that time. But both the assailants and the defenders of Marx's economic doctrines were incorrect in assuming that economic theory propounded in *Capital* ought to be, either immediately or with minor modifications, applied to the clarification of the new empirical phenomena. Later, however, two important books, *Das Finanzkapital* (1910) by Rudolf Hilferding (1877–1941) and *Die Akkumulation des Kapitals* (1913) by Rosa Luxemburg (1870–1919), tried to work these empirical phenomena into a synthetic concept of imperialism. Of these two authors, Luxemburg left little impact on the later development of political economy because she made a serious misinterpretation of the theories of *Capital* in her book. Hilferding's contribution, on the other hand, was much praised by Lenin, whose *Imperialism* (1917) was largely based on Hilferding's notion of finance-capital. Thus Marxists in the end adopted the Hilferding-Lenin version of the doctrine of imperialism.

The formulation of this doctrine, however, poses a new problem concerning its relation to the fundamental economic theory of *Capital*, a problem which has not been solved by Marxists. The solution involves an operation no less than the overhauling and complete restatement of *Capital* as a theory of pure capitalism. If *Capital* is left as it stands, and if the doctrine of imperialism is considered merely as an appendage, the relation between the pure theory of capitalism and the stages-theory of capitalist development cannot be fully understood. If, on the other hand, the relationship of the doctrine of imperialism to *Capital* is correctly interpreted, then the doctrine cannot remain as a mere economic history of capitalism in the Imperialist Age. It must define the stage of imperialism characterised by the chrematistics of finance-capital in contrast to the earlier stages of mercantilism and liberalism shaped respectively by the activities of merchant and industrial capital. This means that the stages-theory of capitalist development must characterise the three stages of mercantilism, liberalism, and imperialism as forming the 'types' of capitalist development. The method of the stages-theory is therefore clearly different from that of the pure theory.

[5] The study of economic policies whether commercial, industrial or any other does not offer so-called policy prescriptions. For instance, the study of commercial policies really amounts to the clarification of the development of capitalism from the point of view of commerce and the appraisal of the historical need for different types of commercial policies from one stage of capitalist development to another. Thus the study of economic policies in general leads to nothing else but the stage-theoretic formulation of capitalist development, distinguishing the mercantilist, the liberal, and the imperialist policies which correspond with the typical activities of merchant, industrial, and finance capital. In the light of this historical distinction between the types of general economic policies, studies of financial institutions and public finance can pursue more detailed analysis. It must be noticed, however, that, whereas the study of financial institutions is dependent on the theory of interest in the pure theory of capitalism, the study of public finance has no comparable underpinning in the pure theory. This is because public finance belongs partly to political science which has no pure theory of its own. On the other hand, the so-called *sozialpolitik* (social welfare policies), propounded and practised in Germany towards the end of the nineteenth century, must be quite specifically related to the definite stage of capitalist development. These policies were designed to counteract the growing impact of socialism by accommodating some of the social welfare problems including unemployment within the existing framework of the capitalist regime. They must not be confused with more traditional measures for the relief of the paupers, even though in actual practice the same policy might have been intended to kill two birds with one stone. Political economy even in this case does not design, prescribe, or advocate any policy measures; it objectively describes them in the context of capitalist development.

[6] The pure theory of capitalism cannot explain in detail the whole process of an actual economy. Although there is the tendency for capitalism to become increasingly purer at a definite stage of its development (which fact alone validates the pure theory of capitalism), the actual process of capitalist development never completely eliminates the remnants of the traditional and pre-capitalist relations. The failure to eliminate them becomes in fact quite conspicuous after the approach of capitalism to its purest form is frustrated. Hence it cannot be generally concluded that the phenomena which are left theoretically unexplained are of negligible importance as if they were bound to disappear with the development of capitalism. The countries whose capitalist evolution followed that of England were in a position to import from their predecessor the results of its capitalist development, which set the example but was not necessarily duplicated elsewhere. That is the reason why empirical studies of the actual economy, whether of the world or of a nation, must always presuppose not only the laws of pure capitalism but also the stage-characteristics of capitalist development. The necessity of the stages-theory becomes obvious, when even England, which was once the leading capitalist nation, had to depart from its pursuit of pure capitalism in the face of competition with the newly emerging industrial nations such as Germany and the United States. Although political economy since the time of the Classical School had always aimed at a pure theory of capitalism, the full implication of this aim could not become apparent until, towards the end of the nineteenth century, the age of finance-capital evolved and showed in no uncertain terms the indispensability of the stages-theory. The profound transformation of capitalism made it finally clear that the pure theory of capitalism alone was not enough to fully account for the actual state of any economic process. Only with the recognition of the need for the stages-theory of capitalist development, can the exact scope and the meaning of the pure theory itself also be made unambiguous.

[7] Marx begins the first chapter of *Capital*, vol. I, by pointing out the importance of the commodity-form that products assume. But after stating that use-value and value are the two elements of a commodity, he immediately attributes the substance of value to labour that is

required to produce the commodity. But the production-process of a commodity is not yet analysed at this stage. Neither can it be because production itself does not assume the form of commodity even if products do. Commodity production must assume the form of capital rather than of commodity. This means that commodity production or the production-process of capital can be introduced only after the conceptual development of the form of commodity into that of capital. Marx's treatment of the labour-process in Part iii ('The Production of Absolute Surplus Value') of *Capital*, vol. I, is handicapped by his prior discussion of commodity production at the beginning of the book and fails to be fully developed as the labour-and-production process common to all societies. On this point, see my *Keizaigaku Hōhōron* [*Methodology of Political Economy*] (1962) for further details.

PART I

# THE DOCTRINE OF CIRCULATION

# INTRODUCTION

10. Capitalist society organises the economy by means of capital. It is readily admitted that, in practice, not all products are capitalistically produced there, but in order to account for the economic laws that govern a capitalist society, a purely capitalist economy must be presupposed in which all products are produced by capital. Now the economic laws of capitalism would never be disclosed if 'capital' meant no more than the means of production such as raw materials, tools, and machines, i.e., if it only meant, as superficial observation might suggest, one of the three factors of production together with labour and land. Means of production do not necessarily or in general assume the form of capital. Capital, which is a *form* specific to a commodity-economy, emerges rather from a definite method of using money quite independently of the process of production. Merchant capital, which is the original form of capital, evidences this truth. In the hands of merchants capital represents money and commodities instead of the means of production. Capital indeed presupposes money, and money itself arises from commodity exchanges. No doubt products are prior to commodities but the former do not necessarily develop into the latter, as commodities do into money and money into capital. Products are not always commodities; products adopt the form of commodity when they are mutually exchanged. Once they become commodities, however, the latter by necessity generate money which always brings capital into being. When capital takes possession of the process of production, moreover, products do not fail to be produced as commodities.[1] Thus the primary concept in political economy is neither a product nor production; it is the form of commodity. Marx's *Capital*, for the first time in the history of political economy, consciously begins its theoretical exposition with the concept of commodities.

## Notes

[1] The existence of capital does not always imply production by means of capital. Even in pre-capitalist societies there are commodity exchanges which give rise to money and capital, but in these societies production is independent of capital. Merchants and money-lenders use their money as capital but do not undertake capitalist production. The expression 'commodity production' is sometimes used to mean not only capitalist production but more generally production by the so-called small commodity-producers either in capitalist or in pre-capitalist societies. It should be borne in mind, however, that the commodity-form cannot be directly or endogenously associated with this sort of production. The latter becomes commodity production only because its products by chance assume the form of commodity. Capital, in contrast, is the form capable of directly subsuming a production-process in its entirety under certain historical conditions. Even though the circulation-form

of capital is external to production as such, it can embrace and govern the process of production completely. Commodity production is thus well entrenched only in the capitalist economy in which the commodity-form is truly endogenous to the production-process itself and every product necessarily becomes a commodity. Here products are not commodities because their producers want them to be, but they are destined to be so by the capital-form of the production-process itself.

# Chapter 1
# COMMODITIES

11. Although commodities are heterogeneous as *use-values* when they serve specific purposes of consumption, they possess the property of being qualitatively uniform, i.e., independent of their material characteristics, and distinct only quantitatively. This is apparent in the fact that all commodities are priced alike in so many units of gold money. The *value* of a commodity refers to its quality of homogeneity to other commodities and the use-value to its quality of heterogeneity from others. This quality of homogeneity stems from the fact that every commodity must be exchanged by its owner for a definite quantity of other commodities that he might choose. It is this requirement of exchange that endows the commodity with its value. Commodities cannot in general be bartered. Commodities are offered for exchange because their use-values cannot be enjoyed by their owners; that is to say, these owners cannot consume their own commodities if the latter fail to be exchanged for different use-values. Hence the owner of a commodity regards its value as the active agent of trade that fetches him other desired commodities and conceives of its use-value as a passive factor which may be of use to others. This relation between the two elements of commodities, value and use-value, generates *value-forms* or the peculiar expressions of *exchange value* by commodities. Their price in gold is but a highly developed form of value.

12. A particular commodity, for example linen, expresses its value by a definite quantity of the use-value of a certain other commodity desired by the linen-owner. The expression of value may then be that 'twenty yards of linen are worth one coat.' Such an expression, needless to say, cannot be directly observed either in a capitalist society or more generally in any actual commercial practice. It is only conceived as a primitive notion underlying the price-form according to which a yard of linen is worth so many gold dollars. The expression, however, does not envision a direct barter, in which the owner of linen and the owner of the coat actually confront one another to execute an exchange, and in which the values of the two commodities are already reflected in the precise quantity of each other's use-value. The expression merely concerns the owner of linen. He sets aside twenty yards of his own commodity and thereby expresses his willingness to part with them, provided someone comes along with a coat of his liking. The expression of the linen value, therefore, does not imply the presence of an owner of the coat who reckons his coat to be worth twenty yards of linen. The exchange value of a commodity or its value-form does not, as is often misconceived, mean its exchange ratio with another commodity. It is a unilateral expression of a commodity's value by its owner in terms of the use-value of another commodity that he

wants. A commodity must express its value in this peculiar fashion.[1]

13. In the expression of its value, linen stands in the position of what Marx calls *relative value-form* and projects its value onto a definite quantity of the use-value of another commodity. In contrast, the coat here stands in the position of the so-called *equivalent form of value*, and reflects the value of linen by appearing to be worth its twenty yards. Of course, this value expression is a subjective evaluation on the part of the linen-owner; it has nothing to do with a similar value expression of the owner of the coat. In the former expression, the coat is nothing more than a value-reflecting object in the mind of the linen-owner. Because of this expression, however, the use-value of the coat, no matter what the subjective evaluation of its owner turns out to be, already embodies the value of linen. In other words, the owner of the coat can at any moment obtain twenty yards of linen for his coat, if he so desires. He is placed in the position, without so asking, of being able to purchase twenty yards of linen with his coat at a moment's notice, whereas the linen-owner who actually desires the coat and is willing to pay for it with linen is in no position actively to realise the exchange. This asymmetry or imparity in exchanges derives from the relationship between value and use-value which are the two elements of any commodity, value being the active agent and use-value the passive condition of trade. To put it more generally, this asymmetry reflects the contradictory social relation peculiar to a commodity-economy, a social relation based on the pursuance by traders of purely private interests.

14. A commodity-owner, however, does not generally express the value of his commodity by the use-value of just one other commodity. He desires many more commodities whose use-value in varied quantities also expresses the value of his own. He demands, in other words, a free exchange of his commodity for a variety of others. A linen-owner, for example, expresses the value of his linen not only with the formulation 'twenty yards of linen are worth one coat,' but also with such statements as 'two yards of linen are worth half a pound of tea,' 'forty yards of linen are worth two quarters of wheat,'[2] etc. These expressions of linen-value are, of course, subjective evaluations on the part of the linen-owner, but the diversity of such expressions broadens the social implication that already inheres in the single value expression in terms of the coat. In other words, the linen-possessor now permits all the owners of those commodities, of which a definite quantity is designated as equivalent to some linen, direct and immediate exchanges for it. These varied expressions of value, however, make all the more apparent the impossibility of direct barters since these expressions are far from objective, society-wide evaluations of commodity values. If indeed all commodity-owners arbitrarily select commodities other than their own to function as *equivalents* to theirs, such subjective operations cannot possibly generate a socially unified system of commodity values. Hence it goes without saying that the expression of a commodity value cannot for long remain in this imperfect form.

15. When every commodity-owner adopts this so-called 'extended value-form' of Marx, however, there necessarily emerges a commodity that is always found on the side of the *equivalent form of value*. This means that once that commodity is acquired every commodity-owner can demand immediate convertibility of that commodity into any other of his liking. Hence he no longer need express the value of his commodity in terms of all the other desired commodities and await exchanges in which he has no initiative. He would rather evaluate his commodity in terms of the one that is universally wanted, and indirectly achieve his purpose by means of this particular commodity which now possesses the power of immediate exchangeability for any other desired commodity. At this stage Marx's 'general form of value' is adopted by all commodities; the commodity which reflects the value of all the others becomes a *general equivalent*. When all commodity-owners express the value of their commodity by various quantities of the use-value of a *general equivalent*, the use-value of the latter is no longer regarded as the object of direct consumption. It is natural then that a commodity possessed of the use-value that is most suitable for this function tends to monopolise the position of a *general equivalent*. Of all the precious metals gold in particular possesses this quality, and hence it becomes *the general equivalent* or money.

16. Gold can be divided or fused at will and it scarcely corrodes. These physical properties are essential qualifications for being the *general equivalent*, but the infrequency of its direct consumption makes it all the more suitable for the function of money. Experience shows that as soon as gold or silver begins to function as money, commodity-owners cease to express the value of their commodity by pre-selecting a definite quantity of the use-value of gold or silver since they no longer regard it as an object of direct consumption. They evaluate the value of their commodity by equating the unit quantity of its use-value to various quantities of gold or silver, such as 'one yard of linen is worth so much gold,' 'one pound of tea is worth another quantity of gold,' etc.[3] Thus with the emergence of money or *the equivalent*, commodity-owners are enabled directly to compare the value of each other's commodity in terms of money. This comparability of values, however, is dependent upon the fact that money alone, which reflects the value of all commodities, possesses the active power of realising exchanges. Money, therefore, is the first concrete step towards the settlement of the so-called contradiction between the value and the use-value of a commodity, a contradiction that reflects the character of a commodity-economy which generates a social relation based on the individual pursuance by traders of private interests. The expression of the value of a commodity in terms of money, that is, in a physical quantity of gold, is what is generally known as the price of that commodity.

# 8 *The Doctrine of Circulation*

## Notes

[1] In this so-called 'simple or elementary value-form,' a definite quantity of coats, (one, two, . . . etc.) must first be chosen as a use-value by the owner of linen, although the use-value is only potential before it is realised by the exchange. Linen, in this case, is a non-use-value to him. He sets aside twenty yards, or some such appropriate quantity, of his own commodity which he is willing to part with, given the desired quantity of coats. It is not, let me stress, the value of the 'twenty yards' of linen but the value of linen as such that is expressed here. Twenty yards are judged appropriate by the linen-owner to express the value of his linen because a given quantity of the use-value of the coat is wanted. This quantity in which the value of linen must be reflected determines the appropriate quantity of linen that should be counter-offered in exchange. Marx does not make this point sufficiently clear in *Capital*. It must be noticed, however, that the measurement of a commodity's value is an altogether different business from the measurement of a thing's weight or length. The value of linen in the present example can be made apparent only insofar as it becomes the means whereby to acquire the one coat, not two or three but one, that the linen-owner wishes to obtain. From the point of view of the purchaser of a commodity, therefore, the relation between its two elements, value and use-value, is the inverse of that from the viewpoint of its seller. The value which to the seller is the active motive of trade becomes a passive means to satisfy the purchaser's need; the use-value which to the purchaser is the purpose itself is merely a means of exchange in the eye of the seller.

[2] As already stated, Marx's 'simple value-form' such as 'twenty yards of linen are worth a coat' expresses the value of linen and not the value of the particular quantity 'twenty yards' of linen. The owner of linen expresses its value by setting aside a certain quantity, such as twenty yards, of his own linen. But this quantity is determined by the pre-selected quantity of the use-value of the *equivalent commodity* that he desires, even if the intensity of the desire depends on the subjective evaluation of the linen-owner. This must be true for the so-called 'extended value-form' as well. Thus the linen-owner must regulate the quantity of his linen standing in its position of *relative value-form* every time a different *equivalent commodity* enters his value expression with a specific quantity. For instance, if he sets aside twenty yards for a coat, he may set aside two yards for half a pound of tea, etc. Marx's illustration in which the same 'twenty yards of linen' face some quantities of all the *equivalent commodities* (see *Capital*, I p. 62, where he gives the formula: '20 yards of linen = 1 coat, or = 10 lbs. tea, or = 40 lbs. coffee, or = 1 quarter corn, or = 2 ounces gold, or = ton iron, or = &c,') fails to bring home the significance of the *equivalent commodities* whose 'use-value' alone can reflect the value of linen.

[3] As pointed out earlier, Marx does not make it clear that the use-value of an *equivalent commodity* in the expression of value determines the quantity of the commodity whose value is evaluated in accordance with the want of its owner. This ambiguity is carried over to his illustration of the 'money-form of value'; he overlooks the fact that, in this form, since gold is not demanded as the object of direct consumption, the quantity of its use-value cannot be definitely pre-determined. Indeed he illustrates the 'money-form' by the following:

$$\left.\begin{array}{rll} 20 & \text{yards of linen} & = \\ 2 & \text{coats} & = \\ 10 & \text{lbs. of tea} & = \\ 40 & \text{lbs. of coffee} & = \\ 1 & \text{qr of corn} & = \\ \tfrac{1}{2} & \text{a ton of iron} & = \\ x & \text{commodity A} & = \end{array}\right\} \text{ 2 ounces of gold}$$

(*Capital*, I, p. 69). But this would ignore the difference between ordinary 'value-forms' and the 'money-form,' which is their logical development. As a matter of fact such a value expression is nowhere observed except in the particular case of a literal 'ten-cent store.'

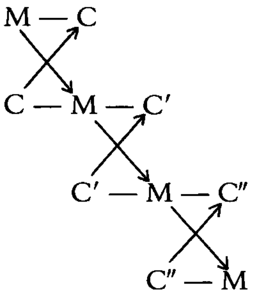
# *Chapter 2*
# MONEY

17. When a commodity projects its value onto an equivalent object, the latter's use-value is often mistaken to constitute the value itself of the commodity; commodity value then tends to be regarded as an attribute of the object such as its hardness, weight, etc. Thus in the case of gold money, which reflects the value of all commodities uniformly, the measure of its use-value is all the more readily confused with the magnitude of the value of other commodities. For instance, although a gold dollar is but another name given to, say, one-hundredth of an ounce of fine gold, it is so often misconceived as the unit of a commodity's value. Indeed gold dollars are well defined units of a gold-price, since they all have the same and invariable gold content. But it in no way follows from this that one gold dollar always represents a fixed magnitude of commodity value. Neither can the value of gold itself be represented by the quantity of its own use-value, even if the latter reflects the value of all other commodities. Gold too must derive its value from its being independent of its use-value; for it has value only insofar as it possesses a quality homogeneous to other commodities. If monetary counters such as yen, pounds, and dollars are well defined as units of price in terms of gold, it certainly does not follow that they are also fixed and invariable units of commodity values.[1]

18. The price of a commodity expresses its value in terms of the socially recognised *general equivalent*. But mere pricing by itself does not signify that society has approved of it; a money price too is a value-form which reflects a subjective evaluation on the part of the commodity-owner. Even if his pricing is made with due consideration of what other sellers of similar commodities do, that alone does not guarantee that his price is an accurate indication of the value of his commodity, making it part of the homogeneous and social mass of commodities. A commodity offered at a certain price is socially confirmed in its value only when it is recurrently purchased at that price by the money-owners who demand that commodity. Their purchase, however, should imply a constant revision of the asking price on the part of the seller, who reduces it if the commodity does not readily sell and raises it if the commodity sells fast. A once-and-for-all purchase, therefore, does not confirm the value of a commodity; it is confirmed only when, in recurrent transactions at prices fluctuating in response to the forces of demand and supply, a central price emerges at which normal trade takes place. In these recurrent transactions, indeed, sellers become purchasers and purchasers become sellers. Money, in the meantime, intermediates exchanges at prices gravitating towards value, thus measuring the value of all commodities. This process, therefore,

enables commodities to regulate their supply [price] in response to the prevailing social demand.

19. Trade is always activated by money's purchase of a commodity: M—C (where M stands for money and C for a commodity) but the purchaser must obtain his money by the sale of his own commodity. Hence it is true that his purchase is but the latter half of the complete circulation-process: C—M—C′. Yet he can sell (C—M) only because someone purchases (M—C), and his own purchase (M—C′) in turn permits someone else to sell (C′—M). Thus the complex of trade is a social business the prime mover of which is the act of purchase, since a seller cannot force anyone to buy nor can he always find a suitable partner for a direct barter. The exchange of commodities, therefore, requires the peculiar form of market circulation intermediated by money. Whereas, in general, commodities once traded leave the sphere of circulation to be consumed, money always remains in the market and continues to mediate the sale and the purchase of commodities. Thus money that functions as *the measure of value* in M—C also functions in consequence as the *means of circulation* inC—M—C′. The word 'currency' refers to money performing this latter function. The aggregate money-value of the commodities traded during a definite period of time determines the necessary quantity of currency, adjustment being made for the so-called velocity of circulation, i.e., the number of times the same currency is repetitively used during the same period. The currency that is required for the incessant circulation of commodities is provided as 'coins' in accordance with the monetary legislation which stipulates the quality of the standard of price. A variety of coins named yen, dollars, pounds, etc., with different gold weight specifications[2] may be used for commodity transactions.




20. If money thus remains permanently in the circulation market as currency, it no longer need preserve the physical body of gold itself since currency is a mere instrument of exchanging C for C′. In the process of converting C into C′, money just momentarily realises the value of these two commodities. Hence in addition to gold coins, silver pieces which only nominally represent a quantity of gold, subsidiary tokens made of copper, and even paper money printed on worthless pieces of paper may circulate as if they were full-bodied gold money. Since circulating money is not the end but only a means of exchange, the cost of monetary circulation can be saved by these *gold symbols*. Moreover, in small transactions, such minuscule money-values are involved that, if gold had to intervene, an impractically fine minting would be required. But these subsidiary coins and paper money cannot entirely supersede gold money because by an excessive issue their nominal representation of gold can

easily surpass the quantity of gold money that would be needed for the circulation of commodities. The quantity of money as means of circulation rises and falls together with the volume of circulating commodities. The quantity of gold money flexibly adapts to this need because gold money can become commodity gold and commodity gold can become gold money. Neither paper money nor other subsidiary tokens possess such adaptability. If they are no longer needed because the volume of trade declines, they cannot function as means of circulation. The same is the case if they are overissued beyond the limit and become redundant. Yet in either case they cannot leave the circulation market because outside of it they are practically worthless objects; the quantity of gold money that they truly represent must fall below what they nominally claim to represent. Hence the nominal price of commodities must exceed their true gold price,[3] a phenomenon peculiar to the circulation of paper currency. The fallacious doctrine that the value of money should be proportional to its quantity simply misunderstands this peculiar phenomenon as the general principle of monetary circulation. As a matter of fact, not all gold becomes money; neither is money always the means of circulation. Only part of the stock of gold becomes money and only that part of gold money that goes out to the circulation market responding to the need of commodity circulation is the means of circulation.

21. Even in its function as the circulating medium, obtained by the sale of commodities and devoted to the purchase of other commodities, money essentially is a value-reflecting object which releases all other commodities from the constraint of their specific use-values. It therefore tends to be held as *reserve funds* which can be drawn upon at any moment for commodity purchases, and to be saved as mercantile wealth which should be kept aside from the market as much as possible. In fact, part of the money which would normally tend to be saved or stored is, from time to time, obliged to go out to the market in order to transform a commodity C into another commodity C′ and act as the means of circulation. The practices of *hoarding* and concealing money, which were common in the early period of capitalism as well as certain pre-capitalist periods when commerce developed to some extent, exaggerate this nature of money. But the formation of idle funds whether by primitive hoarding or more generally by saving of money makes so-called credit sales possible, that is to say, the sales of a commodity for a promise to pay in hard money later. The purchaser of a commodity on credit thus dispenses with the current need for money as the means of circulation but incurs the obligation of a deferred payment. Hence unable to use all the money that he later earns by the sale of his own commodity as means of circulation, he uses part of it as a *means of payment* which then drops out of the market. In other words, the money saved now by credit transactions will have to be withdrawn from the market in much the same way as money for hoarding. Money as means of payment, however, can settle a whole chain of credit transactions at

once if it involves debtor-creditor relationships that mutually cancel. In this case, promissory notes themselves change hands and provide the theoretical basis from which so-called credit money[4] develops.

22. Thus the quantity of money serving as the circulating medium adapts to the need of commodity trade by the flow of money into and out of the pool of monetary saving on the one hand and by the lengthening and the shortening of the periods of deferred payment on the other. The flexibility of this regulation derives, in the final analysis, from the fact that gold, which as a commodity may directly satisfy ordinary needs, can also become money ready to be called to the market and serve as the means of circulation, i.e., to purchase other commodities. Impelled by its function as the measure of value, gold money therefore moves back and forth between the circulation market and the pool of monetary saving, where it often takes the form of bullion. But gold in its bullion state can no longer be considered as money in the ordinary sense; it is rather money at rest or *idle funds* (shikin)[5] laid aside from the circulation market characterised by the ceaseless motion of prices. Whereas money as the means of payment is required to meet pre-arranged obligations, idle funds are accumulated for no specific purpose. That is why money thus saved up as mercantile wealth can now be utilised to purchase commodities, not in this case for immediate consumption, but for a gainful resale, that is to say, for the augmentation of wealth or self-enrichment. The circulation formula M—C—M′ now develops side by side with C—M—C′; at this stage money becomes capital.

## Notes

[1] In evaluating the weight or the length of an object, the measure itself must have a definite weight or length. But in measuring the value of commodities with money, the latter possesses no fixed value by itself. If one hundredth of an ounce of fine gold is fixed as one dollar and serves as the unit of price, it only means that a fixed quantity of the use-value of gold is reckoned as unity in counting the price. It does not mean that the said quantity of gold constitutes the standard unit of the value of either gold itself or any other commodity. The measurement of value requires an altogether different method from the measurement of weight or length. Moreover, although a dollar is originally just another name for a definite weight of fine gold, this name represents gold weight only to the extent that gold is used as money. A dollar, therefore, does not even represent the weight of the metal as such.

[2] When one-hundredth of an ounce of fine gold is named one dollar, the latter is called mint-price, as if it were the price of fine gold per one-hundredth of an ounce. But, in fact, it is merely a matter of denomination; no price of gold which reflects its value is thereby determined. Under the present system of managed currency not only is the circulation of gold coins absent but the gold standard itself has been suspended. Hence the description in the text does not literally apply to the present-day reality. Neither the abolition of the gold standard nor the administration of managed currency, however, can perfectly and irrevocably displace gold which still remains the ultimate measure of commodity values. It is true that the policy apparatus in different countries to some extent neutralises the effectiveness of gold money and disrupts its automatic functioning. Also the so-called gold parities which

determine the gold content of different currencies internationally have largely degenerated into mere definitions of official exchange rates. It is otiose, however, to pass judgement on whether these measures are right or wrong. Political economy must seek to explain objectively why it has become necessary to adopt such measures. The pure theory of capitalism, however, does not immediately answer such a question. This sort of problem can be approached only through empirical studies of actual capitalism which, mediated by appropriate stage-theoretic analyses, maintain a link with the pure theory of capitalism.

[3] If a government empowered to issue paper money uses tax proceeds for its purchase of commodities or for its payment of wages and salaries, it only performs the act of purchase M—C in place of the taxpayers. Even if it uses printed money instead of gold money which has been absorbed as taxes, there will be no difference. But if the government issues new paper money for its payments, it adds to the means of circulation required by the current volume of commodity trade, and causes a general and enduring rise of prices. A fiscal practice of this sort once indulged in often forces the government into further printing of money, leading to a continuous rise of commodity prices or the so-called state of inflation. The economic analysis of inflation which must for instance consider its various effects on different social classes or groups goes well beyond the purely theoretical problem of the value of money. Although the pure theory of capitalism cannot, and should not, be immediately applied to such a mundane issue as inflation, its analysis would be off the track if one ignores the basic propositions of the pure theory.

[4] *Credit money* which is based on the circulation of money as the means of payment must be distinguished from *fiat money* which, as already explained, replaces the medium of circulation, even though they are both paper money. But when the original credit money in the form of circulating commercial bills develops into banknotes, which are its more general form, and further into notes issued by a central bank, credit money also becomes currency side by side with fiat money. As will be explained later, however, banknotes are not issued by banks for their own purchase of commodities or other payments; this clearly distinguishes banknotes from the other kind of paper money. It is true that the supply of banknotes has more recently become policy-motivated in consequence of the changing functions of the monetary system. The clarification of this latter tendency, however, falls outside the purview of the pure theory of capitalism and requires more concrete and empirical investigations.

[5] Marx's 'world money' also implies this role of money. World money regulates the total money supply of one country by adding to its bullion stock when money flows in from abroad as foreign-payments for this country's exports, and by depleting the bullion stock when money flows out to foreign countries as payments for imports. In the export-and-import business, merchants do not buy commodities for their own consumption but for resale; i.e., they spend money only to get more money. One country's C—M—C′ and another country's C—M—C′ are joined together by the new circulation formula M—C—M′. In this latter formula the conversion of M into M′, unlike that of C into C′ in C—M—C′, must imply a quantitative increase; this means that money has become capital. Just as commodities arise from exchanges between independent communities, capital too develops from the inter-connexion of separate circulation markets. All the circulation-forms such as commodity, money, and capital can be viewed as the forms with which external relations penetrate a self-sufficient economic community.

## *Chapter 3*

# CAPITAL

23. In the purchase of a commodity for a gainful resale, i.e., in M—C—M′, money M that is originally advanced must be recovered with a surplus value m as M′ (=M+m). Here at least M in M′ is ready to repeat the same process that it has just completed. This fundamentally distinguishes the formula M—C—M′ from the other formula C—M—C′ in which C′ is, in principle, withdrawn from circulation to be consumed. This C′ possesses, therefore, no necessary impulse in itself to begin another process C—M. Capital, in contrast, cannot properly be itself without an endless repetition of the same process during which it grows in value. This value of capital no longer co-exists with a specific use-value as in the case of a commodity, nor does it exist independently from the diverse use-values of commodities in general as in the case of money, which offers its own use-value as the general value-reflecting object. Capital is value in a state of motion undergoing what Marx aptly calls 'metamorphosis,'[1] so that it takes on and off both the forms of commodity and money. If one just takes either M or C in M—C—M′, they are not capital itself; they are but particular modes of existence of capital. Only in the whole process of metamorphosis M—C—M′ is capital itself at work, sometimes functioning as mere money and sometimes as mere commodities. Given a value M of capital, its yield m is called profit. Since capital is in self-repeating motion, the rate of profit per definite period of time such as a year measures its self-augmenting power. The whole cycle M—C—M′ is sometimes called the turnover of capital. Of course, given the value of capital and surplus value, the rate of profit is the greater, the shorter the turnover-time of capital.

24. A concrete manifestation of the formula M—C—M′ can be seen in merchants' capital which appears even in pre-capitalist societies with the evolution of a commodity-economy, giving impetus to its further development. Merchants' pursuit of increased value has its foundation in the practice of 'buying cheap and selling dear.' This practice characterises the capitalist activity of merchants. Even when it does not directly exploit the adversity or the ignorance of the trading partners, this practice requires differences in the commodity price existing either over time or in space. Hence in this case capital does not generate any increase of value from within itself. *Merchant capital* makes profit by wedging itself, as it were, between one community and another and bridging those who sell cheap and those who purchase dear. In other words, it lacks a real foundation inside an economic community for the pursuit of increased value. But as soon as capital of this type whose abstract formula is M—C—M′ evolves, there also arises another type of capital with the formula

M . . . . M′, a type of capital standing over and aside from ordinary capitals. Concretely, it takes the form of money-lenders' capital. Money lenders, who intercept part of merchants' profit as interest on loan, do not even directly deal with commodities in order to reap a surplus. Their method rather is to dispossess others, sometimes with the ruthlessness characteristic of the so-called usurer-capital which seizes the property of the insolvent. This type of capital, unlike merchant capital, increases its value without any capitalist activity of its own. Since it possesses absolutely no real power in itself to generate an increased value, it exhibits all the more transparently the self-growth of capital. For example, it unambiguously collects interest as a definite, previously agreed-upon percentage of the principal, whereas to merchant capital the profit rate is always a matter of uncertain expectation. In any case, it is clear that both merchant capital and *money-lending capital*, to say nothing of usurer capital, are the forms of capital that are self-defeating: they can only grow in value by depriving others of their own kind i.e., by undermining the collective foundation upon which they themselves stand.[2] Hence neither of them can be regarded as an accomplished form of capital, possessing in itself a real source of surplus value.

25. Capital, therefore, cannot secure a firm foundation for its value-augmenting activity unless it goes a step further than mere resale business and *produces* the commodity that it sells by means of the commodities that it purchases. Moreover, for it to earn a surplus value, capital must produce a commodity of higher value than that which it has purchased. Only the form of *industrial capital*, which characterises the production-process of a capitalist society, satisfies this condition with its abstract formula: M—C . . . . . P . . . . . C′—M′ (where P stands for a production-process). Here, of course, the commodity to be sold in C′—M′ should not merely be of a different use-value from that of the purchased commodities in M—C; the former must also have a greater value than the latter. In other words, capital produces not only a commodity having a new use-value but also one having greater value. But if a self-employed small producer buys raw materials and other things as commodities to produce a new commodity with his own labour, such a process cannot be regarded as production by capital. Neither is it a process of value-augmentation by capital, if indeed a commodity of more value chances to be produced. In the formula of industrial capital the commodities purchased in M—C must include not only the material means necessary for the production of C′ in C′—M′, but also the labour-power of workers as a commodity. Only when it can purchase 'commoditised' labour-power can capital genuinely produce its own commodities. Thus the formula must be more specifically stated as:

$$\mathrm{M—C} < \begin{matrix}\mathrm{Pm} \\ \mathrm{L}\end{matrix} \;.\;.\;.\;.\;.\; \mathrm{P} \;.\;.\;.\;.\;.\; \mathrm{C'—M'}$$

(where Pm stands for the material means of production and L for labour-power).

26. Now labour-power which must be purchased by capital as a commodity together with the material means of production is not a product, nor is it intrinsically a commodity since it has not been produced by capital. Labour-power becomes a commodity only because direct producers, stripped of their means of production in a commodity-economy, cannot otherwise survive than by the sale of their labour-power as a commodity. Such direct producers as medieval peasants, however, being bound by a master-servant relation to the lord, cannot freely dispose of their labour-power as a commodity. Hence the development of the form of industrial capital requires, in addition to the accumulation of monetary wealth, the formation in great numbers of the modern, propertyless workers, free in Marx's double sense: that is to say, free from feudal bondage and also free from the means of production necessary for the realisation of their own labour. Such workers were made available through the process of the so-called primitive accumulation of capital. In this process medieval societies transformed themselves into a modern state of national unity as rising productive powers, brought about by the evolution of commerce, generally destroyed the master-servant relation between feudal lords and their peasants.[3] Only then could the accumulated monetary wealth be invested as industrial capital.

27. Its formula shows that industrial capital is no longer merely a form of circulation. By integrating a production-process into itself, industrial capital provides such pure circulation-forms as commodity and money with a substantive content. Commodities, including the one that becomes money, are now created in the production-process. This production-process must, of course, conform to the circulation-forms of commodity, money, and capital, but this does not make it a production-process totally alien to that of the preceding societies. On the contrary, a production process that is common to, and that constitutes the substantive base of, all societies must be taken possession of by capital in order for the commodity-economy to become the integral property of an historical society. Capitalist society however, develops its production-process in its own peculiar manner. In particular, unlike any preceding societies, it develops its production as a purely economic process, that is to say, as a self-supporting process undisturbed and essentially unaffected by any superstructural ideologies. Capitalism, in other words, produces all the products that society demands as commodities, being able to provide according to its own peculiar method labour-power that is needed in all production. Thus capitalism constitutes a self-sustaining society. Unlike ancient and medieval societies which adopted a commody-economy as an ancillary economic activity, capitalist society possesses the power to dissolve all other forms of economic activity in, and assimilate them to, its own commodity-oriented production.[4]

## Notes

[1] Marx also talks of the 'metamorphosis of commodities' in regard to the circulation formula C—M—C′ (in *Capital* I, pp. 103 ff.). But a commodity is not in motion by itself as capital is. It is true that in C—M—C′ as well as a commodity C is transformed into money M and that further into another commodity C′. This C once transformed into M, however, is already money and is no longer a commodity. It is because M is simply money that it can purchase another commodity C′. As pointed out earlier, C—M can be realised only as the obverse of M—C′, which means that a commodity has no power of its own to transform itself into money. Hence a commodity C in C—M—C′ cannot set the circulation-process into motion by itself in undergoing a self-metamorphosis. The process C—M—C′ works quite differently from the other process, M—C—M′, in which the motion of capital itself performs a self-metamorphosis. In the former process money is only an intermediary in the transformation of C into C′; in the latter money is the initiator and the Subject of the self-repeating motion. A commodity possesses no such prime moving force. Moreover, money in this second process not only confronts a commodity as its value-reflecting object, but also faces itself as the principal that begets a surplus value. In this capacity money can rightly be called the Subject of the motion of capital.

[2] The pre-1868 feudal system in Japan ranked the class of merchants at the very bottom of the social scale, i.e., beneath the classes of *samurai*, agricultural producers and manufacturers. This deliberate contempt of the merchants reveals the fear entertained by the contemporary authority that merchant capital, if unrestrained, could undermine the feudal community from without. In the transition from feudalism to capitalism, commerce always exercises a powerful disintegrating effect on the feudal regime. As already stressed, however, the saturation of a self-supporting feudal economy with commodity exchanges, promoted by the activities of merchant capital, is not sufficient by itself to accomplish the decisive social change.

[3] The formula of industrial capital differs from that of either merchant or money-lending capital in that it does not automatically develop from the circulation-form of capital. The conversion of labour-power into a commodity, which gives rise to this form of capital, does not issue from circulation as such. Of course, capital cannot take hold of a production-process, nor realise a capitalist society, without adopting the formula of industrial capital. But the formation of numerous industrial workers deprived of their own means of production, which condition provides the basis for the conversion of labour-power into a commodity, is made possible only in consequence of the far-reaching disintegration of the feudal society which precedes capitalism. The formation in great numbers of the modern workers is of far greater consequence than the dissolution by the commodity-economy of small producers and their conversion into artisans engaged in the so-called 'simple commodity production.' It is true that the evolution of a commodity-economy always tends to dissolve the social relation that binds the traditional small producers, in consequence particularly of the activities of merchant capital but also in part of the activities of money-lending capital. This tendency, however, does not invariably result in the creation of modern, propertyless workers. In fact, the evolution of commerce in many European countries in the sixteenth and seventeenth centuries gave birth to capitalism only in England.

[4] I have already stated in the Introduction that, under capitalism alone, a commodity-economy constitutes an historical society whose entire economic process is governed by the form of commodity. Political economy, in accordance with this fact, develops into a strict and rigorous science by deliberately focussing its attention on the peculiarities of the commodity-form. Under this form alone can the economic process be made self-contained and independent of the superstructural ideologies of society such as jurisprudence, political administration, religious practice, etc. It is this fact also that lends scientific support to Marx's

materialistic interpretation of history. Political economy does not directly study economic life in general. The general norms of economic life can only be understood in the course of the more specific study of a commodity-economy which, of course, is a very particular form of economic life. The materialistic conception of history can be supported by science only to the extent that political economy confirms this conception by revealing the laws of motion of a specifically capitalist commodity-economy, not by simply laying down the universal laws of societal development. It is important that this point should be very clearly understood.

# PART II

# THE DOCTRINE OF PRODUCTION

# INTRODUCTION

28. With the conversion of labour-power into a commodity, capital takes hold of a production-process and makes of it the *production-process of capital*. This means that the production of material things as use-values, or what is to be called the *labour-and-production process* which lies at the root of all societies, must now be carried out by capital.[1] When capital performs production, however, its product cannot be a mere thing but must be a commodity; hence the labour-and-production process develops into a *process of value formation and augmentation*, a process peculiar to the production of commodities by capital. Since the production-process of capital, by necessity, forms the dual structure of use-value production and value production, it must be complemented by the *circulation-process of capital*. Capital, it will be recalled, originates in the simple circulation of commodities and money; it is itself a circulation-form which includes the production-process as an intermediate phase between M—C and C′—M′. The Doctrine of Production in the pure theory of capitalism, therefore, cannot restrict its scope to the immediate production-process of capital alone; it must also deal with the circulation-process of capital.[2]

29. Economic life generally requires a reproduction-process, that is to say, an uninterrupted flow of production to ensure the continuation of society's consumption. The production-process of capital embedded in its circulation-process makes of such a reproduction-process the *reproduction-process of capital* itself. Capital demands production for the sake of production and reduces consumption to a mere instrument of continued production, inverting the natural sequence of events. Yet labour-power, the motive force of a production-process, cannot be directly produced by capital; it can only be reproduced by workers themselves in their private consumption. Capital merely produces and reproduces the means of livelihood required for the reproduction of labour-power by workers themselves. Hence it is not sufficient for capital merely to produce the means of consumption as well as the means of production as commodities; capital must reproduce the capitalistic social relation as well, compelling the workers always to convert and reconvert their labour-power into a commodity. Moreover, the natural growth of the working population, whose social position is thus reproduced and dictated by capital, may not always suffice to meet the need of capital. Within the reproduction-process of capital, therefore, a peculiarly capitalistic *law of population* must evolve. Thus, the Doctrine of Production examines the production-process, the circulation-process, and the reproduction-process of capital and attempts therewith to uncover the laws that determine the basic social relation between capitalists and workers.

## Notes

[1] It deserves a great deal of attention that the labour-and-production process that is common to all societies can be subjected to a theoretical analysis only at this juncture of the Doctrine of Production in the pure theory of capitalism. The fact that the production-process of capital is not a mere process of material production but also a value-forming-and-augmenting process definitely excludes the intervention of all non-economic factors from capitalist production. The value-forming-and-augmenting process of capital, compelled by the forms of a commodity-economy, exercises a cleansing effect so to speak on the production-process, removing all non-economic influences on it. The fundamental presupposition of political economy that the economic base, upon which the so-called superstructure of a society rests, constitutes an independent and self-moving process ought to be derived from this crucial fact.

[2] The circulation-process of capital should not be confused with the 'simple circulation' of commodities and money. The question in the present context is not that capital changes hands in the market as commodities and money do. Capital as a self-moving entity undergoes the aforesaid metamorphosis, taking on and off the forms of both commodity and money. The Doctrine of [Simple] Circulation treats all the forms of circulation generally in themselves, whereas the Doctrine of Production examines the circulation-process of capital which subsumes the production-process of capital.

# *Chapter 1*
# THE PRODUCTION-PROCESS OF CAPITAL

## The Labour-and-Production Process

30. The production-process of capital, too, is in substance a labour-process of men who work on some material objects with a definite design in mind. In this process labour must invariably be applied to the objects as a physical force in order to bring about their desired transformation into a product. The effectiveness of labour can, of course, be enhanced with the assistance of such *means of labour* as tools and machines. Means of labour, which facilitate physical production, may also include workshops, plants, or any such locales designed to make the application of labour more effective. Although at a primitive level labour may be directly applied to natural things, the *objects of labour* may themselves be labour products as in the case of the processed materials of manufacturing industries. There are also supplementary or *accessory materials* which must be used together with the means and the objects of labour, e.g., coal burned as fuel in steam-engines, oil needed to lubricate machines, dyestuffs for the colouring of fabrics, etc.

31. The end-result of a labour-process is its product, and from the point of view of the product the same process can be viewed as a production-process. Here both the means and the objects of labour are called *means of production*; labour-power too is often regarded as one of the two *elements of production* together with the material means of production. Even in the production-process, however, labour-power which is the active factor does not operate in the same way as the means of production which are passive factors. Suppose, for instance, that 6 kg. of raw cotton and a spinning machine together produce 6 kg. of cotton yarn in 6 hours. In this simplified example, all the means of labour other than the machine are assumed away, and so is the waste of cotton. The 6 kg. of cotton yarn, which in this case are the product of 6 hours of spinning labour, do not embody just 6 hours of labour as such because the production of the 6 kg. of raw cotton as well as the production of the spinning machine must have required some labour. If 20 hours of labour have been spent for the production of the 6 kg. of raw cotton, and if the part of the machine embodying 4 hours of labour wears out during the current production of the 6 kg. of yarn, then 24 hours of labour are already embodied in the means of production quite apart from the 6 additional hours of spinning labour itself. Consequently the 6 kg. of cotton yarn require 30 hours of

labour in all to produce. If, however, the productivity of spinning labour doubles, and twice as much yarn can now be produced during the same 6 hours, then there will be 12 kg. of cotton yarn requiring 54 hours of labour, of which 48 hours correspond to the raw cotton used up and the wear and tear of the machine. Of course, from the point of view of the spinning process which produces cotton yarn as the new product, the labour-time required for the production of the spinning machine and of the raw cotton is given in advance; the productivity of spinning labour, however, changes the proportion in which the total labour cost of the new product is divided into the old and the new component. Labour in the spinning process, therefore, functions on the one hand as what Marx calls *concrete-useful labour* in that, as it converts raw cotton into cotton yarn, it also preserves the labour-time already embodied in the means of production such as raw cotton and the spinning machine used up in the process as part of the total labour-time required to produce the yarn. Simultaneously, the same labour functions on the other hand as what Marx calls *abstract-human labour* in that it adds the spinning hours of labour to the labour hours already materialised in the means of production, regarding them as homogeneous components of the total labour-time embodied in the final product. The same labour, in other words, possesses two entirely different aspects, the one being quite specific and the other perfectly abstract. In the present example, the former aspect requires that the labour should be suitable for the production of cotton yarn; the latter aspect requires that it should not be different, as the expenditure of human labour, from that which is embodied either in the raw cotton or in the spinning machine. A production-process can furnish various specific products only with labour that possesses this dual character.[1]

32. The above-mentioned duality of labour is founded upon the fact that labour-power can produce any goods whatsoever, i.e., that the use-value of labour-power is not limited to the provision of a specific kind of labour but of all useful kinds. In view of this fact, labour-power, which can itself be reproduced by labour-produced means of livelihood, constitutes the material basis for the development of any human society. If the quantity of the means of livelihood required for the reproduction of labour-power is given, or even if it increases to some extent, any advance in the productive power of labour reduces the *necessary labour-time* for the provision of livelihood, and increases the *surplus labour-time*, thereby making it possible for society to acquire more surplus products of various use-values. With a day's labour a man always produces more than he consumes, leaving some surplus products. The disposition of the labour-time that produces the surplus, being determined by the manner in which society organises its production, historically distinguishes the different forms of human society. Capitalist society, unlike ancient and medieval societies, regards surplus labour as an indistinguishable part of total labour expended in the production-process of capital, in which all labour flows

equally from the productive consumption of labour-power, a commodity purchased by capital; hence capital disposes of the products of surplus labour as its own products. This explains the enthusiasm with which capital seeks advancement in the productive powers of labour.

## The Process of Value Formation and Augmentation

33. Since capital executes its production-process by purchasing as commodities not only the material means of production but also labour-power itself which in all societies plays the active part in the labour-and-production process, capitalist production can be described literally as the 'production of commodities by means of commodites.' The Subject [motivating force] of this process no longer belongs to the workers, or the direct producers, but is preempted by the capitalists who are themselves but mere personifications of capital engaged in the chrematistic operation of this process.

34. Suppose that the means of livelihood needed for the reproduction of labour-power per day can be produced with 6 hours of labour, and that the money price of the basket is 3 shillings. If the production of cotton yarn illustrated in the preceding section is to be capitalistically operated, it may further be supposed that the means of production (such as raw cotton and the spinning machine) which required 24 hours of labour to produce are paid 12 shillings, and that the 6 kg. of cotton yarn whose production needed 30 hours of labour in all are sold for 15 shillings. In this case all the commodities are traded at prices proportional to the labour-time required for their respective production. Trade at such prices implies that the capitalist recovers the 12 shillings with which he compensates the use of the means of production by selling four-fifths (or 4.8 kg.) of his output of yarn, and the 3 shillings that he pays out to the worker by selling the remaining fifth (or 1.2 kg.) of his output. It also implies that the worker can buy back, with the 3 shillings that he has received, the equivalent of a fifth of the output of yarn that he has produced with 6 hours of labour in the form of the means of livelihood. The 3 shillings then intermediate this production-process and the commodity-exchange system that revolves around it. The relation of this worker to his yarn-spinning capitalist determines the exchange relation between this capitalist and the capitalist who produces the means of the worker's livelihood. Suppose, for example, that the spinning capitalist sells 6 labour-hours' worth of his output for 3 shillings. If, despite this, the other capitalist sold only 5 labour-hours' worth of his output for 3 shillings to the worker, then not only would the latter fail to receive sufficient means of livelihood, but the capitalist who produces the means of livelihood would gain more than the capitalist who spins cotton, which would make the production of cotton yarn an altogether futile enterprise for capital. Of course, all capitalists who advance money for the purchase of labour-power and the means of

production individually try to maximise their pecuniary gain by selling their product at the highest possible price. But as capital they must collectively make sure, under any circumstances, that their workers get the means of livelihood necessary for the reproduction of labour-power. In order to satisfy this condition capitalists must exchange their products according to the labour-time necessary for the production of these goods. The fact that the capitalists can choose to produce any commodity of their liking merely by purchasing labour-power as well as the means of production as commodities, or, in other words, the fact that the production-relation between capitalists and workers is bound by the form of commodity ensures this result. In the above example, the worker could not directly obtain the product of his 6 hours of labour, even if it consisted of the means of livelihood; he must 'buy back' the result of his own labour with the 3 shillings that are paid to him as the price of his labour-power. This necessity does not follow from the mere fact that products of labour are exchanged as commodities; it only follows from the fact that the production-process itself is governed by the form of commodity. It is a general economic norm rooted in the labour-and-production process that all products are more or less difficult for society to obtain depending on the labour-time needed to produce them. This norm appears in a commodity-economy as the *law of value* which regulates the exchange of these products.[2]

35. The capitalist who purchases labour-power for the day, however, has no reason to limit its consumption to 6 hours and merely to produce 6 kg. of cotton yarn. Moreover, the worker who has been compelled to sell his labour-power for the day as a commodity cannot be free to stop working just because he has finished the labour necessary for the production of his own livelihood. If he therefore works 12 hours a day, then his capitalist can produce 12 kg. of cotton yarn which he can sell for 30 shillings. He makes a net gain of 3 shillings, after having paid 3 shillings for the labour-power and 24 shillings for his means of production. He does not make this gain for having bought his commodities cheap, i.e., for having paid less than is due for the means of production and labour-power, nor does he make this gain for having extorted more than is due from the purchasers of his cotton yarn. Capital increases its own value because labour-power for which it has paid the value creates an entirely new and greater value in the production-process of capital. Of course, the capitalist would endeavour to buy the means of production and labour-power as cheaply as possible, and to sell his cotton yarn as dearly as possible; moreover, in practice, surplus value that he earns through his shrewd mercantile activity cannot often be ignored. As mentioned earlier, however, surplus value so earned cannot be more than the private gain of an individual capital offset by someone else's loss. It cannot be a share of the social gain originating in the formation of new value; in other words, it does not theoretically explain the value-formation-and-augmentation

process of capital, which gives rise to true surplus value capable of being shared by all the members of the capitalist class. Theory must uncover the ground for the value-augmenting power of capital, even when all commodities are supposed to be exchanged at prices proportional to their values. That ground lies in the formation of value by labour which is the consumption of labour-power in the production-process of capital; that is to say, it lies in the social relation that divides men into workers and capitalists.[3]

36. Each individual capitalist, however, being a private entrepreneur, cannot possibly know in advance how much of the commodity that he produces will in fact be socially demanded, and how much of its close substitutes will be produced by other capitalists. He does not even know how much of the labour-time that he mobilises for the production of his commodity will be socially recognised as forming its value since that sort of thing varies from one entrepreneur to another. The supply of a commodity in response to the social demand for it is always regulated by individual capitalists in consideration of its past price, and any divergence of supply from demand must be socially corrected *post factum* by the fluctuation of the market price. The market, through its price-mechanism, gropes for a definite and uniform standard of labour-time socially required to produce each commodity, and at the same time allocates society's labour-power to the production of different commodities in accordance with the pattern of social demand. The forces of the market act on each individual capital as a law, i.e., as compulsion from without. Unlike the laws of nature, however, this law is formed by the activity of men themselves who work under the command of each individual capital. Thus men are governed by a law that they themselves create; this fact lies at the root of what Marx calls the 'fetishistic character' of a commodity-economy. According to this fetishism, the value of a commodity is not viewed as a direct embodiment of human labour but as a physical quality of the product which varies from time to time; the value relation, in consequence, appears as an interconnection of material things in which money represents the counter-weight of the 'physical' value of all commodities. The foundation of this reified image peculiar to a commodity-economy lies in the production-process in which, because of the conversion of labour-power into a commodity, all products, including gold, which serve as money are produced as commodities by capital. Here it is clear that even gold itself, when as money it measures the value of other commodities, varies in its own value in proportion to the variable labour-time needed for its production. In the production-process of capital all human activities thus manifest themselves as a motion of capital; that is to say, their reification takes a thoroughly concrete form.[4] Hence any advance in the productive powers of labour appears to be an advance in the productive powers of capital; only in this form is progress in the productive method expedited.

## The Development of the Capitalist Method of Production

37. Industrial capital which follows the formula M—C . . . . P . . . . C′—M′ pursues an increase of value by investing an M for a greater M′ just as merchant capital (M—C—M′) and money-lending capital (M . . . . M′) do. The difference lies in that, unlike these latter, industrial capital produces a surplus value inside the process of its own motion, instead of obtaining a surplus value from outside of its motion, either by 'buying cheap and selling dear' or by collecting interest on loaned money. Value is formed and augmented, however, only by that part of capital that is invested in labour-power. The rest of capital put in the means of production merely preserves its value in the process of production and has its value transferred to the new product, though it is again labour, the productive consumption of labour-power, that preserves the old value by transferring it to the new product. The value whether of commodities, of money, or of capital is not a physical property of these things but human labour congealed in them; in other words, it is a human relation in a material guise. The production-process of capital is the process of forming such a human relation and, as such, it creates and augments value. Means of production used up in the production-process merely transfer their old value to the product instead of forming a new value because they are already present as labour-products in possession of a definite value. Marx, therefore, calls that part of capital invested in labour-power which forms and augments a new value *variable capital*, and the rest of capital put in the means of production which merely have their old value transferred to the product *constant capital*. Since the value of the means of production is already determined outside of the production-process in which they are used, its increase or decrease is reflected directly in the value of the new product. The rise and fall in the value of labour-power, however, will not directly influence the value of the new product because labour-power which was purchased at a definite value no longer maintains that value in the production-process of capital. The use-value of labour power, or the flow of labour, creates an entirely new value there instead of simply transmitting its unconsumed value to the new product as is the case with the means of production. Surplus value then is merely the difference between the newly produced value and the value paid for labour-power; no special value is produced in the name of surplus value. For capital, therefore, the fullest exploitation of the use-value of labour-power, either by the lengthening of the working-time or by the intensification of the consumption of labour-power within a given period of time, is the sure method of increasing surplus value. Capital, of course, wants to take the maximum advantage of the use-value of labour-power, a commodity which cost it a definite value, but it must be well understood that the use-value of labour-power is labour that forms a new value, not anything that directly satisfies human wants in the same way as the use-value of

other commodities. Unlike the desire for articles of direct consumption, the desire for the augmentation of value through the consumption of labour-power is consequently unlimited.[5] Thus the maximum extension of Marx's so-called surplus labour-time over and above the labour-time necessary for the provision of workers' livelihood, i.e., the stretching of the working-day as long as possible, given the intensity of labour, becomes the leading principle of the capitalist method of production. This principle, known as *the production of absolute surplus value* expresses the basic workers-versus-capitalists relation in terms of what Marx calls the *rate of surplus value* s/v (v=variable capital, s=surplus value), which measures the degree of the exploitation of labour-power.[6]

38. The value augmentation of capital through the production of absolute surplus value is narrowly circumscribed because neither the extension of labour-time nor the intensification of labour can be enforced beyond a definite, and fairly stringent, limit.[7] Beyond this limit, were there no alternative, capital could only grow by increasing the magnitude of its initial investment, assuming a given rate of surplus value. Capital, however, purchases labour-power not from a single labourer but from a certain number of them; the productive powers of collective labour may be improved by a variety of methods, which capital can and most certainly will exploit. With a rise of productive powers in society the labour-time necessary for the provision of workers' livelihood can be reduced, and surplus labour-time increased, even when the length of the working-day is fixed [and the intensity of labour is unchanged]; this makes *the production of relative surplus value* possible. Capitalism, thus endowed with a built-in motive for raising the productive powers of labour, realises an accelerated improvement in the technical method of production. Each individual capital, of course, is not directly concerned with the production of relative surplus value, nor with the raising of general productive powers; it only intends to profit from the so-called *extra surplus value*, which is made available by the early adoption of a new productive method. If a few progressive capitalists introduce a new method of production while many others are still using the conventional method, those few can produce with less labour-time than that which society at large is required to spend in the production.[8] This extra surplus value which accrues to the innovating capitalists will, to be sure, sooner or later vanish as more and more capitalists introduce the same new method and as the value of the commodity consequently falls. But the productive powers of society will have advanced making the production of relative surplus value possible because the necessary labour-time is eventually reduced and the surplus labour-time increased in the aggregate of social production. Thus even though capital merely concerns itself with its own individual gain, the peculiarly capitalist form of value augmentation calls forth an improvement in the methods of production leading to a general advancement in productive powers, which forms the material basis for the development of all

societies, with a speed and a scale never before witnessed by any pre-capitalist societies.[9]

39. The diffusion of the so-called *cooperation*, which consists in the gathering of a certain number of labourers in one place to exploit the productive powers of collective labour, is a general characteristic of all capitalist methods of production. From early times, however, capital has made use of what Marx calls *manufacture*, which is the method of raising the productive powers of labour by making use of the division of shop labour. Unlike the traditional method in which individual producers applied trained skills to the entire process of production, the method of *manufacture* divides the process into parts and consequently reduces the workers to partial operatives, making it possible for the production-process of capital to employ an increasing number of unskilled labourers. As labour is simplified, labour-power is 'standardised,' and capital now secures an expanding real base for the conversion of labour-power into a commodity. In the early period of capitalism, however, when merchant capital prospered by exploiting isolated producers by means of the 'commission system,' the advancement of productive powers due to the *manufacture* method was circumscribed.[10] Only when the productive instruments of the workers organised in *manufacture* were mechanised so as to achieve some independence from the workers themselves, i.e., only with the growth of *modern mechanised industry*, did the factory production of commodities begin to displace the traditional handicraft production of similar commodities, ruining in consequence independent small producers. Machinery, therefore, robs the workers of the initiative in production and simplifies labour; it dispenses with skilled labourers and opens the possibility of employment to women and children. It also powerfully advances the productive powers of labour either by permitting a simultaneous use of many tools or by introducing large-scale machinery which reorganises productive operations. The diffusion of *modern mechanised industry* thus reduces the workers to such a position that they no longer find any opportunity of maintaining their life other than labouring in a capitalist factory.

40. *Cooperation* makes the capitalist the supervisor of workers while *manufacture* makes him their organiser. In *modern mechanised industry*, however, both the supervision and the organisation of labour are controlled by the machinery that the capitalist sets in motion. This gives him power. Under this system, workers no longer use the machinery as their docile instrument; on the contrary, they themselves become subservient to the machinery which they do not own and which represents the power of capital. The productive powers of labour, therefore, appear as the productive powers of capital. Capitalism, however, does not mechanise all industries at once. Even the Industrial Revolution, which lasted from the end of the eighteenth to the beginning of the nineteenth century in England, resulted mainly in the mechanisation of cotton spinning and

weaving, a new industry built upon the sixteenth and the seventeenth century experience in the *manufacture* production of woollen and worsted products.[11] When capitalism develops in the clothing industries, it dissolves their traditional, more or less direct tie with agriculture production, and introduces instead the commodity-economic relation between separate agriculture and industry. The consequent formation of the so-called *home-market* entails the conversion of workers' means of livelihood into commodities; this conversion makes society radically commodity-economic. It, in other words, establishes capitalism.[12]

41. The productive powers of labour, which in the quite abstract sense form the material conditions for the development of human society, advance in a variety of different ways in each society according to the mode of producing and distributing surplus products. Under capitalism the production not only of absolute but also of relative surplus value motivates the advancement of productive powers to an extent unparalleled by any earlier experience. The resulting abundance of material production in means both of livelihood and of further production has, however, not necessarily improved workers' conditions of life nor even reduced the hardship of their labour. Capitalists are not concerned with the progress of human civilisation in the abstract; they employ machinery with the specific purpose of promoting production of surplus value. The development of *modern mechanised industry*, by simplifying labour, consolidates the real base for the conversion of labour-power into a commodity. Yet this commodity continues to be traded under the traditional *form of wages*; hence neither capitalists nor workers see that labour-power is in fact being sold and purchased.[13] Even political economy, taking the appearance for the underlying reality, believed for a long time that the value of a day's labour was compensated by wages. Political economy thus failed to disclose the true source of surplus value which should explain profit on capital. Another fallacious proposition that the whole of slave labour is unpaid similarly mistakes the phenomenal form for the underlying reality of slavery.[14]

42. The form of wages which misrepresents trade in labour-power as trade in labour establishes itself even more securely in *time-wages* or *piece-wages* and frequently allows capitalists to take advantage of its misleading appearance. The *time-wage* is calculated by dividing the value of a day's labour-power by the number of hours customarily worked per day; the *piece-wage* is likewise obtained by dividing the same value by the physical units of normal output per day. In these forms the idea that wages are paid for labour services or 'work done' is intensified even further. Hence a capitalist may employ labour-power, for example, half-time without paying its full value for the day, or he may adjust 'over-time' or 'extra-piece' compensations so as to compel either the extension of the working-time or the intensification of labour. In fact, the increase of output thus contrived often raises the rate of surplus value, even if wages

too rise to some extent. While *modern mechanised industry* completes the technical ground for the conversion of labour-power into a commodity,[15] the form of wages eases capital's access to the existing labour-power. The variable part of capital devoted to the purchase of labour-power, in consequence, becomes indistinguishable from the constant part of capital which purchases the material means of production. Capital regards both uniformly as *production-costs*, i.e., as expenses that its production-process requires. The costing of the elements of production such as labour-power and the means of production is in keeping with the original nature of capital as a circulation-form. Capital performs production in the process of its circulation and, from the point of view of the circulation-process of capital, production-costs are just the same as any other costs.

## Notes

[1] Since Marx first referred to this dual property of labour as 'the two-fold character of labour embodied in commodities' (*Capital*, I, p. 41), it has often been misunderstood that only the labour that produces a commodity is endowed with this duality. On the contrary, labour in all societies possesses this property in common. As will be explained later, however, this duality of labour in general is manifested in a more specific form under the regime of commodity production, such that the concrete aspect of labour produces a specific use-value and the abstract aspect a magnitude of value.

[2] The exchange of commodities at prices gravitating towards values, determined by the labour-time necessary for the production of the commodities, is founded upon the general economic norm that, in all societies, the procurement of any product requires an expenditure of human labour, even though the exact quantity of labour may vary from time to time and according to the person who performs it. The so-called labour theory of value cannot be denied even for this reason. But it is quite another matter to establish that labour constitutes the substance of commodity values and to demonstrate the capitalist-economic logic of that proposition. For example, referring to an exchange in some quantitative proportion of two commodities: corn and iron, Marx declares that the exchange implies the presence in equal quantities of something common to both (*Capital*, I, p. 37). Since they are different in use-value, he proposes to abstract from the use-value property of the commodities. Then the two commodities stripped of their use-values are regarded as the same in being the products of labour, i.e., of labour flowing from indiscriminate human labour-power. Although Marx believes to have established the labour theory of value by this argument, I think that his argument lacks a positive proof of the labour theory of value in terms of capitalist-economic necessity, that is to say, his argument by-passes the reality of the capitalist production-process which unfolds on the basis of the conversion of labour-power into a commodity. Even the abstraction from the use-value property of commodities cannot really be made in the sphere of exchanges alone; it becomes a concrete reality only when capital in its production-process can choose to produce any use-value whatsoever. Indeed, Marx himself writes as follows:

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 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 (*Capital*, I, p. 39).

Obviously 'the average labour-power of society,' etc., can become a concrete fact only in the production-process which capital operates with labour-power purchased as a commodity. The same thing surely cannot be said in reference to commodity exchanges in ancient or medieval societies, nor even in reference to trade among the small commodity producers who more or less survive in capitalist society.

The above-quoted passage is, in fact, preceded by the following remark:

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 (ibid.).

In an attempt to forestall this type of misunderstanding, Marx in the above-quoted passage appears to suggest two different problems. The first is that the value of a commodity, whatever its use-value may be, is determined by the labour-time necessary for its production; the second, which will be studied in the first chapter of the Doctrine of Distribution, is that the market value of a commodity is unique even though different producers require more or less labour-time for its production. Indeed the above-quoted passage is immediately followed by this illustration:

The introduction of power-looms into England probably reduced by one-half the labour required to weave a given quantity of yarn into cloth. The hand-loom weavers, as a matter of fact, continued to require the same time as before; but for all that, the product of one hour of their labour represented after the change only half an hour's social labour, and consequently fell to one half of its former value (ibid.).

This is an appropriate illustration of the second problem concerned with market value. It diverts attention, however, from the first, which is at issue here, namely that 'the labour . . . that forms the substance of value is homogeneous human labour, expenditure of one uniform labour-power' (ibid.). Moreover, having stipulated that value-creating human labour 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' (*op. cit.*, p. 44), Marx goes on to make the following comment:

Skilled labour counts only as simple labour intensified, or rather, as multiplied simple labour, a given quantity of skilled labour being considered equal to a greater quantity of simple labour. Experience shows that this reduction is constantly being made. A commodity may be the product of the most skilled labour, but its value, by equating it to the product of simple unskilled labour, represents a definite quantity of the latter labour alone. The different proportions in which different sorts of labour are reduced to unskilled labour as their standard are established by a social process that goes on behind the backs of the producers, and, consequently, appear to be fixed by custom (ibid.).

This comment merely repeats the general principle of commodity exchanges, according to which products made under different conditions of production are not different as values, when they are exchanged as commodities. Clearly, Marx tries to establish the proposition that labour creates the substance of value in a wrong context, i.e., in the context of commodity production in general. He fails to establish the proposition because in such a context he is forced to attribute even the 'reduction' of skilled to simple labour to 'a social process that goes on behind the backs of the producers.'

A commodity-economy always seeks to establish and extend a social relationship based on the exchange of products; its own nature requires that all products should be rendered homogeneous as values. But in consequence of the conversion of labour-power into a commodity, the development of capitalism has, for the first time, fulfilled this requirement in concrete terms even in the sphere of production. It is not clear whether Marx fully realises this point in the following statement:

Moreover, we see at a glance that, in our capitalist society a given portion of human labour is in accordance with the varying demand, at one time supplied in the form of tailoring, at another in the form of weaving. This change may possibly not take place without friction, but take place it must. 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. Of course, this labour-power, which remains the same under all its modifications, must have attained a certain pitch of development before it can be expended in a multiplicity of modes. But the value of a commodity represents human labour in the abstract, the expenditure of human labour in general (*op. cit.*, pp. 43–4).

When Marx says 'if we leave out of sight . . . the useful character of the labour . . . ,' he may just be repeating the sense of his earlier statement: 'If then we leave out of consideration the use-value of commodities, etc.' (*op. cit.*, p. 38) made in the context of commodity exchanges. In that case, the proposition that 'productive activity . . . is nothing but the expenditure of human labour-power' cannot be fully substantiated. If he means, however, that *capital* 'leaves out of sight' the 'special form' of labour, then he must imply that workers too should be able to provide any form of labour whatever according to the need of capital. This is no longer the question of an abstract 'leaving out of sight,' but of the free inter-industrial mobility of labour and capital. In that case, indeed, 'this labour-power . . . must have attained a certain pitch of development,' before it can be mobilised in all the fields of production 'in accordance with the varying demand of society.' The production-process of capital alone, by the conversion of labour-power into a commodity, realises such a global and thorough-going commodity production; only in that perspective can it be made unquestionably clear that the value of commodities is created by labour. Hence it is my view that the labour theory of value must be established in the context of the production-process of capital, not in that of commodity exchanges as has been the general practice.

[3] When commodities are the products of capital, they are traded by capitalists who do not directly apply labour to the production of the commodities. Hence it may seem that the exchange of commodities among capitalists need not be the 'exchange of labour,' as would be the case when direct producers exchanged their own products as commodities. The opposite is, in fact, the case. Direct producers need not exchange their own products according to the quantity of labour expended on them. When small producers take part in the exchange of their products, their labour has, in most cases, not even achieved the qualitative homegeneity of human labour in general. Only in capitalist production does the commodity-economic form dictate that the labour-and-production process itself be carried out with simplified, average labour. The mechanisation of industry, which realises this simplification of labour, makes the production-process of capital a radically 'commoditised' process, so that, when its products are exchanged as commodities, they must be exchanged according to the labour cost of production.

It is easy to understand why the workers, who must 'buy back' their own products with the money acquired by selling their labour-power as a commodity, should value all commodities according to the labour cost of production. But it is not so obvious that the workers-versus-capitalists relation, which confirms the workers in this viewpoint, cannot be made secure merely by the conclusion of a direct employment contract between an individual worker and an individual capitalist, but only through the society-wide inter-connection of all the capitalists among themselves. In other words, only the commodities that are capitalistically produced can globally and necessarily evolve the value relation. They are not simply exchanged; they are exchanged as the result of the production-relation confronting the workers with the capitalists. A global commodity-economy need not evolve from the exchange of products among small producers who, unlike the workers in a capitalist society, trade their own products as commodities. The exchange of capitalistic products necessarily develops the value relation because they issue from the production-process already managed by capital, which subjects the process, so to speak, to the dictates of a commodity-economy. Capitalists too vouch for their own being by performing this function of capital.

4 The fetishism of a commodity-economy manifests itself more concretely in money which alone possesses the immediate purchasing power than in ordinary commodities. Fetishism is not a mere delusion; it grows the more securely, whether in commodities or in money, the more advanced their commodity-economic functions are. In capital, which no longer stands apart as value against commodities, but which is itself a value-augmenting motion as it takes on and off different forms of use-value, the fetishism is deepened even further. Marx says that 'the monetary system is essentially a Catholic institution, the credit system essentially Protestant,' (*Capital*, III, p. 592), elaborating this pronouncement elsewhere as follows:

And for a society based upon the production of commodities, in which the producers in general enter into social relations with one another by treating their products as commodities and values, whereby they reduce their individual private labour to the standard of homogeneous human labour for such a society, Christianity with its *cultus* of abstract man, more especially in its bourgeois developments, Protestantism, Deism, & C., is the most fitting form of religion (*Capital*, I, p. 79).

The 'social relations of commodity producers,' which Marx refers to in the above passage, are concretely formed, when, in consequence of the conversion of labour-power into a commodity, the production-processes of a society become interrelated under the form of capital. Moreover, since the production-process of capital presupposes the most concrete basis of fetishism in the conversion of labour-power into a commodity, 'even this appearance of simplicity' characteristic of the fetishism of pre-capitalist commodity production 'vanishes' (*Capital*, I, p. 82). Thus Marx goes on to say:

Whence arose the illusions of the monetary system? To it, gold and silver, when serving as money, did not represent a social relation between producers, but were natural objects with strange social properties. And modern economy, which looks down with such disdain on the monetary system, does not its superstition come out as clear as noon-day, whenever it treats capital? How long is it since economy discarded the physiocratic illusion, that rents grow out of the soil and not out of society? (*Capital*, I, pp. 82–3).

It is indeed the purpose of the critique of political economy to pierce through the fetishistic character of capitalist production.

5 As Marx says, 'capital has not invented surplus labour.' Indeed,

Wherever a part of society possesses the monopoly of the means of production, the labourer, free or not free, must add to the working-time necessary for his own maintenance and extra working-time in order to produce the means of subsistence for the owners of the means of production, whether this proprietor be the Athenian καλδζ καγαθδζ, Etruscan Theocrat, Civis Romanus, Norman Baron, American slave-owner, Wallachian Boyard, modern landlord or capitalist. It is, however, clear that in any given economic formation of society, where not the exchange-value but the use-value of the product predominates, surplus-labour will be limited by a given set of wants which may be greater or less, and that here no boundless thirst for surplus-labour arises from the nature of the production itself. Hence in antiquity over-work becomes horrible only when the object is to obtain exchange-value in its specific independent money-form; in the production of gold and silver. Compulsory working to death is here the recognised form of over-work (*Capital*, I, p. 235).

Immediately after this passage Marx mentions 'the civilised horrors of overwork' when the economies based on slavery and serfdom come in contact with a commodity-economy or a capitalist commodity-economy. Then he compares 'the greed for surplus-labour in the

Danubian Principalities with the same greed in English factories.' We are concerned here, however, with the general nature of the capitalist 'thirst for surplus-labour.'

[6] Of course, variable capital alone cannot produce a surplus value; it must always be assisted by constant capital. Moreover, it will be explained later that, from the capitalist point of view, the rate of profit, which is the ratio of surplus value to total invested capital, is the important criterion in determining the choice of the sphere of investment. But that is a problem for the capitalists among themselves. In the present context that which lays the groundwork or material premise for such a problem, namely the social relation between workers and capitalists must be confirmed.

[7] Marx has the following to say:

We can 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 (*Capital*, I, pp. 234–5).

He then shows that the 'struggle for a normal working-day' at first, i.e., 'from the middle of the 14th century to the end of the 17th century,' took the form of 'compulsory laws for the extension of the working-day,' but that later in the 19th century it became 'compulsory limitations by law of the working time,' highlighted by 'The English Factory Acts of 1833 to 1864.' This makes it clear that labour-power is a special commodity which cannot be entirely free from external interventions in the consumption of its use-value. The nature of this special commodity and the problem of its pricing (i.e., of wage determination), however, cannot be fully explained until, in the later context of the accumulation-process of capital, the capitalist law of population specifies historical conditions of trade in this commodity.

[8] This is another point that requires a supplementary explanation in the more concrete context of capital accumulation. In that context it will be shown that innovations in productive methods must occur in clusters at a definite phase of industrial cycles.

[9] The production of relative surplus value explains why capital, the leading principle of which is the augmentation of value, manifests a remarkable enthusiasm for the advancement of productive powers, which entails a fall rather than a rise in the value of capital's products. It also explains, to some extent, why capitalist nations have so keenly promoted the progress of the natural sciences and technology. What should be noticed here is that for capital the value of its products matters only insofar as it is relevant to the acquisition of surplus value. Thus even the fall in the value of products does not hurt capital if that fall is conducive to the acquisition of greater surplus value. Hence capital's search for innovation is not inconsistent with its habitual eagerness to sell its products as dearly as possible.

[10] Medieval handicraft workers were required to polish their skills while undergoing a definite period of apprenticeship stipulated by the guild or the *Zunft*. *Manufacture* based on the division of labour afforded a technical condition for destroying such a tradition; it evidently presupposed a capitalist human relation. Yet *manufacture* by itself did not constitute a decisive factor characterising the early stage of capitalist development, since with this method capital was still unable completely to displace craftsmen-workers. At that stage, it was easier for

capital to profit from the exploitation of small producers by means of the 'commission system,' the typical method of chrematistics adopted by merchant capital which was not yet directly involved in the production-process. Indeed, as Marx confirms, throughout the 'manufacturing period properly so-called,' capital did not quite succeed in demolishing skilled workers;

Still, during the greater part of the 18th century, up to the epoch of Modern Industry and Mechanism, capital in England had not succeeded in seizing for itself, by the payment of the weekly value of labour-power, the whole week of the labourer, with the exception, however, of the agricultural labourers (*Capital*, I, p. 274).

In connection with this point, the following passage of Marx must be carefully examined:

That cooperation which is based on the 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 (*op. cit.*, p. 336).

This fact certainly is not inconsistent with the proposition that the dominant form of capital during this period was merchant capital. It cannot be said, of course, that the 'commission system,' under which merchant capital indirectly controlled the process of production, was a 'characteristic form of capitalist production-process.' For under this system, it was still largely the traditional form of production-process consisting of the operations of small producers that was subjected to the sway of capital. The inability of merchant capital to sink deeply enough into the production-processes was that which made of it the dominant form of capital only in the early period of capitalist development. It is important to avoid the conceptual confusion between the *expropriatory gain* of merchant capital and the exploitation of surplus labour by industrial capital. The general formula of merchant capital admittedly lies at the root of all capital forms, for which the form of industrial capital is no exception. Neither does industrial capital, in practice, refrain from the pursuit of expropriatory gains whenever there is a chance. But expropriation means in general dispossessing of others; it does not specifically mean the exploitation of surplus labour. The expropriatory character of merchant capital played a significant part in the process of the primitive accumulation of capital in depriving the traditional small producers of their property and reducing them to the ranks of the proletariat.

The above explanation should make it clear that an epoch of *manufacture* based on the division of labour does not evolve in the same sense as the epoch of *mechanised industry* does. The latter marks an epoch because it makes industrial capital the dominant form of capital by displacing, wherever it operates, traditional handicraft enterprises. Thus the transition from *cooperation* to *manufacture* and further to *mechanised industry* does not directly correspond with actual historical progress. The transition should be understood as the 'conceptual' evolution of the capitalist process of production from the abstract to the concrete. As such it does explain the theoretical implication of the historical change from *manufacture* to the *mechanised factory-system*. But the concept of *cooperation* being so general has no period 'properly so-called' parallel to the 'manufacturing period properly so-called.'

[11] Only the following quotation from Marx suffices here:

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 material 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, pulleys, 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 constantly serves as such a starting point, whenever a handicraft, or a manufacture, is turned into an industry carried on by machinery (*Capital*, I, p. 373).

[12] Commodity exchanges, as already mentioned, arise at first between self-sufficient economic communities, and only later spread into the communities themselves, transforming them gradually into commodity-oriented economies. Capitalism was no exception. In the early part of the modern age, the particularly active international trade among Western European countries resulted in the formation in England of a *home-market*, which constituted the material foundation of the modern, politically unified nation-state. The formation of the *home-market* not only extended the scope of economic activities from the communal to the national, but more significantly it dissolved many isolated communal economies into the single interdependent whole of a commodity-economic society. This process, however, must not be superficially understood as mere development of commerce.

In fact, the events that transformed the small peasants into wage-labourers, and their means of subsistence and of labour into the material elements of capital, created at the same time, a home-market for the latter. Formerly, the peasant family produced the means of subsistence and the raw materials, which they themselves, for the most part consumed. These raw materials and means of subsistence have now become commodities; the large farmer sells them, he finds his market in manufactures (*Capital*, I, p. 747).

It will be remembered that manufacture, properly so-called, conquers but partially the domain of national production, and always rests on the handicrafts of the town and the domestic industry of the rural districts as its ultimate basis. If it destroys these in one form, in particular branches, at certain points, it calls them up again elsewhere because it needs them for the preparation of raw materials up to a certain point. It produces, therefore, a new class of small villagers who, while following the cultivation of the soil as an accessory calling, find their chief occupation in industrial labour, the products of which they sell to the manufacturers directly, or through the medium of merchants (*op. cit.*, p. 748).

Modern Industry alone, and finally, supplies, in machinery, the lasting basis of capitalistic agriculture, expropriates radically the enormous majority of the agricultural population, and completes the separation between agriculture and rural domestic industry, whose roots—spinning and weaving—it tears up. It therefore, also, for the first time, conquers for industrial capital the entire home-market (*op. cit.*, pp. 748–9).

Whereas the early *manufacture* of woollen and worsted products in England still depended on the domestic supply of raw wool, the *modern mechanised industry* of cotton in England imported its raw material from abroad. Such circumstances may have contributed to a particularly drastic separation of industry from agriculture in that country. These special circumstances are, of course, not essential to the economic process of market formation; they rather confirm that commerce underlies capitalism, i.e., that capital takes advantage of all commercially sound opportunities.

[13] The form of wages originally implied compensation for a definite work done by a craftsman such as a carpenter, a gardener, etc. The same form is not appropriate to represent the payment of money to modern wage-earners who merely sell their labour-power. When the introduction of machinery converted traditional handicraft workmen into modern factory workers, the latter probably inherited from the former this form of wage payment. The special nature of commoditised labour-power, moreover, requires that the payment should be made after labour is performed rather than before, whereas other commodities are generally paid upon sale, i.e., before their consumption. Since labour-power is paid after

performing labour, it appears as if the payment were made for a specific work done by the concrete-useful labour of the wage-earner, just as the payment to a small producer such as a carpenter or a gardener is made for their useful work.

[14] So long as wages represent not the price of labour-power but that of labour itself, one must agree with Marx, who says:

The wage-form thus extinguishes every trace of the division of the working-day into necessary labour and surplus-labour, into paid and unpaid labour. All labour appears as paid labour (*Capital*, I, p. 539).

Such expressions as 'paid and unpaid labour' may, however, be misleading because it is labour-power, not labour, that is ever paid or unpaid. Marx, at any rate, continues:

In the corvée, the labour of the worker for himself, and his compulsory labour for his lord, differ in space and time in the clearest possible way. In slave labour, even that part of the working-day in which the slave is only replacing the value of his own means of existence, in which, therefore, in fact, he works for himself alone, appears as labour for his master. All the slave's labour appears as unpaid labour. In wage labour, on the contrary, even surplus-labour, or unpaid labour, appears as paid. There the property-relation conceals the labour of the slave for himself; here the money relation conceals the unrequited labour of the wage-labourer (*op. cit.*, pp. 539–40).

It should be well understood here that the 'unrequited labour of the wage labourer' is not 'concealed' by capitalists' malevolence. Such a 'concealment' is inherent in the commodity-economic form, which converts even labour-power into a commodity. To peasants performing a corvée, if not to slaves, the class relation is left obvious because there is no apparent need to hide it. But the commodity-economic principle, which by nature is classless, cannot openly admit the class antagonism between capitalists and wage-earners. It has to maintain the 'façade' of classlessness by concealing the class relation in the background.

By the way, Marx, who was the first to discover the sale and the purchase of labour-power under the phenomenal form of wages on labour, says:

. . . In respect to the phenomenal form, 'value and price of labour,' or 'wages,' as contrasted with the essential relation manifested therein, viz., the value and price of labour-power, the same difference holds that holds in respect to all phenomena and their hidden substratum. The former appear directly and spontaneously as current modes of thought; the latter must first be discovered by science. Classical Political Economy nearly touches the true relation of things, without, however, consciously formulating it. This it cannot so long as it sticks in its bourgeois skin (*op. cit.*, p. 542).

[15] In the second section of this chapter the process of value formation and augmentation was discussed already assuming the conversion of 'simplified' labour-power into a commodity. Hence to establish once again in this third section the simplification of labour-power in the light of development in the capitalist methods of production, consequent upon the production of relative surplus value, might appear to follow a wrong order. This apparent reversal of order is unavoidable in the theoretical explanation of an historical event. Capitalist methods of production cannot be understood without the prior theory of value formation and augmentation. Moreover, the present section on 'The Development of Capitalist Methods of Production' does not describe an historical development in concrete terms. It offers the *theory* of capitalism as a self-moving entity. The theory must exhibit the ability of capitalism to actualise and perfect by itself its own basic premise i.e., the simplification of labour-power.

## Chapter 2

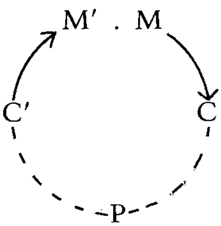
# THE CIRCULATION-PROCESS OF CAPITAL

43. Since the production-process P is embedded in the circulation formula M—C . . . . P . . . . C′—M′, capital always produces with the commodities C that it has purchased. Hence the cost of production does not immediately appear to capital as labour expended on its product. It is true, as pointed out earlier, that capital reckons in its process of value formation and augmentation not only the new labour flowing from the current consumption of labour-power, but also the old labour already materialised in the means of production and simply transferred to the new product as making up the latter's total labour embodiment. From the point of view of its circulation-process, however, capital regards labour-power, the source of value-forming labour, and the means of production both of which it has purchased as commodities, as expenses or costs incurred in production. Thus the formation and augmentation of value that takes place in the process of production is submerged beneath the surface of the circulation-process of capital; each individual capitalist in his actual chrematistics hopes to gain a greater surplus value by reducing his production-costs. This satisfies at least the first part of the circulation principle of capital, the principle of 'buying cheap and selling dear.' By the same token, the time that the production-process requires is viewed by capital, not as the whole length of labour-time required for the provision of the product, but as the *production-period*, i.e., as the time interval between the investment of capital in the elements of production such as labour-power and the means of production and the reappearance of capital in the form of the newly produced commodity. This production-period together with the *circulation-period*, or the time spent by capital in the phase of circulation, now appear as the time-factors constraining the efficiency of value-augmentation. If the elements of production such as labour-power and the means of production are considered as expenses, the duration of time itself either in production or in circulation is also viewed by capital as a cost. This means that capital, whether in the forms of money and commodities or in the various stages of the production-process, cannot stand idle even for a moment.

44. These new considerations certainly do not nullify the formation and augmentation of value in the production-process of capital; on the contrary, they flow from this fundamental fact. Yet capital as a circulation-form, bewildered by these considerations, does not apprehend the exact nature of production as the process of value formation and aug-

mentation. Each individual capitalist only vaguely sees that production lies at the root of his profit-making activity. Because the value of a commodity is realised in money only through the elusive motion of prices, the substance of economic life is always covered by the mystery of the commodity-economic forms. Just as a commodity value, the social norm of exchange, can only be revealed in fluctuating prices through recurrent trade, so is surplus value which is the meaningful outcome of the production-process realised only in the form of profit accruing to each individual capitalist as the difference between the selling price and the production-cost. If there is a socially normal profit, though individual capitalists always earn more or less than the norm, it is because all the particular forms of the motion of capital pursue, in the final analysis, one and the same end in the production-process, namely, the augmentation of value. No particulars of the motion of capital can suppress this fundamental fact even though it is not immediately apparent in the commodity-economy. It instead 'makes a detour' in revealing itself through the phenomenal forms that are peculiar to the circulation-process of capital. The origin of capital was first explained in the Doctrine of Circulation. Although the substantive content of the activity of capital was later established to lie in the value augmentation in its production-process, this does not exempt the motion of capital from the various restrictions to which, as a circulation-form, it is subject.[1] The circulation-process of capital must now develop the forms appropriate to its operation.

45. I have already stated that capital, being the self-motion of value, cannot stop when it turns over once but must repeat the same process *ad infinitum*. Its terminal point M′ is, therefore, also necessarily its restarting point M in the circular motion of capital M—C . . . . P . . . . C′—M′, as depicted below in the diagram. Viewed in this way, however, the motion of capital is no longer simply the *circuit of money-capital* (M—C . . . . P . . . . C′—M′) which begins and ends with the form of money. It is also *the circuit of productive capital* (P . . . . C′—M′ .M—C . . . . P) which begins and ends with a stage in the production-process, as well as *the circuit of commodity-capital* (C′—M′ .M—C . . . . P . . . . C′) which begins and ends with the form of commodity stocks. All three circuits together make up the circular motion of capital. In actual practice, indeed, capital is always divided in an appropriate proportion into the three constituents: money-capital M, productive capital P, and commodity-capital C′, so as not to interrupt the process of production. In other words, when a major part of




capital is engaged in production ( . . . . P . . . ), another part of capital must be preparing for subsequent production (M—C), and still another part must already be selling products in the market (C′—M′). The metamorphosis of capital through time thus translates itself into the asset structure of capital; it is an observed fact that a business firm is spatially divided into the factory, the sales office, and the purchasing department. As the routine operations of production, sales, and procurement are repeated, capital goes through each of these phases in turn and augments its value. That part of capital which takes the forms of commodities and money in the process of circulation is called *circulation-capital* by Marx in contrast to *productive capital* which is the rest of capital concurrently engaged in value formation and augmentation at various stages of the process of production. As the commodity is sold for money, and as the money once again buys commodities in the form of the means of production and labour-power, circulation-capital transforms itself into productive capital. When, however, the process of production is over and commodity stocks are built, productive capital is once again reconverted into circulation-capital. Thus the two forms of capital, one always changing into the other, are but the two sides of one and the same thing: the motion of capital.[2]

46. The circulation-process of capital considers as costs not only the items of productive capital to be used in the production-process but also the time consumed by the production-period and by the circulation-period. Whereas the production-period tends to occupy a definite length of time depending on technical conditions, the circulation-period cannot be technically reduced to any normal duration. There arises, therefore, the problem of how otherwise this period may be shortened and standardised so as to save and equalise to all capitalists the time that they spend in circulation. The so-called *pure circulation-costs* exclusively incurred by the sale and the purchase of commodities, e.g., by the operations of a sales shop, by commercial correspondence and bookkeeping, etc., are, as will be explained later, capable of being taken over by independent commercial capital whose purpose is to save and standardise such costs. But the *storage costs* required to keep the use-value of commodities free from damage while they are circulated and the *transportation costs* incurred by moving commodities from the place of production to the place of sale must be distinguished from the pure circulation-costs. Although storage and transportation activities are partially related to the selling operation, they also affect the use-value of commodities substantively. Even though neither storage nor transportation physically 'form' a new use-value, they cannot always be considered as specifically commodity-economic activities. All economic societies bear the costs of storage and transportation; to that extent both of these activities must be viewed as adding a new value to the commodities. Perhaps transportation may be considered as an extension of the production-process into the circulation-process, and storage as passive production carried out in the circulation-process.[3]

47. The circuit of money-capital, which begins with a given amount of investible money and ends after a certain period of time with the recovery of the principal together with some extra money, is the most general

representation of the circular motion of capital. It shows that money is the initiator of any capital investment; it also measures the efficiency of value augmentation, the sole purpose of any capital, by the increased quantity of money at the end-point. It divides the whole *turnover of capital* into the circulation-period (in which capital takes the form of either commodities or money) and the production-period in the wider sense[4] (which is the period technically required to produce a given quantity of the particular commodity). The production-period in this wider sense includes the *working-period* in which labour-power is actually consumed. The lengths of each of these periods are then viewed as factors determining the turnover-speed of capital which also affects the efficiency of value augmentation. But some means of labour such as machines do not recover the whole of their value in one turnover of this circular motion. Capital of this form, once invested, stays in the production-process for a definite period of time, transferring its value to, and recovering its value in, the product only gradually as it is used up. The other form of productive capital, such as raw materials, transfers to, and recovers in, the new product the whole of its value with every turnover of capital. The distinction between *fixed* and *circulating capital* thus depends on the manner in which different types of the means of production transfer their value to the new product in the production-process. In other words, only productive capital is either fixed or circulating depending on its function; circulating capital must not be confused with circulation-capital which refers to money-capital and commodity-capital. Thus the same cattle are used as fixed capital in farming, and as circulating capital in meat production. When sold as a commodity, however, the cattle become commodity-capital, which is neither fixed nor circulating. The distinction between fixed and circulating capital does not depend on the length of time required for its production. For example, ship-building usually takes a long time, but even the heaviest component of a ship [such as the engine] is a circulating capital in ship-building, although docks, machines, and other structures applied to ship-building are fixed capitals for this purpose. Vessels belonging to a capitalistically operated shipping-business are also fixed capitals even though they are not anchored at any fixed place. In the circuit of money-capital, the fixed components of productive capital recover only part of their value in money after a single turnover together with the whole value of circulating capital. The part of their value thus recovered has to be laid aside to form a depreciation fund with a view to eventual replacement of these fixed components.

48. The variable component of capital invested in labour-power is generally regarded as circulating capital together with the circulating part of constant capital such as raw materials because the whole value of it is recovered by the sale of the product to be ready for reinvestment. As already stated, however, labour-power does not preserve its own value while forming a new value; hence variable capital cannot be considered as

circulating capital in the proper sense of the term. And yet it is this part of capital that augments the value of capital. Therefore the turnover-speed of variable capital, determined by the length of the production-period, has an active significance for the value augmentation of capital unlike the turnover-speed of constant capital, whether fixed or circulating.[5]

49. The length of the circulation-period, on the other hand, entirely determines the magnitude of circulation-capital which, in the form of commodities or money, is tied up in the process C′—M′ . M—C, and thereby passively restricts the efficiency of the value augmentation of capital. The lapse of time in the selling-process C′—M′ in particular requires additional capital in order to avoid an interruption of the production-process, which would among other things leave fixed capital idle. Since the magnitude of total capital needed for the operation is thus crucially influenced by the time consumed in circulation, the latter is of no small concern to any capital. For instance, if the circulation-period is prolonged because of a delay in the selling of commodities, additional money-capital will in the meantime be required for investment in variable capital as well as circulating constant capital in order to continue production. On the other hand, if the selling period is shortened, there will be a corresponding release of excess money-capital which forms *idle funds*. Just as commercial capital, by specialising in the conversion of commodities into money, saves and standardises the unproductive costs of circulation, so does 'bank-capital,' by interposing itself among industrial capitals, facilitate their collective and economical use of idle funds. Thus bank-capital develops financial institutions which regulate the aggregate supply of, and demand for, money-capital.[6]

50. Value that is newly produced by current labour in the production-process circulates for the first time in C′—M′. As stated earlier, variable capital invested in labour-power does not simply transfer its value of the new product as constant capital does. Yet the circulation-form of capital requires that variable capital too should be recovered in the form of money at the end of the turnover in much the same way as constant capital is. Thus when the values of both variable and constant capital are set aside from the sales proceeds, the remainder confirms the existence of surplus value as an increment over the value of capital. As soon as surplus value is realised in money in the process C′—M′, however, it can be separated as m [=M′—M] from the continuing circulation of capital which once again begins with the M. This separated money value m can be spent on private consumption by capitalists, or it can be partially or wholly added to the M to join the circulation of capital. In the former case a *simple reproduction* takes place with the same scale of the production-process as before; in the latter case there will be an *expanded reproduction* as the scale of capitalist production increases. But in either case, surplus value m must be set apart at least in the first instance from the circulation of capital and be held as *freely disposable funds* or money at rest for a longer or shorter period of time.

So long as it remains in the form of money, it can be added to the aforementioned idle funds made available by the shortening of the circulation-period, and can be placed at the disposal of capitalists at large through the banking system. From the point of view of the circulation-process of capital, in which alone funds are generated, it is clear that the motion of capital does not aim at the conversion of surplus value into money contrary to a frequent misconception; it is also clear that surplus value will not continue to be accumulated in the form of money. Of course, it is true that capital aims at rendering an M into a greater M′, but this proposition implies that as the M continues to circulate as capital it urges the m also to join the motion of capital. The true purpose of capital is not the hoarding of more money but the accumulation of capital, provided that the private consumption of capitalists is adequately looked after. Hence the monetary saving of funds is but a temporary form of surplus value. When the latter is realised as c′—m within the process C′—M′, it will sooner or later be spent as m—c either on capitalist's private consumption or on additional elements of production. The circulation of surplus value (c′—m—c), which can be partly seen in the formula,

$$C'\text{—}M' \begin{cases} M\text{—}C \;.\;.\;.\;.\; P \;.\;.\;.\;. \\ \\ m\text{—}c, \end{cases}$$

is thus an adjunct to the circulation-process of capital.[7] When the special problem of the circulation of surplus value is thus settled, capital is then ready to develop its reproduction-process.

## Notes

1 At the opening of Volume II of *Capital*, devoted to the study of the circulation-process of capital, Marx makes the following methodological remark:

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 (*Capital*, II, pp. 25–6).

It should not be overlooked, however, that the theoretical assumption according to which 'the commodities are sold at their values' is made possible only because commodities are actually sold at prices either above or below, but generally gravitating towards, their value as trade recurs a great number of times.

The general description of the nature of capital has already been given in the chapter on Money in the Doctrine of Circulation. The study of the Production-Process of Capital then disclosed the social content that underlay the motion of capital. Now, at the present stage, capital must again be examined in its circulation-form. This theoretical development closely follows the nature of capital itself. If a commodity-economy forms a self-sufficient historical society when capital takes possession of its production-process, this does not mean that production there can be carried out *directly* as a substantive economic activity; it must be carried out *through the forms* peculiar to a commodity-economy. Whence follows the need for 'the changing and the building of forms as such,' with which the motion of capital mediates production and circulation. Theory, of course, does not simply adopt concrete facts that are already familiar to capitalists. Rather these 'facts' superficially observed by them are the necessary forms under which social relations must appear in a commodity-economy. Economic theory must discover the manner in which such social relations develop under these forms.

At the beginning of the theory of 'The Accumulation of Capital,' too, Marx says,

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 (*Capital*, I, p. 564).

Again the 'normal way' should not be just mechanically 'assumed,' but it must be understood as the central limit of the great many not-so-normal ways that constantly occur in a commodity-economy. The forms of a commodity-economy cannot, therefore, be 'conceived in their pure state' by merely 'discarding' all the anarchistic factors. I am not certain what Marx had in mind when he wrote the passages quoted above. But if he merely defined the 'normal way' as the state in which 'commodities are sold at values,' it would certainly be unsatisfactory because that would overlook the fundamental method with which a commodity-economy regulates economic life by generating the forms appropriate to it. That method is to bring law out of anarchy. The anarchy of commodity production does not mean the absence of laws; on the contrary, the laws that emerge from this anarchy make up the 'normal way' of a commodity-economy. Thus even if one assumes with Marx 'not only that commodities are sold at their values but also that this takes place under the same conditions throughout,' this assumption must not be taken to imply that the circulation-process of capital is exempt from being exposed, as money and commodities are, to the anarchy of the market. On the contrary, in order adequately to control the process of production, the circulation-form of capital must develop such new forms as are well-adapted to the anarchism of a commodity-economy.

[2] Marx was the first economist to characterise capital as the self-augmenting motion of value. From this point of view, it is clearly impossible to select any one of the three circuits of capital and consider it as fully representative of the motion of capital. But each circuit offers a particular angle from which the motion of capital may be observed. Marx, therefore, says:

C′ . . . C′ is the groundwork for Quesnay's *Tableau économique*, and it shows great and true discretion on his part that in contrast to M . . . M′ (the isolatedly and rigidly retained form of the mercantile system) he selected this form and not P . . . P. (*Capital*, II, p. 102).

In Marx's economic theory, the reproduction schemes correspond to Quesnay's *Tableau économique* and Marx too uses the circuit of commodity-capital C′ . . . C′ in the formulation of his schemes. Classical political economy rather single-mindedly adhered to P . . . P, rejecting the mercantilists' insistence on M . . . M′.

It might be noted in passing that C in M—C does not represent commodity-capital, since it already takes a form of productive capital; there is no circuit C . . . C in addition to the circuit C′ . . . C′ of commodity-capital. It has been pointed out that capital itself cannot be fully represented by any one of the forms that it adopts in the course of its circular motion, i.e., by any of the forms of money, commodities, or productive elements. Each of these forms, however, plays a significant part in the whole motion of capital, while functioning simply as money, commodities, or productive elements in the appropriate phase. For example, in buying commodities money simply acts as money; when, however, it buys in the form of commodities particular means of production with a definite quantity of labour-power to operate them, it clearly represents a phase in the motion of capital. Money paid to the workers who have sold their labour-power no longer represents capital. Similarly, commodities produced by capital cease to represent capital, as soon as they are purchased by workers. In exactly the same sense, neither labour-power nor the means of production by themselves represent capital because they can produce new products without necessarily adopting the form of capital. It is still a very common practice today to identify capital with mere money or with mere means of production, but it is a fallacy to characterise the whole motion of capital by any of its isolated phases.

[3] Although the pure circulation-costs incurred exclusively by the buying and selling of commodities are in practice inseparably mixed with the storage and transportation costs, the two types of cost must be sharply distinguished in theory. Whereas circulation as such does not form any value, storage and transportation often do. This is consistent with the general proposition that the value of a commodity is determined by its labour costs to the extent that the latter must be borne in any society. The pure circulation-costs of buying and selling commodities, unlike the costs of storage and transportation, are incurred only in a commodity-economy; hence they do not create value. The form of value is, of course, specifically commodity-economic, but the substance of value must all the same be related to the communal exertion of labour that must take place in all societies. The commodity-economic form of value exposes the structure of this communal labour as the value-relation. Although the communal labour need not always take the commodity-economic form, the latter must take possession of this 'social substance' in order to manage a whole society according to its own principle. Capitalist society does precisely this.

It may be noted here that the activity of storage undergoes a special modification under a capitalist commodity-economy. In capitalism the stock of readily available commodities in the form of commercial inventories tends to increase; hence consumers are not obliged to store as many products for their direct need as otherwise. Also it will be noted that the transportation industry always includes not only cargo but passenger transportation as well. This latter form of transportation develops under capitalism into a 'service industry,' and often becomes a matter of no negligible concern in the stages-theory of capitalist development as well as in empirical studies. But in the pure theory of capitalism that part of the transportation industry is irrelevant because it is not directly related with material production. Only the transportation of 'things' has a bearing on value formation.

[4] A production-period normally includes the time in which labour is not applied. For instance, there are times for the drying of materials or products, for the ripening of the crops, etc., which do not involve labour. Such times varying from one industry to another belong, together with the working-period, to the production-period whose whole length affects the turnover-speed of capital. A working-period can, of course, be shortened by an improvement in the capitalist method of production. But technical progress may also shorten the natural process which determines the length of the production-period not involving labour, as well as the period needed for transportation which can be considered as the productive activity extended into the circulation-process. The shortening of any of these periods improves efficiency in the value augmentation of capital.

[5] In business practice, the value of sales per period divided by the total value of capital advanced is often defined as the 'turnover-rate of capital.' This pragmatic index does not reveal which part of the sales proceeds represents surplus value. The 'turnover-rate of capital' which influences the rate of profit is the turnover rate of variable capital. The circulation-process of capital exhibits the manner in which the turnover-speed of capital restricts the efficiency of value augmentation in general. Since, from the viewpoint of the circulation-process of capital, the passage of time involved in the process tends to be regarded as a passive constraint, the active significance of variable capital to the value augmentation of capital is often overlooked. It must be well understood, however, that the value augmentation of capital is, as such, quite unaffected by the length of time that the fixed component of capital

takes in being fully depreciated. Neither the fixed nor the circulating component of constant capital creates new value; at most they merely assist the formation and augmentation of value by variable capital.

[6] In this respect bank-capital develops a more intimate relation with industrial capital than even commercial capital, which relieves industrial capital from the selling of commodities by purchasing them wholesale. In the pure theory of capitalism, the fundamental significance of bank-capital lies in its function of redistributing idle funds which can be communally used by capitalists at large. This function of bank-capital is quite distinct from that of money-lending capital which operates from outside of the activity of industrial capitals. Although the form of money-lending capital has already been discussed, no substantive content can be given to this form in the pure theory of capitalism. Hence to the extent that bank-capital acts as a money-lender outside of industry, its activity cannot be discussed in the pure theory.

[7] Quite apart from the general problem of determining the quantity of money needed for the circulation of commodities in the C′—M′ process, traditional economic theory, as Marx points out, has never solved the question concerning the source of money necessary for the realisation of surplus value. In other words, 'from the point of view of capitalist production, the *semblance* of a special problem does indeed exist' (*Capital*, II, p. 337). For example, a capitalist who invests 400 [in some monetary units] in the means of production and 100 in labour-power must have spent money worth 500. The question is how he can take back from the market money worth 600 including the surplus value of 100. Marx's answer is as follows:

Indeed, 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. (*Op. cit.*, pp. 338–9).

This truth drives home the insufficiency, as emphasised in the text, of regarding the motion of capital exclusively as the circuit of money-capital. The proposition that capital strives to make an M into a greater M′ shows one fundamental aspect of the motion of capital, but not all. In a simple reproduction the circulation of surplus value c′—m—c falls away from the circulation of capital; in an expanded reproduction it is integrated into the circulation of capital C′—M′. M—C. But in both cases, it takes the basic form C—M—C′ of commodity circulation, or the conversion of a commodity C into another commodity C′. In other words, the circulation of surplus value is not a mere conversion of it into money. If the capitalist class realises its surplus value by the money spent 'as the means of purchase for its individual consumption' there is no contradiction. The same money can be spent once again 'for its individual consumption'; this simply means that the capitalist class consumes its surplus value. Only because the acquisition of surplus value is incorrectly identified with the conversion of it into money, does the seeming 'paradox' arise. Even if a capitalist realises his surplus value by the same money that he spent earlier on his means of consumption, it does not follow that he realises his surplus value 'with his own money.' Since he has consumed the worth of the money that he spent in the first instance, the only way in which he can earn the money back is to realise his surplus value in it. The case of expanded reproduction is no different because, in circulating surplus value, money only functions as the medium of circulation in the exchange of a C for C′. This fact is certainly not inconsistent with the temporary character of monetary saving in the form of funds.

It may also be noted here that the money material or gold too is produced by capital in just the same way as other commodities are. The production of the money material becomes necessary, not only because worn-out coins must be replaced, but also because an increased volume of commodity circulation consequent upon the expansion of capitalist production requires a greater quantity of money. (This requirement is, to some extent, accommodated also by a greater velocity in the circulation of money and by an extended use of credits.) Of course, gold is not solely used as the means of circulation, or even as money in general; it is used for both monetary and non-monetary purposes. The social relation between the production of gold which serves as the money material and the production of other commodities will be studied later.

*Chapter 3*

# THE REPRODUCTION-PROCESS OF CAPITAL

## Simple Reproduction: The Reproduction of Capital and Labour-Power

51. 'A society can no more cease to produce than it can cease to consume,' says Marx with a great deal of sense. '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' (*Capital*, I, p. 566). Indeed, if a society ceased to consume, there would be no reproduction of labour-power and hence no continuation of production either. It is a general economic norm that both labour-power and the means of production are consumed in the production-process of material things. But the means of production so consumed will reappear in the new products, so that the production-process of material things is, at the same time, their reproduction-process. Labour-power, on the other hand, must be reproduced by workers in the course of their individual consumption of certain items of the new products. Such reproduction of labour-power must, in one way or another, be carried on without interruption in all societies because it forms the absolute condition of the continued existence of any society. Capitalist society too must reproduce labour-power; here the reproduction of labour-power is accomplished alongside the recurrent motion of capital. In other words, the general economic norm of reproduction common to all societies must be satisfied in a capitalist society by the working of the law that is specific to the commodity-economy. Just as the production-process of material things, as it conforms to the law of value, is simultaneously their reproduction-process, so also is the consumption-process of material things, so far as it concerns the working-class, at the same time the reproduction-process of labour-power *as a commodity*.[1]

52. As soon as its product C′ is realised in money M′, capital first repurchases the means of production corresponding to those which have been consumed in the production-process. Of course, against the portion of fixed capital so consumed it sets aside instead depreciation funds for eventual replacement, as already explained. But in order to continue its production capital must purchase labour-power as well by paying wages; these wages restore the money with which the workers can repurchase *as commodities* their means of livelihood from capital. Workers who labour under capital, having sold their labour-power to it, produce commodities

which will belong to capital; they must consequently buy back from capital even the means of livelihood required for the reproduction of their own labour-power with the money that they earn as wages. In other words, the production- and the consumption-process of 'things,' performed respectively as material production by capital on the one hand and as individual consumption by wage-earners on the other, are interrelated by the form of commodity, both being subject to the working of the law of value.

53. The production-process of capital thus reproduces both the means of production and the means of livelihood which are annually consumed. Along with the reproduction of these material things, however, capital also reproduces labour-power *indirectly* through the maintenance of the wage-earner's life. This labour-power which capital cannot *directly* produce but which is indispensable to its production-process is in fact the driving force of the motion of capital. The reproduction-process of capital is, therefore, not only the reproduction-process of such material things as means of production and means of livelihood, but also that of the social relation which confronts the workers with the capitalists. For by producing both value and surplus value in the new product, wage-earners' labour today reproduces their social position tomorrow. It is the conversion of labour-power into a commodity that compels workers daily to reproduce their labour-power *as a commodity*, the value of which can be determined only when their products become the products of capital.[2] Hence it is entirely reasonable to conclude with Marx that the individual consumption of wage-earners forms but 'a factor in the production and reproduction of capital' (*Capital*, I, p. 572).[3]

## Expanded Reproduction: The Actual Process of Capitalist Accumulation

54. If the whole of surplus value realised in the process C′—M′ is personally consumed by the capitalist, the process of reproduction repeats itself on the same scale or, in other words, a simple reproduction takes place. This being far from consistent, however, with the inherent nature of capital, some part of surplus value is bound to be converted into capital; an expanded reproduction must then be regarded as the general rule. The case of simple reproduction was discussed in the preceding section merely for its theoretical interest, as it displays certain underlying properties of expanded reproduction in clearer perspective. Of course, a portion of the surplus-value component of capital's product must always be devoted to the personal consumption of the capitalist; the other part, however, which should be made as large as possible, will be converted into capital after having remained for a longer or a shorter period of time in the form of accumulation funds.[4] When an individual capital repurchases the means of

production and labour-power with the M part of an M′, obtained by the sale of its commodity C′, it may wish to extend the scale of operation by mobilising some of its surplus value, which has already been held for some time as accumulation funds. For this [conversion of surplus value into capital] to be possible, the additional means of production and of livelihood must, of course, be made socially available by the overall production of capital. Even if they are available in the market, however, capital cannot integrate them into the expanding scale of its reproduction without the simultaneous procurement of additional labour-power. It is, therefore, perfectly clear that the accumulation of capital is crucially dependent on the availability of additional labour-power which capital by itself cannot directly produce. Labour-power, as has been repeatedly stressed, is reproduced in the private life of workers themselves. It may at first sight appear that, since the maintenance of labour-power implies a natural growth of the labouring population, even a simple reproduction already furnishes, to some extent, the pre-condition of an expanded reproduction. For the expanded reproduction of capital, however, the natural growth of the labouring population is no more than an externally provided leeway; it does not always guarantee the sufficient supply of additional labour-power that the accumulation of capital demands.

55. As a general rule, however, advancement in the productive powers of labour consequent upon progress in the technical method of production involves an extended use of such means of labour as tools and machinery as well as the accompanying increase in the consumption of raw materials and other means of production. The quantitative proportion of the material means of production to labour-power, therefore, rises. In the production-process of capital this amounts to the heightening of what Marx calls the *technical composition of capital*. Of course, it does not always follow that the proportion of constant to variable capital, or the *value composition of capital*, must also rise in correspondence with the rise in the technical composition because the effect of the advancement of productive powers on various commodity values cannot be accurately predicted. To the extent, however, that a rise in the value composition reflects a prior rise in the technical composition of capital, what Marx calls the *organic composition of capital* is said to have increased. This organic composition of capital indicates the measure of development of capitalist production in the following sense. Its increase does not show all advances in the productive powers of capital; it rather shows the extent to which capital actually makes use of improved productive power in securing additional labour-power required for the accumulation of capital. It is because of this ingenuity that capital can expand the scale of its production and promote the advancement of productive powers further, even when the size and the natural growth rate of the labouring population are given and fixed. *Surplus population relative to capital*, generated by improvements of the traditional method of production thus introduces the possibility otherwise

excluded of adapting the existing labouring population to the growing demand for it by capital.

56. Capitalist production, as it has already been mentioned, has developed by taking advantage of the progress in the social productive powers of labour. As accumulation proceeds, each capitalist enterprise consequently requires more and more *concentration of capital* compatible with the method of production which embodies the most sophisticated knowledge of science and technology. Productive powers advance even more, if the concentration is accelerated by the *centralisation of capital*. This manner of capitalist accumulation, however, does not proceed in an orderly fashion. More specifically, capitalist accumulation does not constantly improve the method of production, as is frequently believed, nor does it always raise the organic composition of capital and generate relative surplus population. Since fixed capital equipment, once invested in, must be used over a span of several years, a new productive method cannot in the meantime easily displace the old method incorporated in it. Moreover, so long as capital can continue to accumulate on the basis of relative surplus population already made available by the adoption of new productive methods, it has little incentive to adopt any further series of innovations. Although capital is generally motivated by the production of relative surplus value to improve upon the existing method of production, it is not directly concerned with the propagation of improved techniques. The general adoption of new productive methods must, therefore, in principle, be forced upon capital by the severity of competition that it faces in the phase of industrial depression. This means that the organic composition of capital rises in a particular phase of the cyclical fluctuations that characterise the development of capitalism.[5] This proposition indeed explains the fact that the capitalism in nineteenth-century England, particularly between the 1820s and the 1860s, underwent the roughly decennial cycle of prosperity, crisis, and depression. During the phase of prosperity, capital accumulation proceeds 'extensively' under a given organic composition, absorbing surplus population already created in the preceding phase of depression. During the depression phase that follows a crisis, as the disturbances caused by the crisis are gradually brought under control, new methods of production are adopted providing the basis for an increase in the organic composition of capital and for the formation of relative surplus population to be absorbed in the succeeding phase of prosperity. This is the manner in which the *law of population peculiar to capitalism* asserts itself, securing for capital the supply of labour-power required for its accumulation even when the existing stock and the natural growth rate of the labouring population are given and fixed. The so-called 'industrial reserve army,' described in *Capital*, illustrates the concrete mode of existence of the various types of surplus population in mid-nineteenth century England, including relative surplus population generated by the cyclical rise in the organic composition of capital.[6]

57. Thus the wages of workers are also subject to the periodic variation through business cycles, sometimes rising above the value of labour-power and sometimes falling below it. One should, of course, agree with Marx that, 'taking them as a whole, the general movements of wages are exclusively regulated by the expansion and contraction of the industrial reserve army, and these again correspond to the periodic changes of the industrial cycle' (*Capital*, I, p. 637). But what the expansion and contraction of the 'industrial reserve army' regulate is not merely the rise and fall of wages. In these cyclical movements of wages, the wage-earners' living standard itself is determined, which in turn determines the value of this special commodity known as labour-power. The standard of living is in fact not a rigidly fixed *datum*, being 'historically determined' in a broad sense. In the development of capitalism, the accumulation of capital historically generates a standard of living suitable to that level of accumulation, as wages rise in the prosperity phase more than they fall in the depression phase of capital accumulation, even though the net gain may fall short of the full advance in productive powers. The economic crisis which turns prosperity into a depression sets, in each industrial cycle, the upper limit beyond which wages cannot rise. But in the course of capitalist development through business cycles, a rise in real wages cannot be excluded. Moreover, capital in its accumulation requires, and must be able to command, labour-power whose owners demand as a basic condition of trade some improvement in the standard of living along with the general development of capitalist society.[7] Therefore it is not true, though often asserted, that the development of capitalism necessarily implies a deterioration of the workers' living standard. Labour-power, which cannot be directly produced by labour and hence neither by capital, is a special commodity; the demand for and the supply of it must be regulated in the course of capital accumulation according to the *law of population peculiar to capitalism*. The working of this law determines the living standard of wage-earners, and their living standard in turn determines the value of labour-power itself.[8]

## The Reproduction-Process of The Aggregate Social Capital: The Absolute Foundation of the Law of Value

58. If by the formation of relative surplus-population the existing stock of labour-power, which capital cannot directly produce, is ensured to meet the increasing demand for it due to the accumulation of capital, the process of expanded reproduction can proceed of its own accord, i.e., without depending on anything else but the products of capital. Capital can produce all products if and only if labour-power is made available to it. Not only the means of production directly required for reproduction but also the means of livelihood indirectly needed for the same purpose can be produced by capital under this condition. That is why capitalist produc-

tion is capable of sustaining a self-dependent economic society. Capital, however, does not produce with a direct knowledge of the structure of social demand; that is to say, capitalist production peculiar to the commodity-economy is bound to be anarchistic. Each individual capital satisfies part of the social need while merely aiming at the augmentation of value guided as it is by the motion of prices. At the same time, it is true that the social demand is itself shaped in the reproduction-process of capital. For instance, means of production are in part demanded for the purpose of producing further means of production, and in part for the purpose of producing articles of consumption; articles for consumption are, in turn, demanded partly by the workers and partly by the capitalists for individual consumption. The different types of commodities are supplied because they are socially demanded; this is the way in which the commodity-economy satisfies the basic economic norm that is common to all societies, the norm of the rational management of economic life. In all societies the continuity of annual reproduction depends on the allocation of both labour-power and the means of production to the two *sectors of production* in accordance with the degree of intensity with which the sectoral products are socially required. A capitalist commodity-economy satisfies this norm by the law of value which asserts itself through the movement of prices. Capital, in other words, directs labour-power and the means of production to each *sector of production* so as to satisfy the social demand for the product, given the labour-time technically required for its production. A few numerical examples were constructed by Marx to exhibit these social interconnections as the reproduction process of commodities by the aggregate social capital. They are called the *reproduction schemes*.[9]

59. Suppose that the aggregate social capital produces annually the equivalent in money-value of 9000 million dollars, of which 6000 are in the form of the means of production and 3000 in that of the articles of consumption. Suppose also that the former are produced in *sector-I* and the latter in *sector-II*, with the following value composition of the products (c = constant-capital component; v = variable-capital component; s = surplus-value component):

$$\begin{aligned} &\text{I.} \quad 6000 = 4000c + 1000v + 1000s, \\ &\text{II.} \quad 3000 = \mathit{2000c} + 500v + 500s. \end{aligned}$$

If a simple reproduction is assumed, i.e., if the surplus-value components [of both sectors] are entirely consumed by the capitalists, then the value 2000 in the first sector (consisting of 1000v + 1000s) must be consumed by the capitalists and the workers of the same sector. Although this money-value of 2000 must be consumed, it is physically in the form of the means of production. In the second sector, however, there is the same money-value of 2000 (consisting of 2000 IIc), which is physically in the form of the articles of consumption, though representing the value of the means of production used up in this sector. If the exchange of these two equal values takes place, capital can produce once again on the same scale as before, i.e., with the capital compositions

$$\begin{aligned} &\text{I.} \quad 4000c + 1000v, \\ &\text{II.} \quad 2000c + 500v. \end{aligned}$$

Hence the fundamental condition of simple reproduction is that the sum of the variable-capital component of the surplus-value component of the output of the first sector should be equal to the constant-capital component of the output of the second sector: I (v + s) = IIc. The constant-capital component of the output of the first sector 4000c, of course, represents the means of production to be used again in the same sector, after being properly re-allocated by intra-sectoral exchanges. The value-added component of the output (the *value-product*) of the second sector, 500v + 500s = 1000, is wholly consumed by the workers and the capitalists of that sector. Both the inter-sectoral and intra-sectoral exchanges of the products as well as the purchases by capitalists and workers of the materials for individual consumption are mediated by money belonging to capitalists. This money returns to the capitalists who originally spend it upon the completion of the exchanges and stands by ready to act as the means of circulation in the exchanges of the products in the following year.[10]

60. In the case of an expanded reproduction, in which some part of the surplus-value component of the outputs of both sectors is accumulated, I(v + s) must be greater than IIc. Suppose, for instance, that the aggregate output of 8250 million dollars has been produced in the two sectors with the following value composition:

$$\left.\begin{aligned} &\text{I.} \quad 6000 = 4000c + 1000v + 1000s \\ &\text{II.} \quad 2250 = 1500c + \ \ 375v + \ \ 375s \end{aligned}\right\} = 8250$$

Suppose further that in the first sector the value 500s is to be accumulated with the value composition of capital 4 : 1 as before. Then the constant-capital component of the output of this sector adds 400c to the original 4000c; the variable-capital component likewise adds 100v to the original 1000v. Induced by this change in the first sector, the second sector too must accumulate because, corresponding to 1000v + 100(s)v + 500s in the first sector, the second sector must increase its constant-capital component from 1500c to 1600c by adding 100c. If the same capital composition 4 : 1 is to be maintained in this sector as well, the variable-capital component must increase by 25v so that the accumulation required from surplus value in this sector will be 125s. In this case, it is now possible for the value 1000v + 100(s)v + 500s of the first sector to be exchanged for the equal value 1500c + 100(s)c of the second sector.

$$\begin{aligned} &\text{I.} \quad 4000c + 400(s)c + \mathit{1000v} + \mathit{100(s)v} + \mathit{500s}, \\ &\text{II.} \quad \mathit{1500c} + \mathit{100(s)c} + \ \ 375v + \ \ 25(s)v + 250s. \end{aligned}$$

Thus under this accumulation the compositions of productive capital in the two sectors in the current year are:

$$\begin{aligned} &\text{I.} \quad 4400c + 1100v, \\ &\text{II.} \quad 1600c + \phantom{0}400v; \end{aligned}$$

and the resulting production can be shown as follows:

$$\left.\begin{aligned} &\text{I.} \quad 4400c + 1100v + 1100s = 6600 \\ &\text{II.} \quad 1600c + \phantom{0}400v + \phantom{0}400s = 2400 \end{aligned}\right\} = 9000.$$

The accumulation has taken place in the current year [raising the total output from 8250 to 9000] because in the preceding year the value-added component of the output (the value-product) of the first sector I(v + s) = 2000 was greater than the constant-capital component of the output of the second sector IIc = 1500, satisfying the condition I(v + s) > IIc. This condition shows the general economic norm that an expanded reproduction in any type of society must originate in an incremental production of the means of production. It shows, at the same time, that in a capitalist society this general norm is enforced by the specifically commodity-economic law known as the law of value. The accumulation can proceed in the following year in the same way. First, the aggregate output of 9000 is rearranged as follows:

$$\begin{aligned} &\text{I.} \quad 6600 = 4400 + \mathit{1100v} + \mathit{550s} + 440(s)c + \mathit{110(s)v}, \\ &\text{II.} \quad 2400 = \mathit{1600c} + \phantom{0}400v + 200s + \mathit{160(s)c} + \phantom{0}40(s)v; \\ &\text{I.} \quad [1100v + 550s + 110(s)v] = \text{II} \quad [1600c + 160(s)c] \end{aligned}$$

Then the composition of capital in each sector becomes:

$$\begin{aligned} &\text{I.} \quad 4840c + 1210v, \\ &\text{II.} \quad 1760c + \phantom{0}440v, \end{aligned}$$

and the resulting production will be:

$$\left.\begin{aligned} &\text{I.} \quad 4840c + 1210v + 1210s = 7260 \\ &\text{II.} \quad 1760c + \phantom{0}440v + \phantom{0}440s = 2640 \end{aligned}\right\} = 9900$$

The accumulation can continue similarly in the third year and onward.

61. The accumulation-process of capital does not differ from the previously discussed process of simple reproduction in that the exchange and the purchase of all products must be mediated by money. But the reproduction-process of capital must provide by itself the money needed for the circulation of all commodities. Even in a simple reproduction, at least that portion of gold money that is worn out in use must be restituted, other conditions of circulation being assumed unchanged. The production of gold belongs to the first sector, even though gold may not all be used as an

ordinary means of production but partly as money. Capitalists of both sectors accumulate money by procuring it in return for a part of their surplus value, a deduction from either the consumption or the capitalisation (conversion into the means of production and labour-power) of surplus-value. If this point is to be illustrated with the scheme of simple reproduction shown above, newly produced gold to restitute the worn-out gold money must, in this case, be acquired by capitalists of both sectors in return for part of surplus value which they do not consume. This part of surplus value consequently drops out of the reproduction-process. For example, let this value be 3 million dollars, and let capitalists of sector-I accumulate 2 million and capitalists of sector-II 1 million. Then the inter-sectoral exchange relations can be shown as follows:

$$
\begin{array}{ll}
\text{I.} & 6000 = 4000c + \mathit{1000v} + \mathit{997s} + \mathit{1s} + 2s, \\
\text{II.} & 2995.5 = \mathit{1997c} + 499.25v + 498.25s + \mathit{1s}, \\
\text{I.} & (1000v + 997s) = \text{II } 1997c, \text{ I } 1s = \text{II } 1s,
\end{array}
$$

where in the first sector I 2s denotes gold to be accumulated as money, and I 1s that part of gold production to be exchanged for the means of consumption produced in the second sector II 1s, i.e., to be consumed by the capitalists of the first sector and accumulated as money in the second sector. Hence even a simple reproduction must already satisfy the condition of accumulation $1(v + s) > \text{II}c$ in the present case, in which gold production is supposed to take place so as to make up for the depletion of the existing stock of gold money.[11] In the case of an expanded reproduction the production of monetary gold must also expand and more surplus value must drop out of the reproduction-process in a similar fashion. There are, of course, various ways of 'economising' the use of money, a cost of circulation, when the reproduction-process expands, so that gold production may not have to expand as fast as the general process of reproduction.

62. These schemes, illustrated with a set of simple numbers, aim at nothing more than to show that capitalist society too satisfies, albeit in the peculiarly commodity-economic form, the fundamental condition of simple and expanded reproduction which all societies must satisfy. In reality, of course, capital compositions and the rate of accumulation can vary in a multitude of different ways; there are some durable means of production which need not be replaced every year, as there are means of both production and consumption which are several times reproduced within a year. The schemes of reproduction can never at once show all of these complications, no matter how ingeniously one handles the arithmetic. Regardless of the complications, however, capital conforms to the above-mentioned fundamental condition of reproduction, as it is guided by the motion of the prices of the products; it can be entrusted to allocate the means of production and labour-power so as to meet the annual need for the commodity-products in the form of the means of production and

the articles of consumption. Individual capitalists and individual labourers do not, of course, directly perceive this general economic norm of social reproduction; their activities are merely compelled by the law of value which, asserting itself in the motion of prices, regulates the individual pursuit of private interests. Thus if a commodity is over-produced, a fall in its price compels a contraction of the scale of its production; if a commodity is underproduced, a rise in its price induces an expansion of the scale of its production. Hence the labour-time required for the production of each commodity cannot diverge very far from that which is socially normal. The law of value that governs a commodity-economy sees to it, as Marx states, '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' of products (*Capital*, III, p. 635). In other words, the law of value must apply to the whole of society in enforcing the general economic norm of reproduction. The relation between the two sectors expresses an 'equilibrium' of the law of value in this sense.[12]

63. The intersectoral relation does not, however, merely show that both the means of production and the articles of consumption are produced in equilibrium quantities. These various use-values are produced as commodities and mutually exchanged in the process of commodity circulation which is intermediated by money; this money too must result from the production of gold as a means of production. Gold as money just as any other commodity must, of course, possess a value determined by the law of value. Not all of the gold produced, it will be recalled, becomes money but only as much as is needed for the circulation of commodities, so that the greater part of gold annually produced as a means of production must in fact be used as a material for luxury goods. Gold embodied in luxury goods, however, can be readily reconverted into money whenever the need for it arises. This would mean that the determination of the value of gold does not presuppose a definite demand for it in the social process of reproduction, as is the case with the ordinary means of production and consumption. Yet gold is not to be produced disregarding the allocation of labour to the production of other products. The demand for luxuries, though seemingly boundless, is limited indirectly by the social reproduction-process of other products. This indirect control of gold production suggests indeed the subtlety of the law of value, which regulates the self-moving, peculiarly commodity-economic reproduction-process of a capitalist society.[13]

64. The reproduction schemes formally illustrate the reproduction-process of a capitalist society as a system in which the annual outputs C′ in the preceding year of the aggregate social capital are mutually exchanged as commodities and in which, on the basis of that exchange, aggregate production in the current year is performed in such a way as to prepare for whatever should take place in the following year. The schemes, of course,

assume that the reproduction of labour-power as a commodity is ensured by articles of consumption that capital produces; for it is labour-power that actually carries out production. That labour-power should be reproduced strictly *as a commodity* makes the process of aggregate social reproduction wholly dependent on the working of the law of value peculiar to capitalism. Labour-power, which reproduces itself with the articles of consumption purchased by wages, is allocated to the various spheres of production under the direction of capital and produces, in conjunction with the means of production already made available in the preceding year, new means of production and articles of consumption during the current year. This production adds to the value c of the existing means of production a new value v + s formed by current labour. Capital, however, regards even the v-component of the value of the new product, along with the c-component, as part of the initially advanced capital now recovered and reproduced. The s-component on the other hand, though it forms part of the *value-product* [v + s] newly created by labour in the same way as the v-component, becomes an increment of value freely disposable by capitalists, i.e., their *income*. Although wages are generally believed to constitute workers' income which by implication is as freely disposable as capitalists' income, wages are in fact quite different from income or revenue in that sense because they are the price of a definite commodity known as labour-power. It may be contested that capitalists' income too is nothing but money obtained by the sale of their commodities; so indeed it is. But this money originates in the [freely disposable] surplus part of the value-product, whereas the money that workers earn in return for their labour-power is earmarked in the reproduction-process to repurchase the rest of the value-product. Moreover, by selling labour-power as a commodity, workers do not part with it forever. Unlike other commodities it must remain even after sale with its owners, who are obliged to expend it [as the capitalist demands] in the production-process of capital. Labour-power must produce a new value along with the new product; it must reproduce the value paid in return for itself at the same time as it produces a surplus value. In other words, by the sale of the commodity called labour-power, workers are obligated to reproduce it with whatever part that they can buy back of their own product and simultaneously produce once again what they will have to buy back in future. Surely this is more than ordinary trade in a commodity. It is the form of commodity transaction that enshrouds the true economic function that labour-power performs, and that endows the price of labour-power with the semblance of workers' income parallel to the income of capitalists. The articles of consumption purchased by wages, or the so-called 'workers' [real] income,' can drop out of the reproduction-process of capital on this condition only: that they reproduce labour-power which shall return to the reproduction-process of capital. The surplus-value component of the new product which forms capitalists' income, on the other hand, can be disengaged from the reproduction-process of capital altogether and be freely disposed of. Capitalists' income, in other words, is the so-called net revenue [net product]; only because it is freely disposable can the accumulation of new capital originate in it.

65. Of annual *product-value* c + v + s, the value-product part v + s corresponding to that which is newly produced by labour in the current year, may, however, be considered as *income to society* in a very abstract sense. Indeed value-product may be entirely consumed if reproduction simply maintains the existing scale; if the scale of reproduction is to expand, additional investment must originate in the value product. In a capitalist society, since reproduction is carried out under the form of commodity by virtue of the conversion of labour-power into a commodity, both the v-component and the c-component of the product-value [c + v + s] are 'capitalised' and must be restituted by the sale of the product. It is, however, true even in that case that the v-component must be entirely consumed by workers and cannot, as is the case with c-components, stand ready for the following year's reproduction by merely having been exchanged for other products of capital. Labour-power is reproduced because workers consume materials for consumption *in their private life*, a process that is different from the production-process of capital. Thus even though the value of labour-power is to be determined by the labour-time required to produce the daily livelihood of a worker, this does not mean that the value of the livelihood is 'transferred' to the value of labour-power as a commodity; that is to say, even in a capitalist society, labour-power is reproducible in human life only. [The abstract sense in which value-product forms income to society is justifiable on this ground.] It is the social condition under which the propertyless workers reproduce their labour-power that ensures the constant reconversion of labour-power into a commodity. Unlike the means of production, labour-power cannot be produced as a commodity in the production-process of material things, nor can it be consumed as an ordinary commodity in the consumption-process properly speaking. The consumption of labour-power is labour itself which produces a new value-product v + s in excess of v. In a capitalist commodity-economy, however, even this human relation involving labour-power conforms to the peculiar rules of that economy by the 'commoditisation' and reification of labour-power; it is this conformity that endows the aggregate reproduction-process of a capitalist society with its characteristically commodity-economic regularity. To regard wages as mere labour-income parallel to profit (or surplus value that accrues to capital as income) is to neglect the distinctly commodity-economic form of wages and to propose an insignificantly general and abstract description of them. The so-called national income is an example of the commonplace notions that ignore the peculiarity of a commodity-economy. Yet this notion, just as many other commonplaces, cannot be described as entirely false because it has its root in the fact

that v + s may be viewed as social income in the abstract sense described above.

66. With this reservation I reject the popular practice of treating wages in the Doctrine of Distribution along with other income categories such as profit, rent, and interest. The Doctrine of Distribution must exclusively deal with the mechanism of the distribution of surplus value among capitalists themselves and between capitalists and landowners. Wages, as I have already stated, have been fully explained in terms of the capitalists-versus-workers relation in the Doctrine of Production; this relation is not to be modified by other relations to be examined in the Doctrine of Distribution in connection with such income categories as profit, rent, and interest. The Doctrine of Distribution must be firmly grounded on the relation so far discussed between capitalists and workers. But, since surplus value already produced must now be distributed in the commodity-economic fashion through the market form of prices, there now arises a need for the Doctrine of Distribution which, by means of a few general principles of the division of surplus value, establishes more concrete social relations of a capitalist commodity-economy.

## Notes

[1] The reproduction-process of labour-power is, of course, a consumption-process of material things, not a production-process properly speaking. That is to say, labour-power as a commodity must be reproduced in the private life of the workers, not in the process of material production. However, the conversion of labour-power into a commodity compels the reproduction 'as a commodity' of labour-power through the individual consumption of wage-earners with the recurrence and regularity characteristic of a production-process. Thus labour-power is 'produced' by the consumption of material things just as material things are produced by the consumption of labour-power. Such an inter-relatedness, however, must not obviate the distinction between the processes of production and consumption. Labour-power and the means of production are sometimes said to be 'productively consumed,' though this does not make the production-process of material things their individual consumption-process.

[2] The determination of the value of labour-power as a commodity cannot be said to follow the usual principle of the determination of commodity values in general. In the case of labour-power, its value is determined indirectly by labour-time spent on the production of the means of livelihood required for the reproduction of labour-power. But this involves the practical problem of determining what quality and quantity of the means of livelihood should be deemed necessary for the reproduction of labour-power. As will be explained later, this problem must be settled historically, i.e., through a consideration of the movement of wages accompanying the accumulation of capital. The prosperity phase of an industrial cycle, which embodies a particular level of development of the capitalist method of production, reveals the correspondingly appropriate level of real wages. In general terms it can only be stated that 'all the capitalist cares for, is to reduce the labourer's individual consumption as far as possible to what is strictly necessary' (*Capital*, I, p. 572). Marx elaborates this point as follows:

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 it productive to the capitalist and to the State, since it is the production of the power that creates their wealth. (*Op. cit.*, p. 573).

[3] These words of Marx quoted in the text are immediately followed by the subordinate clause:

Just as cleaning machinery does [forms a factor in the production and reproduction of capital], whether it be done while the machinery is working or while it is standing (ibid.).

Marx further continues:

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 (ibid.).

However, it would certainly be going too far to consider wage-earners in the same way as 'machinery or the beasts of burden' because capital cannot so completely reduce the reproduction of labour-power to 'a factor' in the production-process. The fact that the reproduction of labour-power forms the individual consumption-process of the workers parallel to, but not integrated in, the production-process of capital must not be underestimated because of the impression that the workers' position sometimes resembles that of machinery and beasts. Even when the impression is realistic, one must not forget that workers and capitalists are interrelated *by commodity trade in labour-power*. Labour-power is converted into a commodity, but workers themselves are not; wage-earners cannot be reduced to 'things' to the extent that slaves can be.

[4] As already pointed out, capital as a circulation-form is a self-repeating process always ready to reinvest at least the M out of an M′. Surplus value m earned in this process should also be expected to join the M as a matter of course, i.e., in view of the nature of capital. The part of surplus value devoted to the personal consumption of the capitalist is a deduction from that which is normally converted into capital. On this point, Marx comments as follows:

Except as a personified capital, the capitalist has no historical value, and no right to that historical existence, . . . And so far only is the necessity for this own transitory existence implied in the transitory necessity for the capitalist mode of production. But, so far as he is personified capital, it is not values in use and the enjoyment of them, but exchange-value and its augmentation, that spur him into action. Fanatically bent on making value expand itself, he ruthlessly forces the human race to produce for production's sake; he thus forces the development of the productive powers of society, and creates those material conditions, which alone can form the real basis of a higher form of society, a society in which the full and free development of every individual forms the ruling principle. Only as personified capital is the capitalist respectable. As such, he shares with the miser the passion for wealth as wealth. But that which in the miser is a mere idiosyncrasy, is, in the capitalist, the effect of the social mechanism, of which he is but one of the wheels (*Capital*, I, p. 592).

And further,

So far, therefore, as his actions are a mere function of capital—endowed as capital is, in his person, with consciousness and a will—his own private consumption is a robbery perpetrated on accumulation, just as in book-keeping by double entry, the private expenditure of the capitalist is placed on the debtor side of his account against his capital. To accumulate, is to conquer the world of social wealth, to increase the mass of human beings exploited by him, and thus to extend both the direct and the indirect sway of the capitalists (ibid.).

Of course, not all individual capitalists are expected to act exactly as 'personified capital.' But the latter should be understood as setting the norm of capitalist behaviour, a deviation from which may cause the capitalist to forfeit his own being. As Marx points out after the above passages, and as this book too will explain later, the inviolability of this norm becomes evident, as competition among capitals compels each individual capital to expand itself continuously. In more concrete terms, however, capitalists' attitude towards accumulation undergoes various changes in response to the development of capitalism, as Marx examines in detail (*op. cit.*, pp. 593ff.). For instance, the greatly accelerated accumulation of capital makes it possible to increase the luxury of capitalists' consumption without necessarily detracting from the need for accumulation. Thus neither should the above-stated norm of capitalist behaviour be taken to exclude the concrete evolution of the behaviour of capital, nor should the details of concrete facts divert one's attention from that which characterises the guiding principle of capital.

[5] Referring to this point Marx writes as follows:

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 (*Capital*, I, pp. 628–9).

Although one must credit Marx for discovering this important trend, which is certainly true in the long run, i.e., in the context of the development of capitalism from one prosperity phase to another, this particular statement tends to obscure the full significance of Marx's more important *law of population peculiar to capitalism*. I even believe that the exaggeration of this trend precluded *Capital* from developing a fully satisfactory theory of economic crises. For example, he says:

The course characteristic of modern industry, viz., a decennial cycle (interrupted by small 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 reformation of the industrial reserve army or surplus-population (*op. cit.*, pp. 632–3).

This sentence which contains the hopeful sign of a cyclical theory is immediately followed by such an anti-climax as:

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 (p. 633).

This conclusion de-emphasises the important contrast between the absorption of surplus population in prosperity and the formation of it in stagnation. Marx rather one-sidedly stresses the formation of surplus population, endeavouring to establish the law of population on the basis of this aspect alone. Regarding the absorption of surplus population, he mentions rather cursorily that:

there must be the possibility of throwing great masses of men suddenly on the decisive points without injury to the scale of production in other spheres (p. 632).

This is indeed a particular problem concerning the absorption, but it cannot be surmised to offer a general theory. Marx may not have entirely neglected the alternate formation and absorption of surplus population because, referring to the periodicity of capital accumulation, he says the following:

As the heavenly bodies, once thrown into a certain definite motion, always repeat this, so is it with social production as soon as it is once thrown into this movement of alternate expansion and contraction. Effects, in their turn, become causes, and the varying accidents of the whole process, which always reproduces its own conditions, take on the form of periodicity. When this periodicity is once consolidated, even Political Economy then sees that the production of relative surplus-population—i.e., surplus with regard to the average needs of the self-expansion of capital—is a necessary condition of modern industry (p. 633).

But so long as Marx insists on the fundamental presupposition of 'a progressive qualitative change in the composition of capital,' relative surplus population cannot be properly understood as 'a necessary condition' of 'the course characteristic of modern industry.' The theory of capital accumulation must at least show through the working of the law of population that capitalist development necessarily constitutes a cyclical process. The reason why this process must contain the phenomenon of economic crisis, however, cannot be made fully clear in this context as yet; for the theories of profit and interest, which must be developed later, are relevant.

[6] Marx distinguishes three forms of existence of the 'industrial reserve army' or relative surplus population as (i) the floating, (ii) the latent, and (iii) the stagnant, explaining them in turn as follows:

(i) In the centres of modern industry—factories, manufactures, ironworks, mines, etc.—the labourers are sometimes repelled, sometimes attracted again in greater masses, the number of those employed increasing on the whole, although in a constantly decreasing proportion to the scale of production. Here the surplus population exists in the floating form (*Capital*, I, p. 641).

(ii) As soon as capitalist production takes possession of agriculture, and in proportion to the extent to which it does so, the demand for an agricultural labouring population falls absolutely, while the accumulation of the capital employed in agriculture advances, without this repulsion being, as in non-agricultural industries, compensated by a greater attraction. Part of the agriculture population is therefore constantly on the point of passing over to an urban or manufacturing proletariat, and on the look-out for circumstances favourable to this transformation. (Manufacture is used here in the sense of all non-agricultural industries.) This source of relative surplus-population is thus constantly flowing. But the constant flow towards the towns presupposes, in the country itself, a constant latent surplus-population, the extent of which becomes evident only when its channels of outlet open to exceptional width. The agricultural labourer is therefore reduced to the minimum of wages, and always stands with one foot already in the swamp of pauperism (*op. cit.*, p. 642).

It may be noted here that the latent form of surplus population in agriculture need not be related to the development of capitalism in agriculture; for surplus population can easily arise in consequence of the natural growth of agricultural population.

(iii) The third category of the relative surplus population, the stagnant, forms a part of the active labour army, but with extremely irregular employment. Hence it furnishes to capital an inexhaustible reservoir of disposable labour-power. Its conditions of life sink below the average normal level of the working-class; this makes it at once the broad basis of special branches of capitalist exploitation. It is characterised by maximum of working-time, and minimum of wages. We have learnt to know its chief form under the rubric of 'domestic industry.' It recruits itself constantly from the supernumerary forces of modern industry and agriculture, and specifically from those decaying branches of industry where handicraft is yielding to manufacture, manufacture to machinery. Its extent grows as, with the extent and energy of accumulation, the creation of a surplus-population advances. But it forms at the same time a self-reproducing and self-perpetuating element of the working-class, taking a proportionally greater part in the general increase of that class than the other elements. In fact, not only the number of births and deaths, but the absolute size of the families stand in inverse proportion to the height of wages, and therefore to the amount of means of subsistence of which the different categories of labourers dispose. This law of capitalistic society would sound absurd to savages, or even civilized colonists. It calls to mind the boundless reproduction of animals individually weak and constantly hunted down (*op. cit.*, p. 643).

In addition to these three forms of surplus population Marx also includes the following categories of paupers in his industrial reserve army:

The lowest sediment of the relative surplus-population finally dwells in the sphere of pauperism. Exclusive of vagabonds, criminals, prostitutes, in a word, the 'dangerous' classes, this layer of society consists of three categories. First, those able to work. One need only glance superficially at the statistics of English pauperism to find that the quantity of paupers increases with every crisis, and diminishes with every revival of trade. Second, orphans and pauper children. These are candidates for the industrial reserve army, and are, in times of great prosperity, as 1860, e.g., speedily and in large numbers enrolled in the active army of labourers. Third, the demoralised and ragged, and those unable to work, . . . (*op cit.*, pp. 643–4).

Marx's classification of the industrial reserve army closely follows the empirical reality of English capitalism at this time. These concrete forms and categories indicate the extent to which capital actually seeks labour-power during the cyclical upswing of its accumulation, i.e., during the process of absorbing relative surplus population already formed by a general rise in the organic composition of capital. The specific mode of existence of the reserve army should not, however, obscure the basic theory of capital accumulation.

Marx summarises the above-quoted explanations by the following:

The greater the social wealth, the functioning capital, the extent and energy of its growth, and, therefore, also the absolute mass of the proletariat and the productiveness of its labour, the greater is the industrial reserve army. The same causes which develop the expansive power of capital, developed also the labour-power at its disposal. The relative mass of the industrial reserve army increases therefore with the potential energy of wealth (p. 655).

And further:

But the greater this reserve army in proportion to the active labour-army, the greater is the mass of a consolidated surplus-population, whose misery is in direct proportion to the labour put in. The more extensive, finally, the lazarus-layers of the working-class, and the industrial reserve army, the greater is official pauperism. *This is the absolute general law of capitalist accumulation*. Like all other laws it is modified in its working by many circumstances, the analysis of which does not concern us here (p. 644).

This so-called 'law of pauperisation,' however, is in reality no more than a circumstantial phenomenon which enshrouds the real law of capitalist accumulation, according to which relative surplus population is alternately formed and absorbed through the cyclical process of growth. 'The analysis of the many circumstances' does indeed concern us for the purpose of clarifying such a circumstantial phenomenon, which is not a general law. The same consideration applies to what Marx calls 'the accumulation of misery, corresponding with the accumulation of capital,' i.e., 'Accumulation of wealth at one pole is, therefore, at the same time, accumulation of misery, agony of toil, slavery, ignorance, brutality, mental degradation, at the opposite pole (p. 645)'. Such a problem can only be satisfactorily treated in the stages-theory of capitalist development and in empirical studies in which the proposition of the pure theory concerning the basic relation between workers and capitalists in the accumulation-process of capital must be evoked. It is the *law of population peculiar to capitalism* that is, 'like all other laws, modified in its working by many circumstances, the analysis of which does not concern us here,' not the contingent phenomenon of pauperisation. Marx himself in the later context of the 'historical tendency of capitalist accumulation' does not let the 'law of pauperisation' work its way through, because 'with this too,' he claims, 'grows the revolt of the working-class, a class always increasing in number, and disciplined, united, organised by the very mechanism of the process of capitalist production itself (p. 763)'. Neither the pauperisation nor the revolt of the working-class are simple problems capable of being reduced to the manifestations of a general, theoretical law.

[7] Labour-power, which is generated at the inception of capitalism through the process of the so-called primitive accumulation, varies of course in quality from one country to another. Even though with the development of capitalism labour-power is simplified and standardised, the workers who own it must be required to meet a certain level of ordinary education. Their education, unlike the training of medieval craftsmen, is not professional but the general level of their ordinary education has to be raised with the development of capitalism. As the quality of their education rises, the aspiration by workers for a higher standard of living will, of course, be stimulated.

[8] According to Marx:

The industrial reserve army, during the periods of stagnation and average prosperity, weighs down the active labour-army; during the periods of over-production and paroxysm it holds its pretentions in check. Relative surplus-population is therefore the pivot upon which the laws of demand and supply of labour works. It confines the field of action of this law within the limits absolutely convenient to the activity of exploitation and to the domination of capital (*Capital*, I, p. 639).

This proposition surely contains a great deal of truth. But Marx's concept of 'industrial reserve army' connotes more than can be strictly treated in the pure theory, so that these 'limits absolutely convenient to the activity of exploitation and to the domination of capital' cannot be defined unambiguously. The limits are set, as will be clarified later in the theory of profit, by the *excess of capital* consequent upon the rise of wages throughout the phase of prosperity. Such limits are certainly not inconsistent with an improvement in the living standard of the working-class, nor do they contradict the theoretical proposition that labour-power as a commodity is bought and sold according to its value.

[9] As often described, the reproduction schemes contrived by Marx are true works of genius. Praising Marx in her *Accumulation of Capital*, Rosa Luxemburg writes as follows:

Karl Marx made a contribution of lasting service to the theory of economics when he drew attention to the problem of the reproduction of the entire social capital. It is significant in the history of economics that we find only two attempts at an exact exposition of this problem: one by Quesnay, the father of the Physiocrats, at its very inception; and in its final stage this attempt by Marx (Rosa Luxemburg, *The Accumulation of Capital*, translated by Agnes Schwarzchild, London, 1951; p. 31).

Marx's reproduction schemes, originally inspired by a critique of Quesnay's *Tableau économique*, are adopted in the theoretical systems of *Capital* for the purpose of expounding 'the reproduction and circulation of the aggregate social capital.' In the preceding chapter on the circulation-process of capital, I have quoted a passage from Marx, in which he credits Quesnay for selecting the circuit C′ . . . C′ of commodity-capital as the groundwork for the *Tableau économique*, saying that 'it shows great and true discretion' on Quesnay's part. Marx's reproduction schemes too are grounded on this circuit and not on the others because the schemes are designed to display the circular flow of all the products of the aggregate social capital.

[10] For example, in the intra-sectoral exchanges of the means of production in the first sector (4000 Ic), it may be assumed that the capitalists of this sector are divided into group-A and group-B. If the capitalists of group-A purchase the means of production from those of

group-B, by spending 2000 million dollars, the money of this value is transferred from the capitalists of group-A to those of group-B. But when the latter purchases the means of production from the former, the same money returns to the capitalists of group-A. In the meantime this money has mediated the exchange of the means of production owned by the capitalists of group-A for those owned by the capitalists of group-B. Suppose now that the capitalists of sector-I pay 1000 million dollars as wages to their labourers. When the labourers purchase the materials for consumption with this money from the capitalists of sector-II, the latter can spend it to buy the means of production of value 1000 from the capitalists of sector-I. Hence the 1000 million dollars return to their original spenders after having mediated the exchange of the means of production 1000 Iv for the materials for consumption 1000 IIc, and stand by ready to be paid once again as wages in the first sector. If again the capitalists of sector-I purchase the means of consumption 1000c for their personal consumption for the capitalists of sector-II, the latter can use the money so earned for the purpose of procuring the means of production 1000s. In this case too, the original spenders of 1000 million dollars recover the money which has mediated the exchange of the means of production for the means of consumption.

In all cases money that mediates the exchange of products returns to the capitalists who originally spend it. In each of the above illustrations I have only shown one of several alternative cases. For example, it may alternatively be assumed that the capitalists of sector-II originally spend 2000 million dollars to buy the means of production from the capitalists of sector-I. Then the latter can use 1000 out of their sales proceeds of 2000 for their own consumption and the remaining 1000 for the payment of wages. In this case too, the money is used to buy the articles of consumption from sector-II and returns where it originally starts. Similarly, the capitalists of sector-II may spend 500 million dollars for their own consumption and another 500 for the payment of wages. The money is either directly or eventually used to buy the articles of consumption, the products of sector-II, and so returns to the capitalists who originally spend it. In these illustrations, I have assumed, for instance, that 2000 million dollars are needed to circulate 4000 Ic; in reality considerably less money is enough to circulate the products because of a higher velocity of circulation and other reasons.

[11] In my earlier book *Keizai Genron* [*Principles of Political Economy*] (1950), I recognised that the value composition of the output of the gold producing sector can differ from that of the total output of the aggregate capital. But having considered the gold producing sector ($I^g$) parallel to the first sector (I), I was led to believe that monetary gold must be supplied from part of $I^g$ (v + s), but that the rest of $I^g$ (v + s) and the whole of $I^g$c must consist of non-monetary gold. I wish to revoke this argument which was erroneous. The correct reasoning should be that the output of monetary gold, which capitalists of both sectors must procure in return for part of their surplus value, must be found in kind within the surplus-value component of the first sector as a whole, i.e., in Is.

[12] The inter-sectoral 'equilibrium' observed in the reproduction schemes of a capitalist commodity-economy, even in the theoretically visualised model of a pure capitalist society, should be understood to hold only *approximately* as prices gravitate towards their central limits. Although the anarchistic production and accumulation of each individual capital are subject to the regulation of the law of value, no one need, either actually or theoretically, be trading at equilibrium prices. The theory merely demonstrates the necessity that the law of value asserts itself in the course of anarchistic production. Economic laws work quite differently from the laws of nature, the working of which may be experimentally tested. The equilibrium of reproduction, therefore, does not suggest that a general economic norm which lies outside of a capitalist economy demands its compliance, nor that a capitalist economy because of its anarchism of production may from time to time deviate from this general norm. Each individual capital produces anarchistically indeed, but it must obey the regulation of the law of value, the global consequence of which is to realise the norm of reproduction common to all societies. In other words, the law of a commodity-economy is not independent of a general economic norm, but rather contains the latter within its peculiar

form of fluctuating prices. The law of value becomes an economic law because it has the power to realise a general economic norm on a society-wide scale.

From this point of view, it would be completely incorrect to assert that the reproduction of a capitalist society follows the numerical relation of the schemes exactly or that the schemes can possibly represent an unbalanced development of the relation of reproduction in a capitalist society. Such misapprehensions would deny the automatic power of self-regulation inherent in a capitalistic commodity-economy, and would neglect the fundamental rationale that makes the theoretical treatment of capitalism possible. The wrong interpretations and the misuses of the reproduction schemes based upon such misapprehensions are still prevalent among many Marxist economists. It appears that they misunderstand the nature of the law of value: its peculiar form of application to a capitalist economy, and the restriction imposed on the working of the law *by the use-value aspect of the commodities*. The following passage from Marx ought to clarify this point:

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 in 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 has 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 labour-time for this particular kind of product under prevailing conditions of production (*Capital*, III, pp. 635–6).

The limitation which Marx mentions here due to the use-value of commodities imposes, however, a passive constraint upon the unfolding of the law of value. This limitation does not, as the marginal utility theory might assert, actively form any value. Yet a simple-minded approach to the labour theory of value has often neglected the significance of this passive constraint on the law of value, and over-emphasised the active determination of commodity values by the socially necessary input of labour-time alone. Such a one-sided view tends to obstruct a full understanding of the law of value, the peculiarity of which is that it enforces itself only through the motion of prices.

13 I have already mentioned in the earlier chapter on Money that the quantity of money as the means of circulation, though determined by the required volume of commodity circulation, is in fact adjusted by what is generally known as *funds* or what Marx rather calls 'money as money' formed in the course of the circulation-process of capital. But the quantity of funds in turn must be adjusted by the supply of monetary gold which must be produced together with non-monetary gold. As stated in the text, the greater part of non-monetary gold is used as a material for luxury goods and drops out of the social system of reproduction, forming a pool from which money can be supplied as the need arises. Potential money, therefore, is always produced in a greater or smaller quantity in the normal process of social reproduction and

stands by ready to be activated at any moment. On this point, Marx has the following to say:

Just as the precious metals are useless in the direct process of production, so they appear to be unnecessary as means of subsistence, i.e., as articles of consumption. Any quantity of them can thus be placed at will within the social process of circulation without impairing production and consumption as such. (*A Contribution to the Critique of Political Economy*, Moscow, 1970; p. 154).

And, moreover,

Gold and silver—are not only negatively superfluous, i.e., dispensable objects, but their aesthetic qualities make them the natural material for pomp, ornament, glamour, the requirements of festive occasions, in short, the positive expression of supra-abundance and weather (ibid.).

It is this property that makes gold produced but not used as money the object of social demand without any direct and definite limit, forming in consequence a flexible source of supply of monetary gold, as

the fact that it is possible to transform gold and silver from coin into bullion, from bullion into articles of luxury and *vice versa*, the advantage they have over other commodities of not being confined to the particular useful form they have one been given makes them the natural material for money, which must constantly change from one form to another (ibid., p. 155).

Earlier in the chapter on Commodities, I mentioned that gold possesses the physical properties most suitable to serve as the general equivalent, and surmised that gold of all commodities became money because of them. But these use-value properties must be supplemented by the following value properties of gold. First, a fairly small quantity of gold can contain a great deal of value; secondly, its 'value is . . . more stable than that of other commodities on the average' (ibid.). This second property may be due to the fact that the demand for gold as a luxury article is not directly limited by the social reproduction-process itself, and hence that excess production or the abundance of the existing stock of gold does not *immediately* lead to a fall in its value. Thus gold represents a surplus product that is not directly necessary for the process of reproduction as such; possessing a certain value as a product of labour, however, it mediates commodity circulation as it measures the value of commodities. Not only, moreover, does it become the value-object vis-à-vis all other commodities, but it also constitutes the starting-point of the value-augmenting motion of capital. This peculiar usage of gold as money is a necessary detour that a capitalistic commodity-economy must make in organising a society's real economy under the form of commodity characterised by the unremitting pursuit of the production of surplus value.

# PART III

# THE DOCTRINE OF DISTRIBUTION

# INTRODUCTION

67. The motion of capital represented by the formula $M—C$ . . . . $P$ . . . . $M'—C'$ involves a chrematistic process of value augmentation. As already stated in Part I: Chapter 3, the increment of value or surplus value relative to the sum M of advanced capital is called *profit*, the acquisition of which is the sole purpose of capital. From this point of view surplus value accrues to the whole of capital advanced, so that even the constant part of capital which does not directly produce surplus value ought to have a share in it for being part of the total capital investment. In contrast to the rate of surplus value s/v which defines the social relation of workers vis-à-vis capitalists, the rate of profit s/(c + v), which is the ratio of surplus value to total invested capital, expresses a social relation of capitalists among themselves. Whereas the former is a production-relation internal to the process of production (at least to the aggregate process of production in which the capitalist class confronts the working class, if not to the production-process of an individual capital), the latter relation places capitalists, so to speak, outside of the production-process allowing them to observe the efficiency of its value augmentation per given period of time. Thus the rate of profit offers a standard, according to which capital selects various *spheres of investment* so as to produce and supply the diversity of the use-values that are socially demanded, though capital itself is not directly interested in these use-values. This is the manner in which capital satisfies the social demand, making a commodity-economic detour so to speak, and developing in concrete terms a peculiarly commodity-economic principle of capitalist distribution. The sharing of surplus value by profit-earners with the recipients of rent and interest is ancillary to the enforcement of this fundamental principle of capital.

68. *Rent* is a concession of capital to the proprietors of limited and monopolisable natural powers, generically represented by *land*, which are needed as means of production in the production-process of capital, but which also set an external restriction on the activity of capital. *Interest*, on the other hand, is the transfer of incremental surplus value produced in consequence of the utilisation of idle money-capital (which arises from time to time in the motion of individual capitals) as *investible funds* by other capitals. Such a utilisation of funds in effect shortens the period during which capital must remain in the form of commodities or money in the entire process of social reproduction, and hence saves society the costs of circulation. Whereas rent is a share of surplus value by those who stand outside of the motion of capital, interest arises from inside of it as the production of increased surplus value is made possible by the saving of the circulation costs. Yet rent is earned from a direct participation in the

production-process of capital, unlike interest which derives from a supplementary and additional contribution to the motion of capital. Hence, after profit, the Doctrine of Distribution must first treat rent and next discuss interest.[1] The theoretical treatment of both rent and interest must, of course, presuppose a purely capitalist society as in the theory of profit. In other words, rent must be viewed here strictly as the payment by capitalists for the rental of land upon which they produce with labour-power purchased as a commodity; the source of interest must likewise be explained by the mutual financing of idle funds among capitalists themselves who invest in industrial operations. Other more concrete relations affecting rent and interest must be examined in the light of these fundamental characterisations.[2]

69. The financing of idle money-capital generated from the motion of industrial capital, i.e., the conversion of such money-capital into investible funds, is arranged by the special institution known as a bank, which develops into *bank-capital* with a share in the general profit. Through their financing operations banks save capital its circulation-costs, as the duration of time for capital to be tied in the form of money is reduced by such operations. Correspondingly, there also arises another type of capital, called *commercial capital*, the purpose of which is to save the circulation-costs by shortening the time during which capital remains in the form of commodities. For saving the costs of buying and selling commodities, commercial capital also shares in the general profit. Commercial profit, however, is no longer directly tied to surplus value obtained in the production-process of capital; it seemingly springs from the entrepreneurial activity of the capitalists. Whence arises the conception of so-called entrepreneurial profit. Side by side with this illusory form, moreover, capital itself develops into what is called 'interest-bearing capital,' the form in which the fetishistic character of capitalist commodity-economy reaches perfection. For with this form the commonplace notion which Marx calls the 'trinity of bourgeois society' is consummated, according to which interest is to capital just what rent is to land and wages to labour. The class-relation of capitalist society is thus shrouded by a commodity-economic veil. In the Doctrine of Distribution, the general principle governing the distribution of surplus value in the form of profit must first be expounded. This principle will then be supplemented by the theories of rent and interest. Finally, with the disclosure of the peculiar class characteristics of capitalist society, the Doctrine concludes the pure theory of capitalism.

## Notes

[1] In Marx's *Capital*, the general theory of profit is immediately followed and supplemented by the theory of commercial profit; this latter theory in turn opens the discussion on interest. Following this approach, however, the function of commercial capital in saving the costs of

circulation cannot properly be explained as flowing from the general need for capital to save these costs, the need upon which the theory of interest must rest. Marx's approach also leads, as *Capital* shows, to a theory of interest unfounded on the presupposition of a purely capitalist society. The theory of interest including the account of commercial profit must follow the theory of rent which directly supplements the general theory of profit because rent originates in the direct participation of landed property in the production-process of capital. I believe that the formation of rent can and must be logically explained prior to the emergence of interest motivated by the saving of circulation costs.

[2] In practice, of course, there is rent paid by non-capitalist farmers to the landlord for the rental of land, as there are interest payments on loanable funds not directly supplied by the motion of capital. These and other forms of rent and interest cannot be disregarded in the study of an actual economy, but their significance would not be clarified unless they are examined in the light of the more fundamental forms of rent and interest. As far as rent is concerned Marx realises this; for after presupposing the capitalist mode of production in the study of rent, he goes on to say:

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 (*Capital*, III, p. 615).

Yet, in the case of interest, Marx fails to uphold the same methodological approach. In fact, his theory of interest, as I shall illustrate later, cannot be said to be based on the supposition of a purely capitalist society.

# *Chapter 1*
# PROFIT

## The Formation of the General Profit-Rate: Transformation of Values into Production-Prices

70. Although the form of industrial capital M—C . . . . P . . . . C′—M′ involves value augmentation in its production-process, it is still basically a circulation form, the general nature of which is already portrayed by the formula of merchant capital: M—C—M′. To a merchant, the selling of commodities C is not an end but merely a means of augmenting a money-value M into a greater money value M′. Nor is the production of commodities C′ the goal of industrial capital. Indeed, capitalists acquire surplus value only by selling commodities, whether the surplus value originates in the process of production or is merely embezzled in that of circulation. The acquisition of surplus value is always associated with the practice of 'buying cheap and selling dear.' Hence it is natural that capitalists regard the purchase price of the means of production and labour-power in M—C as their *cost-price* against the selling price of their commodities in C′—M′. Individual capitalists invariably strive to buy the means of production and labour-power as cheaply as possible and to sell their products as dearly as possible. They also take trouble not to waste the consumption of the means of production and labour-power in the process of production, using the former sparingly and the latter fully. Capitalists, in other words, endeavour to minimise their cost-price so as to earn a greater profit. Since, however, all prices gravitate towards definite values, the means of production and labour-power will not be made available at prices which are too low; neither can products be sold at overly high prices. Although some individual capitalists might make substantial profits 'by purchasing cheap and selling dear,' such particular instances cannot explain the real source of profit. In a purely capitalist society in which unrestricted competition prevails among capitals, the means of production, labour-power, and commodity-products must all tend to be traded at definite prices; it should also be expected that the efficiency of capital in the use of the means of production and labour-power in the process of production tends to approach a normal standard. Only with these general presuppositions can it be made apparent that capital possesses the faculty of allocating itself to the various spheres of production so as to supply all the products that society demands. Yet, even with these presuppositions, the value of a commodity appears to capital as a mere composite of cost-price and surplus value.[1]

71. From the capitalists' viewpoint, therefore, the selling-price of a commodity must, in the first instance, be sufficient to cover its cost-price;

the selling-price must then exceed the cost-price (the cost of capital investment) in order to yield a surplus value. Capital, of course, seeks as much surplus value as possible, this latter being the sole purpose of a capitalist operation. Since all commodities, as already pointed out, tend to be traded at definite values, surplus value can in principle be obtained only in consequence of the surplus labour of workers. Yet the same capital value need not always produce the same amount of surplus value, because cost-price may be of various value compositions reflecting differences in the technical conditions which characterise the production-process. If, for example, the same cost-price of 100 is invested by one capital in the proportion of 90 in the means of production and 10 in labour-power, and by another capital in the proportion of 70 in the means of production and 30 in labour-power, then, even if the rate of surplus value is 100 per cent in both cases, there will be differences in surplus value as well as in product-value, the value composition in each case being

$$90c + 10v + 10s = 110,$$
$$70c + 30v + 30s = 130.$$

Moreover, the rate of profit, which is the ratio of surplus value to total invested capital, is also different in the two cases. Since the rate of profit to capital is the guiding standard of investment, the first industry with the lower profit-rate will be avoided and the second with the higher profit-rate will be chosen by capital in the present example. It should be noted here that the presence of fixed capital introduces some additional complications because the cost-price includes only part of the value of fixed capital. As already stated in Part II: Chapter 2, fixed capital has its value transferred to the product not at once but in instalments; yet in calculating the rate of profit as the ratio of surplus value to total invested or advanced capital, the denominator must represent the entire value of fixed capital, not just the portion of it contained in the cost-price. For capitalists reckon that surplus value accrues to the totality of capital advanced, fixed as well as circulating. Moreover, the concept of cost-price would not conform to capitalist rationality unless it were viewed against the duration of time required for value augmentation. The time required for value augmentation does not mean here the labour-time already embodied in the cost-price of a product, but the lapse of time during which the product is produced by the capitalist and sold as a commodity, i.e., the lapse of time within which, by the sale of the product, surplus value is actually obtained in the form of profit. This length of time for which a definite stock of capital is tied up before it is recovered as the cost-price of a commodity is a factor determining the rate of profit. Thus the rate of profit is determined by the following three factors: (1) the rate of surplus value; (2) the composition of capital in the sense of the ratio of variable to constant (fixed as well as circulating) capital; and (3) the turnover-time of capital, consisting of both the production-period (of which the working-period is a part) and the circulation-period (of which the period for the selling of the commodities is decisive). Any variation of these factors affects the investment policy of capital, the sole purpose of which is the acquisition of profit.

72. Let us first examine the rate of surplus value. As already mentioned, a day's labour-time is divided into the necessary labour-time (or the labour-time needed for the production of workers' livelihood) and the surplus labour-time over and above the necessary. The rate of surplus value being the ratio of the surplus to the necessary labour-time, an advance in the productive powers of labour generally increases the rate by reducing the necessary labour-time, even though the shortening of this part of labour-time may eventually cause a reduction, to some extent, of the length of the working-day itself. It must be noticed, however, that when the rate of surplus value rises or falls the effect is common to all branches of industry. Of course, workers cannot always freely migrate to the branches of industry in which wages are relatively higher and the working-day relatively shorter, nor can they perform equally skilled labour in all the spheres of production. Yet the simplification of the labour-process consequent upon the evolution of modern mechanised industry tends to remove such frictions, so that the general supposition of an equal rate of surplus value in all the fields of industrial production is well justified. In other words, it should be understood in theory that, when an individual capital selects its sphere of investment in competition with other capitals, the rate of surplus-value which defines the workers-versus-capitalists relation must be deemed common to all capitals. Inequalities that in practice remain in the rate of surplus value over different capitalist activities must be attributed to certain particular conditions requiring in each case separate explanations.

73. The composition of capital, on the other hand, must be expected to differ from one branch of industry to another; such differences in capital composition do not tend to be eliminated with the development of capitalism. The branches of industry in which a large-scale operation is advantageous usually require a higher capital composition, relatively more capital being invested in its constant component than in its variable component; the branches in which a small-scale operation is more appropriate usually maintain a lower capital composition. This means that, even in theory, differences in the composition of capital from one branch of industry to another must be fully allowed for. But the consequence of this allowance, as pointed out earlier, is that capital of the same value produces more surplus value if invested in the branches of industry with a relatively lower capital composition and hence that capital tends to be attracted to such branches at the expense of others. It, therefore, becomes unavoidable that the price of the products produced with a higher composition of capital rises above its value and the price of those produced with a lower capital composition falls below its value. The prices that equalise profits that accrue to all capital investments of the same value are, therefore,

equilibrium prices. In other words, *production-prices* which consist of the cost-price *plus* the average profit earned by the total of invested or advanced capital regulate the social supply of capital's products in place of values; for market prices that fluctuate in response to the forces of demand and supply gravitate towards production-prices rather than to values. This conversion of values into production-prices, however, does not imply any change in the labour-time required to produce each commodity. This technical requirement is taken for granted when capital, guided by production-prices, determines the quantity of each commodity that it will supply socially. In other words, here again capital makes a commodity-economic detour. Since it cannot know directly what quantity of each commodity ought to be socially supplied, the production of which requires a definite quantity of labour-time, capital relies on the market form of production-prices to allocate itself and labour with it to the various spheres of industrial production, thereby ensuring that the socially necessary labour-time is spent for the production of each individual product.

74. Now let us consider the third and the last determinant of the rate of profit: the turnover-time of capital. This latter consists of a *production-period*, including a working-period and a *circulation-period*, the major part of which is the period needed for the selling of the product as a commodity. It is the turnover-speed of variable (as well as circulating constant) capital that defines the length of the turnover-time of capital as a whole. The production-period, however, is determined by the natural or technical conditions of the production-process in much the same way as the composition of capital is determined. Hence the production-period differs from one branch of industry to another just as capital composition does. The inequalities of the rate of profit in different branches of industry caused by the differences in the length of the production-period can be settled by the conversion of values into production-prices, just as the inequalities of profit-rate due to the differences in capital composition is settled by the same development. The circulation-period, in contrast, must in general be expected to differ with every individual capital, although there may be a few instances in which the length of the circulation-period is determined by the quality of the product itself. The inequalities of profit-rate due to the individual differences in the circulation-period cannot be eliminated by the conversion of values into production-prices. The equalisation of profit must be completed, as will be explained later, by the formation of commercial capital which relieves industrial capital of the unproductive costs of circulation by specialising in the operation of buying and selling commodities.[2]

75. Since the products of capital are now traded at prices gravitating towards production-prices which consist of the cost-price *plus* an average profit (on total invested capital), the movement of prices can no longer be said to be directly governed by the law of value. For example, the effect of a change in productive methods which reduces the labour-time technically

necessary to produce a commodity is not reflected in its price directly, but with certain modifications due to the redistribution of surplus value as profit among capitals. The two constituents of cost-price are the price of the means of production and the price of materials for livelihood which are purchased by wages and which define the value of labour-power. Since both tend to approach production-prices more or less at variance with values, the cost-price of the commodity itself must, in fact, be the summation of prices already diverging from values. Even the average profit, which is added to the cost-price to make up a production-price, must be calculated in relation to capital whose monetary value is also estimated in production-prices. Therefore the production-prices of the products of capital diverge from their values in a much more intricate fashion than the illustrations above can hope to show. It cannot be overemphasised, however, that this fact does not in any way alter the basic workers-versus-capitalists relation according to which workers devote the necessary labour-time for the production of their own livelihood and the surplus labour-time for the formation of capitalists' income.[3] In other words, production-prices at variance with values define a social relation among individual capitalists, the relation arising from the need to redistribute among themselves surplus value which, as a class, they collectively wrest from the working-class. Because of the transfer of a part of surplus value from the capitalists whose products sell at production-prices below their values to the capitalists whose products sell at production-prices above their values, all capitalists can earn an equal profit for an equal value of capital investment and the rate of profit is equalised on all capitals as the general rate of profit.

76. Because of the conversion of values into production-prices, changes in the value of a commodity are no longer accurately reflected by changes in its production-price. But this is not all. Even when there is no change in the conditions of production of a commodity, its production-price may still vary because of a change in the productive method of other commodities so far as the change affects the composition and/or the turnover-speed of capital elsewhere. This is because the general rate of profit is altered. Moreover, even though the value of a commodity is not directly influenced by a change in wages, the production-price in general is because the general profit-rate changes in consequence, the exact effect on the production-price depending on the extent to which the value composition of capital differs from the social average. For example, in the branch of industry in which 1/10 of capital forms the variable component, the production-price reflects the variation of wages quite differently from the production-price in the branch of industry in which 3/10 of capital forms the variable component.[4] Of course, a rise in the cost-price does not necessarily mean a rise in the production-price, nor does a fall in the cost-price necessarily mean a fall in the production-price. Production-prices can vary quite independently from values. Since under capitalism

the products of labour are mutually exchanged as the products of capital, the law of value in its concrete manifestation must reflect this fact. It should be recalled that monetary gold, which measures the value of all other commodities, is also a product of capital. That is to say, even gold production, so long as it is operated capitalistically, should be subject to the law of average profit in the sense that monetary gold too must be evaluated by what corresponds to its production-price [since monetary gold does not possess a money price] diverging more or less from its value. When gold acts as money, it must therefore measure the value of other commodities with its imputed production-price.[5]

77. Thus the movement of production-prices cannot be said to exhibit the law of value simply. But the law of value that governs a commodity-economy does not secure the solid mechanism of its operation, nor the full scope of its application, unless commodities are produced by capital, i.e., unless values are already transformed into production-prices. Only by the formation of the rate of profit is it possible objectively to determine the equilibrium quantities of the various use-values that are socially demanded and that technically require a certain amount of labour-time for their production. Guided by the rate of profit, capital in effect accomplishes the equilibrium allocation of the aggregate social labour to the production of various use-values; this too is made possible, in the final analysis, by the conversion of labour-power into a commodity. Although individual capitals form and augment value by consuming labour-power in their respective production-processes, they cannot realise all the surplus value that they produce as their individual gain; they must share in the social production of aggregate surplus value which is distributed among them according to production-prices. Hence some commodities must be bought and sold at prices above their values and some others must be bought and sold at prices below their values. In our earlier study of the reproduction schemes, we investigated the equilibrium state of reproduction of the aggregate social capital as if it were directly achieved by the exchange of commodities at values. In fact, capital realises the equilibrium state of reproduction in which it forms and augments values only when commodities are exchanged at production-prices since the state of equilibrium implies and depends on a general rate of profit.[6] A general profit-rate, however, is always in the process of being formed, as individual capitals migrate from one branch of industry to another in quest of a higher profit; it is not a definite percentage which once established is guaranteed to all capitalist activities. A general profit-rate arises in consequence of the competitive investment of capital in the various spheres of industrial production, offering at the same time an objective standard according to which the advisability of each investment may be judged.

## Market Prices and Market Values (or Market Production-Prices): Demand-and-Supply Relation and The Formation of Surplus Profit

78. The variations of the rate of profit from one branch of industry to another due to the differences in capital composition (which characterises the production-process) and in the turnover-speed of capital (which is particularly affected by the duration of the circulation-process) are eliminated from the point of view of capital by the conversion of values into production-prices. Hence every capital, regardless of which branch of industry it is invested in, earns an average profit consistent with the general rate of profit. In reality, however, it cannot be always supposed that each individual capital invested in a particular branch of industry produces under identical technical conditions. There are differences at least in the scale of operation between a large and a small capital and their profit-rates cannot be expected to be the same. Let us for the moment set aside the two important cases to which special attention will be called later, i.e., (i) the case in which the adoption of an improved technique by some capitals causes differences in the conditions of production between them and the other capitals still using the conventional technique; (ii) the case in which as in agriculture the unequal endowments of limited natural powers, such as land, cause differences in productivity among capitals. Even apart from these cases it is impossible, in practice, to avoid all inequalities in profit-rates arising from some differences in the conditions of production under which capitals in the same branch of industry compete with one another. Of course, as they compete among themselves, all capitals pursue the most advantageous conditions under which they may produce; this behaviour of capital goes a long way towards removing many enterprise-to-enterprise differences in the conditions of production which tend to be standardised. The market, of course, does not recognise the differences in the supply conditions of the same product and determines a unique price for an identical commodity so that, even if a particular commodity is produced under unfavourable conditions, it must be sold at the price at which the same kind of commodity produced under better conditions is sold. Because of this fact, it is possible to imagine the entire output of each industry as if it were produced by one capital. Such a simplification permits the theory more easily to explain how capital selects a particular branch of industry for investment and how each capital earns an average profit consistent with the general rate of profit. If indeed a single capital produced the entire output of a particular branch of industry, even though that capital in fact operates several plants with different conditions of production, the rate of profit on that capital could be reckoned easily as a weighted average of the different profit-rates of these several plants. If, however, these plants are operated by independent capitals, the different profit-rates of these separate enterprises cannot be

meaningfully summed up or averaged out. Therefore the formation of a general profit-rate must imply the determination of *market value* in each branch of industry. Since there always remains a greater or smaller divergence in profit-rates among the capitals invested in the same sphere of production, the rate of profit applicable to those capitals which determine the market value of the output of that sphere must be considered as *the* profit-rate of the branch of industry. When industrial products are the products of capital, the concept of *market production-price* must, of course, be substituted for that of market value. But even the existence of a market production-price does not imply that all the capitals invested in the particular branch of industry are in a position to enjoy an equal profit-rate.[7] It only implies that the market price of a product of capital gravitates towards its market production-price, just as the market price of any commodity is, in general, attracted towards its market value.

79. As a general rule, the bulk of any kind of product tends to be supplied under average (or normal) conditions of production and the market value of the product is determined by the *individual value* of it supplied under such conditions. But this need not always be the case. The market value of a commodity must reflect an equilibrium of demand and supply, the market value being the centre of attraction for the market price of the commodity. This means that the supply of the commodity increases as the demand for it raises its market price above the centre, and decreases in the reverse case. Hence the determination of the market value of a commodity depends upon the conditions of production under which the supply of the commodity is capable of being adjusted to the demand for it. If in general the value of a commodity produced under normal conditions of production is said to determine the market value of the same kind of commodity, this means that the supply at the margin of this kind of commodity is, in most cases if not always, drawn from an increase of its production under the normal conditions and seldom from an increase of production under particularly favourable or unfavourable conditions. However, if in fact the supply at the margin of the commodity depends on the variability of its production under inferior conditions, the market value must be determined by the commodity produced under those conditions and capitals producing under either normal or superior conditions must earn surplus profit in excess of the average profit. If, conversely, the supply of a commodity at the margin is drawn from the capital producing under superior conditions, the individual value of its product determines the market value so that capitals producing under either normal or inferior conditions earn less than the average profit. In this case, if the small profit causes capitals operating at the worst end of the spectrum to stop production, the ensuing shortage of the supply must be filled by the extended production of capitals operating under superior conditions. The same rule must apply to the ordinary case in which the market value is determined by the individual value of the commodity supplied under normal condi-

tions. If, in this case, capitals operating under inferior conditions cease to produce, capitals operating under normal conditions must take up the slack.[8]

80. As far as the competition on the market between sellers and purchasers is concerned, it is true, as Marx says, that 'the side of competition which happens for the moment to be weaker is also the side in which the individual acts independently of, and often directly against, the mass of his competitors . . . , while the stronger side acts always more or less as a united whole against its antagonist' (*Capital*, III, p. 193). For example:

> If the demand for this particular kind of commodity is greater than the supply, one buyer outbids another—within certain limits—and so raises the price of the commodity for all of them above the market-value, while on the other hand the sellers unite in trying to sell at a high market-value, while on the other hand the sellers unite in trying to sell at a high market-price. If, conversely, the supply exceeds the demand, one begins to dispose of his goods at a cheaper rate and the others must follow, while the buyers unite in their efforts to depress the market-price as much as possible below the market-value. The common interest is appreciated by each only so long as he gains more by it than without it. And unity of action ceases the moment one or the other side becomes the weaker, when each tries to extricate himself on his own as advantageously as he possibly can (pp. 193–4).

But the competitive buying and selling that takes place in the market does not, either always or in most cases, presuppose a fixed supply of commodities. If there is an excess demand, the price rises to induce an increased supply and if, conversely, there is an excess supply, the price falls to bring about a reduced supply. Moreover, the very concept of excess demand or excess supply is meaningful only as a measure of deviation from a state of equilibrium in which market value balances the forces of demand and supply. The real issue, therefore, boils down to the question as to which conditions of production determine the market value of a commodity. Though in most cases normal conditions do, other cases cannot be ignored.

81. In a commodity-economy goods that are socially demanded are produced individually and anarchistically, i.e., without a prior social plan. That is why individual producers must be compelled to obey the law of value which brings about a social order by acting on them as an external force, in other words, as if it were a natural law. The social regulation of the economy according to the law of value requires a peculiar mechanism by which the general norms of economic life common to all societies, the norms directly rooted in the labour-and-production process, are realised perforce in the specifically commodity-economic forms. I have repeatedly emphasised that this mechanism rests on the workers-versus-capitalists relation in the production-process of capital; for without this relation the law of value cannot operate on a social and global basis. Yet this very relation entails the necessity of the conversion of values into production-prices, a capitalist-economic detour. That is to say, only by this capitalist-economic digression from exchanges at values is a commodity-economy

enabled objectively and efficiently to allocate the social labour to all the branches of industry as social need requires. This allocation, however, implies that the supply of every product can be varied according to the changing pattern of social demand; the efficiency in the allocation of labour to a particular sphere of production must depend on the aforementioned principle of market value. According to this principle, market-value is not determined by the actual content of labour per unit of the commodity but rather by the individual value of the same kind of commodity supplied at the margin. In other words, the market value of a commodity depends on the conditions of production under which its supply may be varied in response to the changing demand. The market value of a commodity so determined may be more or less than is proportional to its actual labour content, depending on the extent to which society wishes to value it. This principle of market value must, however, be realised in the form of the market production-price in the environment in which values are already converted into production-prices. Thus although the inequalities of profit-rate among capitals in the same branch of industry still remain, a general rate of profit can be established which is common to all the capitals determining the market value in each branch of industry. Or to put it another way, capital, so long as it is a marginal supplier, can realise the same rate of profit in any branch of industry, according to the principle of market production-price, although within each industry there are capitals operating with a profit-rate different from the general rate of profit. The competitive relation of one capital to another reflected in the variations of the profit-rate is not a rigidly fixed relation but one that mirrors frequent changes in demand and supply, such changes being the normal attendants of capitalists production. Needless to say, demand would be ineffective if it did not induce a supply and supply would be useless if it were not demanded. But capitalist production and accumulation always entail a general expansion in both demands and supplies, these two being mutually adjusted in the ceaseless motion of prices, or in the process of what Marx calls 'the incessant equilibration of constant divergences' (*Capital*, III, p. 196). Market values emerge as the underlying tenor of this equilibrating process. This does not mean that the demand-and-supply relation itself constitutes the substantive content of a market value. That content is, of course, formed by the labour-time needed to produce the commodity whose individual value is the market value. The demand-and-supply relation, however, identifies the producers whose commodity sets the market value for its kind.[9]

## The Falling Tendency of the General Rate of Profit: The Advancement of Productive Powers and Business Cycles

82. If a capital succeeds in raising its productive powers by introducing say, a new and technically improved machine into a branch of industry in

which a large number of other capitals are still producing the same kind of commodity with the conventional machine, that capital earns a surplus profit. Generally speaking, capital produces relative surplus value by pursuing such a surplus profit and in the course of that pursuit improves upon the current method of production. There is, however, a subtle difference between this specific type of surplus profit that accrues to an innovating capital and surplus profit more generally explainable by the general principle, discussed in the preceding section, of market value. In the present case, the individual value of the commodity offered by the innovating capital (though it may be a marginal supplier) does not immediately determine a new market value. The market value based on the conventional method of production is still valid; the difference between that market value and the individual value of the commodity supplied by the innovating capital gives rise to this *special surplus profit*. In this case, as Marx illustrates in connection with the production of an extra surplus value,[10] the capital which increases its output with an advanced technique will be obliged to sell its commodity at a price lower than the conventional market value though higher than its individual value. It in any case earns some surplus profit because of the extra surplus value that it produces. But as the number of capitals adopting the new method of production increases, the price must gradually fall until, in the end, such capitals are deprived of their surplus profit at which moment a new market value is finally determined. Capitals operating with the conventional method of production, in the meantime, gradually lose their profit until they are eventually forced to adopt the new method. The surplus profit that the innovating capitals earn, however, is not made up of the portion of profit that others let slip. The surplus profit arising from the difference between the conventional market value and the individual value of the commodity produced with the new method disappears, as the number of capitals adopting it increases, that is to say, as the market value approaches the individual value of the commodity produced by the innovating capitals. The length of the transitional process depends upon the ease or the difficulty with which the old method of production can be switched to the new. If the switching is easy, the surplus profit of the innovating capitals disappears quickly. But in any case the innovating capitals do not form a new market value at once; a surplus profit accrues to them for a longer or a shorter period of time until the new method is widely propagated. This is the manner in which the capitalist economy introduces new methods of production.

83. The development of the capitalist method of production, which is generally accompanied by an improvement of productive techniques and an advancement of productive powers, is conditional upon a rise in what Marx calls the organic composition of capital. With an increase in the magnitude of total invested capital, its variable component does expand in absolute terms, mobilising indeed a growing number of workers, but that

component in the total also tends to decline in relative terms, especially because the advancement of productive powers always involves a significant gain in the formation of fixed capital. If the rate of surplus value is constant, a higher organic composition will certainly reduce the general rate of profit which is a ratio of surplus value to total capital. It is true that the advancement of productive powers due to improved methods of production contributes directly or indirectly to a higher rate of surplus value and that the fall in the profit-rate is to that extent counteracted. Moreover, technical progress in the production-process of capital as well as the improvement of transportation and other facilities in the circulation-process tend to accelerate the turnover-speed of capital; these accordingly raise the rate of profit. But these counteracting forces operate only at the time when the organic composition of capital rises, tending to reduce the rate of profit. Fundamentally, the development in the method of production which advances productive powers tends to reduce the rate of profit because it raises Marx's so-called technical composition of capital. Indeed, any advance in the productive powers of labour manifests itself in the increased volume of the means of production, particularly of the means of labour, relative to the application of current labour. But the advanced productive powers themselves lower the value not only of the means of production but of the means of livelihood which determine the value of labour-power in such a way that the organic composition of capital rises to a lesser extent than the technical composition of capital does. Even the rise in the organic composition is counteracted somewhat by the simultaneous rise in the rate of surplus value, mitigating the fall of the profit-rate originally caused by the advancement of productive powers. Because of these counteracting and mitigating forces, it is appropriate to speak, as Marx does, of the 'law of the tendency' for the rate of profit to fall.[11] Of course, growth in the investment of total capital ensures that the absolute magnitude of profit increases even if the rate of profit falls; the pace of capital accumulation is not affected by the working of this law. Yet the constant pursuit of greater value and higher profit-rate by capital leads to improvements in the method of production accompanied by the production of relative surplus value. The value of commodities consequently falls and with it the rate of profit. Thus the falling rate of profit must be viewed as a peculiarly capitalist-economic expression of the advancement of the productive powers of labour in general.

84. As already mentioned, however, the development of the capitalist method of production does not constitute a continual and uninterrupted process of technical improvement because the presence of fixed capital is incompatible with such a process. Neither can innovation be directly and simply explained by capital's ordinary desire for surplus profit or extra surplus value. Capital introduces a new method of production as part of the so-called industrial 'rationalisation' which involves a renewal of fixed capital equipment; such a rationalisation is forced upon capital in the

cyclical period of depression when capital must extricate itself from severe economic difficulties. If the introduction of new productive methods does not proceed constantly, neither does the formation of relative surplus population. The latter too is formed in the period of depression when surplus population already exists because of the inactivity of business. Once the depression is over, capital accumulation in the prosperity phase can count on the abundant supply of surplus population with the result that the expansion of the scale of production does not require innovations in productive methods. Since capital can always produce more means of production and consumption by expanding the scale of its production, there is no inherent limit to the accumulation of capital so long as capital is well supplied with labour-power, which it cannot directly produce, in the form of surplus population. Hence, so long as labour-power is available, there is no theoretical reason why capital may not continue to expand its production with the given technical method. Such an expansion, however, sooner or later entails the state in which the inevitable rise of wages sharply depresses profit. The phenomenon of economic crisis, which the capitalist economy cannot avert, arises fundamentally from the superabundance of capital due to this sudden fall in the rate of profit.[12] This fall of the profit-rate consequent upon the rise of wages does not fail to result in *the state of an excess of capital*, i.e., the condition in which the accumulation of more capital is unaccompanied by an increase in the magnitude of profit.[13] Capital, however, does not cease to accumulate. For even when it is already superabundant socially, individual capitals still endeavour to compensate for the fall of the profit-rate with a desperate attempt at further accumulation. Their fate is sealed, however, because the rate of interest rises as the rate of profit falls. When the two rates are equal, prosperity turns abruptly into a crisis. It is, of course, not an inter-industrial disequilibrium (or the so-called disproportionality) that causes a crisis because, even if industries were always in equilibrium, such an equilibrium would not avert the cyclical shortage of the labouring population. Faced with labour shortage, capital cannot suddenly generate relative surplus population by introducing new methods of production, i.e., by raising its organic composition. Improvements in the technical methods of production can be forced upon capital only after the outbreak of a crisis. The necessity of a crisis on the other hand may be said to reveal the fact that the consuming-power of the workers is capitalistically restricted, but this does not mean that the workers' standard of living is always kept at a fixed minimum. During the prosperity phase of business cycles, rising wages often permit an improvement in the standard of living of the workers.[14] A capitalistic restriction is placed upon this trend, however, because the rise of wages leads to a sharp fall in the profit-rate revealing the state of an excess of capital. Although in the long run capital can restrain this rise of wages by raising the organic composition of capital, i.e., by forming a relative surplus population, the presence of fixed capital, as already pointed out, does not permit capital to adopt a technical improvement at any time. Only in the period of depression following a crisis, i.e., only when the capitalistic production-process finds itself in the state of general stagnation, does the time finally arrive for the replacement of fixed capital, giving the opportunity for capital to start afresh in a renovated environment. It is true that the period of depression is characterised by the overabundance of commodities, the prices of which are generally depressed by the destruction and the loss of value of all forms of capital including fixed capital and by the widespread unemployment of workers whose wages also tend to fall. The general decline of prices and wages, however, cannot immediately introduce the recovery phase because it does not remove the real cause of crisis and depression. Only with the advent of new methods of production in the course of the so-called industrial rationalisation can a new workers-versus-capitalists relation be redefined, upon which a fresh development of productive powers is made possible. The depression is now transformed into prosperity. Thus the improvement by capital of the methods of production can only proceed intermittently in the process of business cycles, the recurrence of which is based upon the periodic renewal of fixed capital and the formation of relative surplus population.

85. In the process of the development of capitalism, the method of production cannot be improved constantly, nor can the organic composition of capital be raised without interruption. Hence the tendency of the rate of profit to fall can only be observed by comparing the so-called normal or average level of the profit-rate which appears in the prosperity phase of a business cycle with that which appears in the same phase of another cycle. It is not contended here that no technical innovation can occur during the prosperity phase in which the scale of production is expanding,[15] nor that innovations should occur uniformly in all branches of industry during the depression phase in which the rationalisation of industrial management is called for. There is only the theoretical presumption that, in the prosperity phase of business cycles when handsome profits are readily available, capital more likely expands its production with the existing technique rather than hastens to 'innovate' sacrificing the undepreciated value of fixed equipment. On the other hand, significant innovations in some key branches of industry are quite sufficient to initiate a recovery from depression. Although the periodicity of the decennial cycles observed during the middle of the nineteenth century in England appears to me to be closely related with the replacement periods of fixed capitals, not all the industrial equipment need have a durability of ten years because the severity of competition during the depression phase often compels the scrapping of undepreciated machines. Capitalism, in any case, develops through business cycles of some definite periodicity; the general rate of profit, too, tends to fall as it fluctuates in the course of the cyclical process. Thus even the law of the equalisation of profit-rates must

not be conceived of as a static principle applicable to only one period in which the currently produced surplus value must be proportionally distributed to all capitals according to their magnitude. In reality, surplus profits always remain, though disappearing in the course of time as capitals compete among themselves; in reality, profit-rates are different from one branch of industry to another, though equalising eventually as the accumulation of capital proceeds. The law must work its way through all the contingencies that accompany the cyclical process of capitalist development. Thus capitalism, so far as it is a commodity-economy, depends fundamentally on the law of value which enforces itself in the motion of prices, but the actual working of the law of value in a capitalistically organised commodity-economy is highly sophisticated. In actual practice, the social regulation of capitalist-economic processes requires the two laws of profit to supplement the law of value: the law of the equalisation of profit-rates on the one hand and the law of the falling tendency of the profit-rate on the other. According to the former, the centres of gravity of fluctuating prices are production-prices instead of values; according to the latter, the tendency of the rate of profit to fall asserts itself only in the long run across the cyclical ups and downs.

## Notes

[1] Since capitalists do not apply their own labour in the production-process of capital, they do not 'feel' that labour forms the value of a product. If they attempt to prolong the labour-time of their workers in the production-process, they are merely motivated by the desire to reduce their cost-price, taking the fullest advantage of the use-value of labour-power, a commodity that they have purchased at a definite price. The concept of cost-price accords well with the shallow thought of the capitalists who overlook the value composition c + v + s of commodities. In the notion of cost-price, they do not recall that value-product v + s is formed by fresh labour, i.e., by the use-value, not the value, of labour-power v. They forget that variable capital v does not have its value simply transferred to the new product in the same way as constant capital c does. Of course, the v-component of the product does not form income in the same sense as its s-component does, but this distinction between the v- and the s-component does not entitle one to regard the v-component of capital in the same way as the c-component, that is to say, as old value to be simply transferred to the new product. Variable capital indeed can only be recovered in the value-product v + s together with a surplus value, so that the increase or decrease of v is accurately counterbalanced by the decrease or increase of s, and does not affect the sum v + s as such. What affects the magnitude of v + s is the quantity of labour exacted from labour-power, not the value paid to a labour-power. Yet the concept of cost-price replaces the implication of c + (v + s) by the capitalist illusion (c + v) + s. It is, therefore, appropriate to quote here what Marx says about cost-price c + v = k.

The grouping of the various 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 other 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 (*Capital* III, pp. 27–8).

2 Commercial capital and its special profit must, in the pure theory of capitalism, be explained after the distribution of surplus value to industrial capital in the form of profit because the rationale of commercial capital is to save the unproductive costs of circulation which do not directly contribute to the production of surplus value. But in the actual development of capitalism, merchant capital traditionally engaged in the buying and selling of commodities evolved directly into commercial capital as industrial capital gradually gained independence from commerce proper. Merchant capital which profited historically by the practice of 'buying cheap and selling dear' dealt with products of the small producers; hence as a general theoretical form of capital, merchant capital is still much too abstract a form in which to explain the substantive cause of profit on capital. But I have already mentioned, in Part I: Chapter 3, that merchant capital was the first form of capital to develop in history and is the most general form of capital in theory. Thus industrial capital too is based on the form of merchant capital. That is why, as the present chapter shows, industrial capitals are capable of distributing surplus value among themselves as profit, making use of the mechanism of circulation. Yet industrial capitals cannot by themselves go as far as to equalise the burden of circulation costs. The inequalities that remain may, however, be disregarded in the present context, and indeed they must be, because commercial capital whose activity can only be discussed later must relieve industrial capitals of these inequalities by taking over the business of trading commodities.

3 Suppose that materials for consumption that a worker purchases for a day contain 6 hours of social labour as their value, and that this value exceeds the production-price at which they are traded. Then the worker's money-wages must be adjusted to the production-price so that, with the money-wages, the worker should in any case be able to buy back no more than, and no less than, the labour-product of 6 hours. If, for example, he works 12 hours a day, he must produce a surplus value for his capitalist in the remaining 6 hours in any case. This fundamental relation between the worker and the capitalist, in which the former obtains the labour-product of 6 hours in the form of materials for consumption and the latter obtains the remainder as the surplus product, is absolutely invariant to whatever the production-price turns out to be for the materials of workers' consumption. As already emphasised, by far the most important function of the law of value is to determine the relation between capitalists and workers. It is because of this fundamental relation that the exchange of commodities depends, by necessity and in the final analysis, on the regulation of the law of value. This point is particularly apparent in the present context.

4 For example, let there be only three branches I, II, III of industry to which social capital is allocated, with the following value compositions and profit-rate. (For simplicity, the presence of fixed capital, differences in turnover period, and other complications are disregarded.)

$$
\begin{array}{rl}
\text{I.} & 80c + 20v + 20s = 120 \\
\text{II.} & 90c + 10v + 10s = 110 \\
\text{III.} & 70c + 30v + 30s = 130 \\
\hline
 & 240c + 60v + 60s = 360 \quad P' = \dfrac{60}{300} \times 100\% = 20\%
\end{array}
$$

A ten per cent rise in wages will bring about changes in the value composition of the products and the rate of profit as follows:

$$
\begin{array}{ll}
\text{I.} & 80c + 22v + 18s = 120 \\
\text{II.} & 90c + 11v + \phantom{1}9s = 110 \\
\text{III.} & 70c + 33v + 27s = 130 \\
\hline
 & 240c + 66v + 54s = 360 \quad P' = \dfrac{54}{306} \times 100\% = 17\tfrac{11}{17}\%
\end{array}
$$

Hence, the production-prices must change from 120 to the following in each case:

$$
\begin{array}{lll}
\text{I.} & (80 + 22) + 18 = 120 & (\pm 0) \\
\text{II.} & (90 + 11) + 17\tfrac{14}{17} = 118\tfrac{14}{17} & (-1\tfrac{3}{17}) \\
\text{III.} & (70 + 33) + 18\tfrac{3}{17} = 121\tfrac{3}{17} & (+1\tfrac{3}{17})
\end{array}
$$

Thus the rise in wages leads to a fall in the production-price of a product with a higher-than-the-average capital composition, and to a rise in the production-price of a product with a lower-than-the-average capital composition. A fall in wages will, of course, have the reverse effects. Only the product with the average capital composition maintains the same production-price despite a rise or a fall of wages because the change in cost-price is always exactly offset by the change in the general profit-rate. This particular case reflects accurately what is true of the total product of capital, namely, that the value of a commodity is invariant to the movement of wages. Indeed, the movement of wages affects only the proportion of the s-component in the value-product v + s. But it does affect the value composition of capital as well as the rate of surplus value, which in turn affects the mutual relation among different capitals. It is for this reason that production-prices are generally affected by the movement of wages.

[5] Suppose that gold production adopts a lower-than-the-average capital composition as in case III of the preceding note. Then gold measures the value of other commodities with its imputed production-price of 120 instead of its value of 130 ( = 70c + 30v + 30s). In other words, if the imputed production-price of 120 is physically represented by an amount of gold equivalent to £1, then all commodities with the production-price of 120 are estimated to possess as much value as that amount of gold.

It may sound odd that gold, as money, is capable of measuring the value of other commodities not only with its own fluctuating commodity-value instead of a fixed and invariable value but also with what amount to its production-price known to be at variance even with its commodity-value. The striking peculiarity of a commodity-economy, however, lies in its capacity to fulfil the social demand with this hardly straightforward method of measuring value. That is to say, the commodity-economy measures the value of all products which capital brings forth anarchistically by gold, which capital produces just as anarchistically as other things.

[6] Earlier, in Part II: Chapter 3, Section 3, the reproduction-process of the aggregate social capital was schematically treated; here in Part III: Chapter 1, the formation of a general profit-rate has been explained by the 'transformation of values into production-prices.' From this procedure the reader might form the impression that the allocation of social labour to the two aggregate sectors of production, brought about directly by the application of the law of value, should be modified or repudiated by the conversion of values into production-prices. That impression is false. Here the problem is the allocation of social labour to a specific branch of industry, not to an aggregate sector. The allocation of labour to a particular branch of industry must follow the guidance of production-prices so long as the product of that

branch of industry is a product of capital. But the reproduction schemes do not, and cannot, show the allocation of labour to a particular branch of industry through the capitalist-economic mechanism. The schemes show the allocation of labour to such aggregative economic sectors as the sector for the production of the means of production and the sector for the production of materials for consumption. Not only do these sectors contain many different branches of industry but these sectors as such do not define the relation of one capitalist to another capitalist. The division of the whole economy into the two sectors is intended to clarify the workers-versus-capitalists relation because the inter-sectoral material relation is explainable by the value relation in terms of c, v and s. The allocation of labour to different branches of industry by an individual capital in the light of production-prices occurs within the broader framework already set by the two-sectoral allocation of labour. Or it may be better to say that the social regulation of the activity of individual capitals by means of the conversion of values into production-prices results in a definite quantitative relationship between the means of production and materials for consumption such as is exhibited in the schemes, and confirms the law of value by ensuring the feasibility of social reproduction. Indeed, the conversion of values into production-prices does not in the least affect either the formation of value or the production of surplus value; these matters are presupposed in the distribution of surplus value in the form of profit according to production-prices.

7 Reference to market value here, *after* the discussion of the conversion of values into production-prices, might appear to be completely otiose. But it should be understood that only by the conversion of values into production-prices can the role of the market in the determination of values be fully clarified. The determination of values presupposes the adjustment of supply according to the social demand, and the mechanism of this adjustment actually develops only when commodities are supplied as the products of capital. When a number of capitals produce and sell the same kind of commodity under different conditions, their competition within the sphere of investment must, of course, presuppose the competition of capitals at large over all the spheres of investment. But variations of profit-rate in any particular sphere due to differences in the conditions of production cannot be eliminated by the conversion of values into production-prices. In other words, the solution to the problem of competition within a sphere of production must be given prior to the concept of production-price which represents the relation of competition over different spheres of production. Only after the establishment of the notion of market value as the centre of gravity of the market price of a commodity in general, can this notion be applied to the case in which the commodity is a product of capital. Whether the centre of gravity is value or production-price does not, of course, alter the theory of market price as such.

8 In *Capital*, vol. III, part ii, chapter 10, Marx tries to develop a theory of market value. His explanation, however, remains unsatisfactory because he does not articulate the significance of price fluctuations in the market in adjusting demand and supply. This point, I believe, is of some methodological importance. Marx's general neglect of the demand-and-supply analysis impairs his theory of value-forms at the outset of *Capital* already, placing the rest of his economic doctrine on a rather precarious ground. I have discussed this and related issues in my *Keizaigaku Hōhōron* [*Methodology of Political Economy*] (1962) in greater detail.

9 In agriculture and fisheries a sudden change in weather conditions often causes a drastic fluctuation of the crops; the consequent disruption of equilibrium cannot be readily corrected by capital. In these industries the investment of capital must presuppose what is generally understood to be the normal weather conditions.

The theory of market value emphasises the impossibility of neglecting the effect of use-value in the determination of the value of a commodity, although the part played by the demand side in this determination must always be considered passive. Depending on the conditions of production, some of the capitals producing the same use-value may earn a surplus profit and others may fail to earn even the average profit. If, however, the competition among capitals leads to a standardisation of the conditions of production, the inequality of profit-rates will tend to disappear as a new market value will be formed. Although in the production of different use-values competition is supposed to entail the equalisation of profit-rates by the conversion of values into production-prices, the inequality of profit-rates often remains in the production of the same use-value. This latter phenomenon is not even limited to the case of capitalist production. The market-value problem arises more generally in any commodity-production. Since, however, the determination of market value can be understood more transparently in the context of capitalist production, the problem of market value in general is introduced at this juncture. The discussion of the problem in this chapter is, however, quite general and does not cover the special aspect of it related to the conversion of surplus profit into rent.

[10] Cf. *Capital*, vol. I, part iv, chapter 12: 'The Concept of Relative Surplus-Value.' Marx here describes the labour that produces extra surplus value for an innovating capital, the receiver of surplus profit, as an 'exceptionally productive labour' (*Capital*, I, p. 318), which 'operates as intensified labour,' and which 'creates in equal periods of time greater values than average social labour of the same kind' (*ibid.*). However, the substantive content of extra surplus value cannot be fully explained by the 'intensified labour,' which itself becomes 'socially average labour' eventually with the diffusion of the new productive method. Extra surplus value must be viewed as a special cause of surplus profit, the general nature of which becomes apparent with the formation of market value. Since the surplus profit originating in extra surplus value disappears with the diffusion of the new productive method, I believe that the underlying economic substance of this form of surplus profit should be considered as the social cost of propagating an improved technique. (Of course, no surplus profit accrues to scientific inventions and discoveries as such, the cost of which generally does not form an economic value.) This type of cost, which even a socialist society cannot ignore, appears in a capitalist society as the special surplus profit. This special form of surplus profit may be considered to possess a value-substance unlike other forms of surplus profit. Under capitalism, however, society does not directly bear the cost of improvement of existing techniques; it instead subsidises the innovating capitals with surplus profit accruing to them individually. This is but another example of the peculiar functioning of the capitalist system.

[11] Because of the counteracting forces, it may be argued that an advancement in the productive powers of labour does not necessarily affect the three quantities: constant capital, variable capital, and surplus value so as to bring about a fall in the rate of profit. Such a purely abstract and quantitative argument, however, is irrelevant. The real issue here is the peculiar form in which capitalist society reflects the self-evident economic norm common to all societies that progress in the productive powers of labour confirms itself in the quantitative increase of the means of production per unit of current labour. Regardless of the division of value-product newly produced by current labour into variable capital and surplus value (though the arbitrariness of the division should not imply that the labour-time necessary for the production of workers' livelihood can be reduced beyond a certain limit), the same magnitude of value-product is capable of being produced by as many workers as the variable part of capital can buy, the proportion of which to the constant part of capital declines steadily. Moreover, the relative increase of the constant part of capital is mainly due to the extended use of fixed capital (which incorporates the new techniques). Thus, speaking in general terms, the tendency of the rate of profit to fall can be regarded as the capitalist-economic expression of progress in the productive powers of labour. It should be mentioned here in passing that Marx includes among the forces counteracting the law such things as the 'depression of wages below the value of labour-power,' 'foreign trade' and 'the increase of stock capital' (*Capital*, III, iii, 14). Such concrete matters, however, must not be considered in the context of the pure theory of capitalism because they serve no theoretical purpose except to divert attention from the true significance of the problem.

[12] In *Capital*, vol. III, Marx devotes two chapters, 13 and 14, for a general explanation of the law of the falling tendency of the profit-rate. Then, in Chapter 15: 'Exposition of the Internal

Contradictions of the Law,' he lays down a few principles intended to clarify the phenomenon of crisis. It should be remarked, however, that the falling tendency of the profit-rate is a normal consequence of the rising organic composition of capital and that the law itself does not imply any 'internal contradictions' capable of generating an economic crisis. For this reason, Chapter 15 of *Capital*, vol. III, is quite confounding; despite some important details, this chapter fails to develop a fully satisfactory theory of economic crises.

13 Marx endeavours to clarify the concept of the excess or overabundance of capital which is the real cause of the phenomenon of crisis (Cf. *Capital*, vol. III, Chapter 15, Section 3: 'Excess Capital and Excess Population'). For the reasons mentioned in the preceding note, however, Marx fails to come to full grips with the concept. For example, he begins by asking the question:

Over-production of capital, not of individual commodities—although over-production of capital always includes over-production of commodities—is therefore simply over-accumulation of capital. To appreciate what this over-accumulation is (its closer analysis follows later), one need only assume it to be absolute. When would over-production of capital be absolute? Over-production which would affect not just one or another, or a few important spheres of production, but would be absolute in its full scope, hence would extend to all fields of production? (*Capital*, III, p. 251).

Marx gives the answer in the following paragraph:

There would be absolute over-production 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 . . . ; 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 over-production 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 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 (*Capital*, III, pp. 251–2).

It is quite clear that the excess of capital described here is not caused by any 'internal contradictions' ascribable to the 'law of the tendency of the rate of profit to fall'; it is the excess simply due to 'capital having grown in a wrong ratio to the labouring population.' Thus, if capital's method of production is always capable of improvement, or at least so when such a wrong ratio develops, then the consequent formation of relative surplus population, even though it implies a general fall of the profit-rate, need not develop an excess of capital. In other words, the excess of capital is not caused by the working of the law of the falling profit-rate. It is caused by the internal contradictions of the capitalist mode of production itself which is based on the conversion of labour-power into a commodity.

After the above-quoted passage, Marx goes on to discuss the process in which the 'conflict' is settled. But he fails to show that the settlement of the 'conflict' really involves a complete overhauling of the capitalist method of production, i.e., the actual removal of its contradiction which has become aggravated, and the launching of another cyclical process of capital accumulation on an entirely new basis. Marx gives the impression that the excess of capital could appear in such a form 'that a portion of capital would lie completely or partially idle . . . , and the other portion would produce values at a lower rate of profit, owing to the pressure of unemployed or but partially employed capital' (*ibid.*, p. 252). An individual capital, however, cannot respond to the reality of the excess of capital by allowing part of its capacity to stand idle or unemployed. On the contrary, it is forced to utilise its capacity fully in order to avoid the shrinkage of the magnitude of its profit, consequently aggravating the social excess of capital. As stated in the text, only a sharp rise of interest rate imposes a capitalist-economic limit on further accumulation, plunging the whole economy into a crisis.

14 It goes without saying that under capitalism workers maintain themselves by converting their labour-power into a commodity. Although the price of labour-power fluctuates about its value, this value cannot be directly determined because labour-power is not a direct product of labour. The value of labour-power is, therefore, the value of the means of consumption which workers purchase with their wages and which are necessary for the maintenance of their life and the reproduction of their labour-power. But the quantity and the quality of the means of workers' consumption vary with their standard of living which may be said, as Marx claims, to be 'the product of historical development' (*Capital*, I, p. 171).

It should be emphasised here that the 'historical element' in the determination of the value of labour-power is in turn determined in the process of capitalist development itself. In other words, the standard of living corresponding with the level of wages during the prosperity phase of business cycles should represent the value of labour-power consistent with the prevailing workers-versus-capitalists relation. Since this relation is redefined from time to time in the course of capitalist accumulation, there is no reason why the standard of living of the mass of workers cannot improve. But there is a barrier beyond which the standard of living cannot pass under any given workers-versus-capitalists relation.

15 The process of business cycles periodically interrupted by crises must be explained in the pure theory of capitalism; for otherwise its theoretical necessity would not be established. But in reality no business cycle is free from disturbances and irregularities, making its abstract treatment extremely difficult. Moreover, the theoretical study must base itself on the experience of the mere five cycles which took place between the 1820s and the 1860s because they alone exhibited the decennial periodicity with any measure of accuracy. An empirical study of these five cases would certainly be insufficient to produce an abstract theory of business cycles and crises; such a theory can only be deduced in the context of the pure theory of capitalism. From this point of view, it is perfectly warranted to conclude that innovations in the method of production that take place in the prosperity phase of business cycles are not of theoretical importance. It must be remarked also that, in a more recent stage of capitalism, and particularly in a country like Japan in which capitalism developed late, the adoption of the joint-stock-company system in industry permits a comparatively painless and fairly constant introduction of new productive methods. This is because a new company can always be formed for the purpose of adopting a novel technique, although even in this system the rationalisation of industry during the depression phase cannot always be avoided. Generally speaking, the evolution of contemporary capitalism characterised by the diffusion of the corporate system in industry appears to have caused a significant change in the manner in which capital improves the method of production. But this is precisely the kind of topic that should be studied in the stages-theory of capitalism, because the real problem there is why, under definite historical conditions, the propositions of the pure theory of capitalism must appear with certain predictable modifications.

# Chapter 2
# RENT

86. It has already been stated that capital secures the conversion of labour-power into a commodity by rendering the workers propertyless, that is to say, by denying to these direct producers their traditional right of access to the limited and monopolisable powers of nature, the means of production generically known as land. Such natural powers are, however, not products of labour and hence cannot in general be converted into capital. This is the reason why they must be owned by someone other than the capitalist and must confront capital as an alien property,[1] so that the capitalist should be obliged to rent from their owners such natural powers whenever he wants to use them as means of production. This relation presupposes, but does not determine, the workers-versus-capitalists relation; it is rather this latter more fundamental relation that defines the scope of, and lays the foundation for, the new relation arising between capital and landed property.[2]

87. Thus when capital makes use of limited and monopolisable natural powers (generically called land) as means of production, a surplus profit arises which cannot be shared equally among capitalists themselves. This infringement of the principle of equality among capitals calls for a form of landed property consistent with the capitalist mode of production. Suppose that power generated by steam engines is in general use as the source of industrial energy but that a few fortunate capitalists can extract power much more cheaply from natural waterfalls. Whereas steam engines are accessible to any capital, the access to waterfalls is limited to the few. Consequently surplus profit arising from the use of waterfalls must be laid aside from the motion of capital. Let the product of the factories employing steam-engine power be produced with the cost-price of 100 and sold at the production-price of 115, and assume for simplicity that the cost-price represents the whole of capital. Then obviously the profit is 15 and the profit-rate is 15 per cent. If, on the other hand, the cost-price for the same product supplied by capitals having access to waterfalls is 90, the individual production-price of the product comes to 103.5 (= 90 × 1 15/100). Hence upon selling this product at 115, these capitals receive the surplus profit of 11.5 (= 115—103.5) over those unable to utilise waterfalls. But this surplus profit could not have arisen from capitalist acitivity of any sort and cannot legitimately belong to the capitals. If, indeed, they pay a rent of 11.5 for the utilisation of waterfalls, they still have the average profit of 13.5 (= 90 × 15/100), which is 15 per cent on their investment. It is, however, possible that some of the factories employing steam-engine power innovate their engines and reduce their cost-price to 90. In that case these innovating factories also receive the surplus profit of 11.5, but this

surplus profit will not be converted into rent so long as it reflects the temporary production of extra surplus value. Such a surplus profit stimulates the propagation of the same technique to other factories with the consequence that the production-price for all capitalists eventually falls to 103.5 (if the general profit-rate is assumed unchanged). The surplus profit then disappears; the rent on the use of waterfalls too will cease to be paid.[3] Whereas natural powers such as waterfalls in the present example can be displaced by an improvement in the means of production producible by capital, there are other natural powers that cannot be similarly displaced, e.g., land used in agriculture and in some industrial activities. Surplus profit arising from the use of land, therefore, becomes a permanent source of rent. It should be recalled that surplus profit that originates in the improvement of *capital's* method of production actually forms value in a capitalist commodity-economy because that surplus profit represents a social cost of innovating the means of production belonging to capital. In contrast, surplus profit convertible into rent, including the surplus profit that arises from the use of waterfalls before it is eliminated, serves no social purpose. It is a mere consequence of the peculiar mode in which a commodity-economy determines market value. Possessing no substantive economic content, that surplus profit represents what Marx calls *false social value*.[4] Such false value, in other words, reflects the simple fact that land unlike capital's means of production is not a product of labour.

88. Suppose, for example, that four types of land of different qualities A, B, C, and D are used in agricultural production. Suppose further that a given magnitude of capital worth, say, 50 shillings is invested on a given area, such as an acre, to yield the different quantities 10, 15, 20, and 25 bushels of wheat[5] according to the qualities A, B, C, and D of land. If a bushel of wheat is sold at 6 shillings, and if the average profit is 10 shillings (for each capital investment of 50 shillings), then the surplus profits of 30, 60, and 90 shillings will accrue to the capitals operating on land-B, land-C, and land-D. These surplus profits will, in due course, be converted into rent. The table below summarises the particulars of this example:

| Land | Products (bushels) | Products (shillings) | Capital (shillings) | Profit (shillings) | Surplus Profit (shillings) |
|---|---|---|---|---|---|
| A | 10 | 60 | 50 | 10 | 0 |
| B | 15 | 90 | 50 | 40 | 30 |
| C | 20 | 120 | 50 | 70 | 60 |
| D | 25 | 150 | 50 | 100 | 90 |
| Total | 70 | 420 | 200 | 220 | 180 |

This table, of course, implies that when all these four types of land are used in a definite proportion, the total output is socially demanded at the production-price of wheat supplied on the least productive land-A. The other types of land B, C, and D then yield rental revenues, the amount of which also depends on their actual acreage. If, however, the demand for wheat does not warrant the price that yields the average profit of 10 shillings to the capitals investing 50 shillings on land-A, and if, therefore, the social demand for wheat can be satisfied without the product of that type of land, then the market production-price can sink to 4 shillings, equal to the production-price of wheat of the capitals investing on land-B. In that case, only the capitals operating on land-C and land-D receive the surplus profits of 20 and 40 shillings respectively, which will be converted into rent.[6] It is also possible that the method of agricultural production is improved in such a way as to change the differential productivity of these different types of land. Even in that case, however, so long as different qualities of land are used for the same production, and so long as a given money-value of capital investment yields a different money-value of the product, capital requires the conversion of surplus profit into rent in order to enforce its principle of average profit.

89. If surplus profit which arises from the divergence in quality of different types of land is convertible into rent, so is surplus profit that arises from successive investments of a given sum of capital on the same quality of land. For example, the first investment of 50 shillings may produce more output than the second investment of the same value, in which case the difference will give rise to a surplus profit accruing to the first investment. When this type of surplus profit is converted into rent, it is called by Marx 'the second form' of differential rent as opposed to 'the first form' which arises from the differential fertility of different types of land. In practice, of course, the two forms of rent are always paid together, but the distinction between the two is theoretically warranted because the one arises from the extensive use, and the other from the intensive use, of land by capital. In the earlier illustration of *differential rent I*, 70 bushels of wheat would be produced when capital worth 200 shillings were divided into equal units of 50 shillings and invested each on an acre of land-A through land-D. Now one may think of the investment of the same 200 shillings on the best land-D such that the first investment of 50 shillings produces 25 bushels of wheat and the second, the third, and the fourth investment of 50 shillings produces respectively 20, 15, and 10 bushels. In this case, the capital investing on land-D earns the average profit of 10 by its last investment of 50 shillings, but it also earns the greater profits of 100, 70, and 40 shillings on its first, second, and the third investment. It must, therefore, convert the surplus profit of 180 shillings (90 + 60 + 30) into rent. The present example, of course, assumes the situation of social demand justifying the price of 6 shillings per bushel of wheat. If the social demand for wheat warrants the additional production of 5 bushels by the

fifth investment of 50 shillings on land-D, and permits the price of 12 shillings per bushel and the average profit of 10, then, not only the fourth investment of 50 shillings on land-D, but even the first investment of 50 shillings on land-A that produces 10 bushels of wheat now receives the surplus profit of 60 shillings that is convertible into rent. At the same time, the first through the third investment of 50 shillings on land-D converts the surplus profits of 240, 180, and 120 shillings into rent. If conversely the situation changes so that the third investment of 50 shillings on land-D at the production-price of 4 shillings per bushel is enough to satisfy the social demand for wheat, the total rent that land-D yields will decline to 60 shillings; land-A will no longer be cultivated, and no surplus profit convertible into rent accrues to capitals investing on land-B.[7]

90. The nature of differential rent has so far been discussed with the use of a few simplified examples. These model-examples, in the case of *differential rent I*, might give the impression that capital may choose to produce first on the best land-D and then successively expands over the less fertile tracts of land C, B, and A, as the demand for wheat increases. In other words, surplus profit convertible into rent might seem to arise as capital expands from superior to inferior land. But the conversion of surplus profit into rent does not always follow this so-called 'descending order.' It is true that the formation of differential rent requires that the availability of superior land be limited, but that is not sufficient. Rent is formed because capital cannot by itself absorb surplus profit arising from the use of limited land without violating its own principle of equality.[8] In the case of *differential rent II*, the above examples also give the impression that the formation of rent is a consequence of the so-called law of diminishing returns, according to which the productivity of capital on a given area of land declines as the magnitude of capital investment increases. This impression too is incorrect. In agriculture where land is the principal means of production, the investment of capital is no doubt conditioned by land itself. This fact, however, does not imply that an increase in the magnitude of capital investment always decreases the return at the margin. The real issue here is not that land in general limits the investment of capital but rather that landed property socially confronts capital, imposing an external restriction on the freedom of capital investment. Generally speaking, the accumulation of capital causes the demand for the products of the soil to expand and encourages further accumulation of the capital whose principal means of production is land. In this case, however, the accumulation of capital in response to the rising prices of agricultural products may either be encouraged or obstructed depending on the conditions of the tenancy contract. If, for example, the capitalist expects to recover only a small portion of the value of his investment on land by the time the contract expires, he will tend to avoid such an investment. When the prices of agricultural commodities rise, some capitalists may earn surplus profit paying only the contractual rent fixed prior to the rise of

prices. But if the latter maintain a high level when the rental contract is renewed, that surplus profit will be converted into rent. If the prices continue to rise after the conclusion of a new rental contract, capital vastly increases its investment so as to make the most of the opportunity. Thus the amount of rent actually collected from land of identical size and quality can easily differ depending on when the tenancy contract was concluded and for how long the existing contract remains valid. The fact that an additional investment of capital is, in principle, not integrated into the earlier investment and consequently gives rise to a surplus profit convertible into rent is entirely attributable to this institution of rental contract.[9] With the development of capitalism, at any rate, the accumulation of capital and the extension of agricultural land cause a general increase in rental revenue. This increase, however, does not necessarily reflect the fact that more and more inferior land is cultivated; nor does it reflect the working of the so-called law of diminishing returns. The progress of agricultural and other techniques may, in the meantime, raise the productivity of land and affect its differential fertility. But every surplus profit arising from the new method of using land will eventually be converted into rent because of the presence of private land-ownership. This conversion tends to work against the improvement of agricultural techniques.

91. The ownership of the powers of nature, generically called land, does not merely exercise an external and passive restraint on the activity of capital in the manner described so far. In the process of the primitive accumulation capital secures the ground for the control of the production-process by severing the tie connecting peasants, the direct producers, with their land. This severance places land outside the direct control of capital. Not only is land other than a product of labour and hence unable to become capital, but even as a natural power it is limited in supply and is capable of being monopolised. Land constitutes a means of production to which capital has no free access. It follows, therefore, that capital cannot invest on *any* land without paying for the right, regardless of whether it forms a surplus profit convertible into rent or not. This explains what Marx calls *absolute rent*. Absolute rent arises, of course, from the monopolisation by landowners of land against capital; as Marx correctly points out, however, it is not a converted form of surplus profit originating in the monopolistic price of a product. It is, for example, different from rent paid to the vineyard which grows the finest quality of grapes. Absolute rent is the rent that land in general extracts from capital. It should not be interpreted as a 'monopoly rent' even in the sense, for instance, that no uncultivated land is left for capitalist agriculture or that the concentration of land-ownership enables the landlords to charge an arbitrary rent. Since no rent is paid to the landlord unless his land is leased for capital investments, he cannot in any case charge a prohibitive rent.[10]

92. In agriculture, which utilises land as the principal means of produc-

tion, improvements in the means of labour that ordinarily accompany the accumulation of capital are frustrated in one way or another by land itself which is part of nature. Investment in fixed capitals which depreciate over a long period of time fails to be encouraged. The formation of what Marx calls 'land-capital,' i.e., capital invested for the improvement of the soil itself, is positively discouraged because the benefits in most cases accrue to the owner of the land. Hence, generally speaking, the organic composition of capital in agriculture is expected to be lower than the social average; so the production-price of agricultural products must generally remain below their value, even if the length of the turnover-period of capital might to some extent lessen the gap. Landed property, therefore, can absorb part or all of the difference between the value and the production-price as absolute rent which is distinct from monopoly rent. In other words, the attempt by agricultural capitalists at sharing with other capitalists surplus value embodied in their products in the form of average profit is obstructed by landed property, which carves out a portion of agricultural surplus value *before* it is redistributed as profit to all capitals. The price of agricultural products must, therefore, rise above their production-price by the amount of absolute rent. The contrast between absolute and differential rent is here made particularly obvious. Differential rent always presupposes a definite production-price. Since capital cannot eliminate by competition surplus profit that arises from the differential productivity of land, differential rent must be formed to remove that surplus profit from capital. Absolute rent, on the other hand, is formed to the extent that land-ownership can interfere with the competition among capitals and hamper the conversion of values into production-prices. The extent to which land-ownership can actually raise the price of agricultural products beyond their production-price with the imposition of absolute rent, however, depends on the conditions of the market. As land-ownership by itself possesses no standard of price determination, the extent to which it can obstruct the conversion of surplus value embodied in the products of the soil into average profit must depend on the competition among landowners in leasing their land to capitalists.[11] In any case, absolute rent raises the price of agricultural products above their production-price and this, of course, augments the differential rent on superior land as well. All rents, absolute or differential, will, however, be paid together as a rental price of land by capitalist-tenants to the landlord.

93. The presence of absolute rent which rather sharply impinges upon capital's right on profit appears to have caused the frequent call, even in capitalist society, for the nationalisation of land. But the nationalisation of land would not eliminate this rent.[12] As already repeated a number of times, a capitalist commodity-economy must presuppose the private ownership of land as its own premise. The private ownership of land forms not only the historical condition for the mass conversion of the direct producers into propertyless wage-earners, but also the basis of the

institution of private property, the fullest development of which is realised in a capitalist economy. It is from land, i.e., from nature or the general environment of any production that labour acquires products; the private appropriation of the products of labour must, therefore, presuppose the private appropriation of land. Since, however, nature by itself does not imply the institution of private property, the private ownership of land can be justified and accepted in capitalist society so long as it conforms directly or indirectly, to the capitalist method of production. It is the recognition of this conformity that is reflected in capitalism by the peculiarly commodity-economic forms of rent. Sometimes land itself, as a title to a series of rental incomes, can also be converted into a commodity and be traded, seeming to adapt to the capitalist method of production even more. This conversion must, however, be explained in the following chapter in connection with the theory of the conversion of capital itself into a commodity; that theory requires a prior explanation of the form of interest-bearing capital.

94. In the above discussion, it was assumed that surplus profit arising from the differential fertility of land is converted into differential rent. But surplus profit convertible into rent can arise from differences in the distance separating the place of production from the market-place in which the products are sold. Often a fertile piece of land also has a ready access to the market, but there are cases in which the fertility of the soil and the distance from the market cancel each other out. What has been observed for agricultural rent applies as well to mining and building rent without substantial modifications. Since in the pure theory of capitalism it is otiose to consider all the details of the phenomenon of rent, only its most fundamental property has been clarified here in a simplified context.

## Notes

1 'Nothing could be more comical than Hegel's development of private landed property,' says Marx in a footnote, and continues as follows:

According to this, man as an individual must endow his will with reality as the soul of external nature, and must therefore take possession of this nature and make it his private property. If this were the destiny of the 'individual,' of man as an individual, it would follow that every human being must be a landowner, in order to become a real individual. Free private ownership of land, a very recent product, is, according to Hegel, not a definite social relation, but a relation of man as an individual to 'nature,' an absolute right of man to appropriate all things. This much, at least, is evident: the individual cannot maintain himself as a landowner by his mere 'will' against the will of another individual, who likewise wants to become a real individual by virtue of the same strip of land. It definitely requires something other than goodwill. Furthermore, it is absolutely impossible to determine where the 'individual' draws the line for realising his will—whether this will requires for its realisation a whole country, or whether it requires a whole group of countries by whose appropriation 'the supremacy of my will over the thing can be manifested.' Here Hegel comes to a complete impasse (*Capital*, III, pp. 615–6).

Hegel's notion of private landed property may indeed not be satisfactory as it stands. But it is not incorrect to claim that the ownership of land constitutes the foundation of all other forms of private property, including what Marx calls 'private property based on the labour of its owner' (*Capital*, I, p. 761). The fact that capitalism presupposes the severence of the direct producers from land does not simply give rise to the so-called capitalist law of appropriation; that fact also brings all the forms of private ownership that a commodity-economy involves into a well defined social institution. Since any form of labour is a human activity applied directly or indirectly to land, capitalism requires the institution of private property securely rooted in the private ownership of land in order to appropriate surplus labour at all.

[2] It is quite correct to say the following:

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 (*Capital*, III, p. 617).

In a country like Japan, however, in which capitalism evolved relatively late, it was not necessary for capitalism to 'subordinate agriculture to capital' in order to achieve a high level of development. Neither did landed property display its fully capitalistic form; only a formal system of private property compatible with the functioning of a commodity-economy was sufficient. Yet the theoretical study of the law of rent requires the assumption of a fully capitalistic form of landed property. This fact suggests that the purely theoretical study, though indispensible, cannot be immediately applied to the concrete analysis of the Japanese experience. The theory of pure capitalism and empirical analysis must always be mediated by a suitable stage-theoretic characterisation.

[3] I have adopted here the example of waterfalls following *Capital*. But I realise that this example may be a little unsatisfactory because waterfalls generate energy-power which can be employed to produce all sorts of commodities rather than a definite kind of commodity. But my purpose here is merely to illustrate the contrast between the surplus profit arising from the use of such things as waterfalls and that which reflects the existence of an extra surplus value.

[4] Concerning the surplus profit convertible into rent, Marx says the following:

This is determination by market-value as it asserts itself on the basis of capitalist production through competition; the latter creates a false social value. This arises from the law of market value, to which the products of the soil are subject. The determination of the market-value of products, including, therefore agricultural products, is a social act, albeit a socially unconscious and unintentional one. It is based necessarily upon the soil and the differences in its fertility (*Capital*, III, p. 661).

This passage attributes the formation of surplus profit generally to the determination of market value. Marx, however, points out immediately afterwards that 'if we suppose the capitalist form of society to be abolished and society organised as a conscious and planned association,' then that society would not accept the claim that a product contains more labour-time than is 'actually' spent on it, as capitalism does in the form of surplus profit. He continues:

While it is, therefore, true that, by retaining the present mode of production, but assuming that the differential rent is paid to the state, prices of agricultural products would, everything else being equal, remain the same, it is equally wrong to say that the value of the products would remain the same if capitalist production were superseded by association. The identity of the market-price for commodities of the same kind is the manner whereby the social character of value asserts itself on the basis of capitalist production and, in general, any production based on the exchange of commodities between individuals. What society overpays for agricultural products in its capacity of consumer, what is a minus in the realisation of its labour-time in agricultural production is now a plus for a portion of society, for the landlords (ibid.).

Generally speaking, no surplus profit can be formed in consequence of the determination of a market value in a non-capitalist, e.g., a socialist, society. The formation of surplus profit must be considered to be a phenomenon specific to 'capitalist production and, in general, any production based on the exchange of commodities between individuals.' But surplus profit that reflects an extra surplus value obtained in consequence of an improvement in productive methods cannot be disregarded even in a non-capitalist society because this kind of surplus profit, unlike others, has a social substance in that all societies must recognise the cost of innovation. What is interesting and significant is that in a capitalist commodity-economy this social substance must appear under the form of surplus profit which accrues to individual capitalists in the process of the determination of market values in general. Capitalism is powerfully motivated to improve on its method of production because the compensation for the cost of innovation takes the form of surplus profit, as has already been remarked.

[5] Following Marx I assume that capital is invested on land to produce wheat. In connection with this example, let us note the following words of Marx:

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 (*Capital*, III, p. 615).

[6] The following table summarises the particulars of this example:

| Land | Product bushels | Product shillings | Capital shillings | Profit shillings | Rent shillings |
|---|---|---|---|---|---|
| B | 15 | 60 | 50 | 10 | 0 |
| C | 20 | 80 | 50 | 30 | 20 |
| D | 25 | 100 | 50 | 50 | 40 |
| Total | 60 | 240 | 150 | 90 | 60 |

[7] The following tables might help to clarify the illustrations in the above paragraph.

Table (1)

| Investment on Land-D | Capital (shillings) | Product (bushels) | Product (shillings) | Profit (shillings) | Surplus Profit (shillings) |
|---|---|---|---|---|---|
| I | 50 | 25 | 150 | 100 | 90 |
| II | 50 | 20 | 120 | 70 | 60 |
| III | 50 | 15 | 90 | 40 | 30 |
| IV | 50 | 10 | 60 | 10 | 0 |
| Total | 200 | 70 | 420 | 220 | 180 |

Table (2)

| | | | | | |
|---|---|---|---|---|---|
| I | 50 | 25 | 300 | 250 | 240 |
| II | 50 | 20 | 240 | 190 | 180 |
| III | 50 | 15 | 180 | 130 | 120 |
| IV | 50 | 10 | 120 | 70 | 60 |
| V | 50 | 5 | 60 | 10 | 0 |
| Total | 250 | 75 | 900 | 650 | 600 |

Table (3)

| | | | | | |
|---|---|---|---|---|---|
| I | 50 | 25 | 100 | 50 | 40 |
| II | 50 | 20 | 80 | 30 | 20 |
| III | 50 | 15 | 60 | 10 | 0 |
| Total | 150 | 60 | 240 | 90 | 60 |

[8] On this point I have been criticised by Messrs T. Ohuchi and H. Hidaka who contend the necessity of the 'descending order.' But the claim that cultivation always extends from superior to inferior land incorrectly presupposes freedom on the part of capital to invest on superior land first. The following remarks are in order in this connection. The pure theory of a capitalist commodity-economy has so far paid no particular attention to the use of restricted and monopolisable natural powers, generically called land, even though they are important means of production. Since these natural powers do not directly affect the fundamental workers-versus-capitalists relation of a capitalist society, the omission of their consideration up to this point has been theoretically warranted. But the historical fact that the genesis of a capitalist society presupposes the severance of the tie connecting peasants, the direct producers, to their land is already implied in the theory of the production-process of capital, the operation of which hinges upon the conversion of labour-power into a commodity. This consideration militates against the view that, when capital requires land as the principal means of production, land is freely available to capital. Although the conversion of surplus profit into rent characterises the capitalistic form of land-ownership, this conversion does not *generate* land-ownership itself. Thus even the passage quoted from Marx in the second note to paragraph 86 to the effect that 'the capitalist mode of production creates for itself the required form of landed property by subordinating agriculture to capital' must not be taken to mean that capitalism historically ensures for itself an unobstructed use of land. Whatever the historical circumstances may be, they cannot be directly reproduced in theory. Having treated the production-process of capital tentatively presupposing the presence of landed property outside of it, the theory cannot now introduce a form of landed property that interferes with the operation of the production-process. The form of landed property that capital historically created by subordinating agriculture to itself in fact turns out to be 'the suitable form' in the sense that it theoretically requires no revision of the prior theory of the production-process of capital. This theoretical compatibility of the form of landed property with the law of value is most strikingly apparent in *differential rent I.*

[9] On this point, too, Messrs Ohuchi and Hidaka criticise me. I wish to emphasise, however, that *the second form* of differential rent reflects more obviously than *the first form* a variety of restrictions placed on capital by landed property. Whereas the first form of differential rent arises from a parallel use, so to speak, of different types of land by capital [even when the scale

of reproduction is unchanged], the second form involves the conversion into rent of surplus profit that is formed in the process of capital accumulation. In the case of *the second form*, therefore, an apparently irrational result can at times be observed. For example, the same land can easily yield different magnitudes of rent, if the process of capital accumulation on it varies because of different tenancy arrangements. It is not simply the productivity of additional investment but also the way in which landed property restricts the free investment of capital that determines this form of differential rent.

All this boils down to the fundamental issue concerning the method of theorising in the context of pure capitalism: the process in which landed property develops its peculiarly capitalistic form. In the theory of rent the general status and character of landowners in a capitalistic society must be clarified. It is therefore necessary to show that *the first form* of differential rent, which arises from the need for capital to convert its surplus profit into rent, constitutes the first step towards the capitalistic characterisation of landed property; *the second form* of differential rent constitutes the second step imposing, so to speak, a passive constraint upon the process of capital accumulation by the landed property, which again conforms to the commodity-economic principle of capital. Then the *absolute rent*, the study of which follows presently, can be seen to constitute the last step exercising an even more active restriction on capitalist activities on land. It is not without reason that absolute rent should be discussed as the last form of rent because it completes the characterisation of landed property in a capitalist society. Capital, let me repeat, does not create land-ownership as such, but requires the particular form of land-ownership suitable to its production-process. The discussion of rent in the pure theory of capitalism accordingly exhibits the theoretical compatibility of the form of landed property with the production process of capitalist society.

[10] It is not a simple problem to specify the exact condition of land-holding that the pure theory of capitalism must envisage. But, in order for capitalism to develop at all the share of surplus value by landed property must be kept within a certain limit. The presence of uncultivated land, for example, most certainly ensures this. Marx says the following:

The mere legal ownership of land does not create any ground-rent for the owner. But it does, indeed, give him the power to withdraw his land from exploitation until economic conditions permit him to utilise it in such a manner as to yield him a surplus, be it used for actual agricultural or other production purposes, such as buildings, etc. He cannot increase or decrease the absolute magnitude of this sphere, but he can change the quantity of land placed on the market. Hence, as Fourier already observed, it is a characteristic fact that in all civilised countries a comparatively appreciable portion of land always remains uncultivated (*Capital*, III, p. 757).

[11] Again Messrs Ohuchi and Hidaka object to this proposition. I, however, maintain that it is impossible theoretically to determine the exact magnitude of absolute rent. Just as the extent to which the rate of profit tends to fall, the magnitude of absolute rent depends on actual circumstances and cannot be determined by abstract logic alone. But the fact that the production-price of the products is lower than their value in agriculture and other industries in which land is the principal means of production, makes it possible for capital to pay absolute rent without contradicting its own principle. So far as this is possible, the form of land-ownership can be regarded as 'normal' from the capitalist point of view. In practice, the case cannot be excluded in which the price of agricultural products rises beyond their value, giving rise to a monopoly rent distinct from, and in addition to, absolute rent. On this point, Marx writes as follows:

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' need and ability to pay. Its analysis belongs under the theory of competition, where the actual movement of market-prices is considered (*Capital*, III, p. 764).

What Marx means by 'the theory of competition' here is not clear to me; it is however quite certain that the pure theory of capitalism cannot treat rent that is based on a monopoly price. Marx, in *Capital*, often makes a similar reservation alluding to a 'theory of competition' without, however, making it apparent how 'the actual movement of market-prices' can be theoretically studied. My view is that a problem such as monopoly rent must be entirely relegated to empirical studies based on, but distinguished from, the stages-theory of capitalist development and the pure theory of capitalism. The misleading impression that 'the actual movement' of anything could be analysed in a theoretical context must be dispelled once and for all in order not to adulterate the consistency of the pure theory nor to detract from the lucidity of the stages-theory.

[12] Even if, upon the hypothetical nationalisation of land, the State collects only differential rent, the latter cannot be adjusted to the need of the commodity-economy because the correct amount of differential rent on superior land varies in response to the absolute rent that the market at any rate generates. Even if the State leases the least fertile land free of rent, that land can be still 'subleased' to others at a certain charge, in which case, as Ohuchi says, the land becomes *de facto* private property. Ohuchi's view on this point is, of course, buttressed with more detailed arguments; for the present purpose, even this single possibility of 'subleasing' is sufficient to disprove the practical feasibility of the nationalisation of land in a capitalist society.

*Chapter 3*
# INTEREST

95. The formula of interest-bearing capital: M . . . . M′ is already familiar to the reader since it represented earlier in Part I: Chapter 3 the activity of money-lending capital. This money-lending capital together with merchant capital whose formula, let it be recalled, was M—C—M′ emerges even in pre-capitalist societies as soon as a commodity-economy develops to some extent. The value augmentation of these two types of capital, however, cannot be said to be rooted in the labour-and-production process, the substantive economic base of these societies. On the contrary, these traditional forms of capital make profit by eroding, so to speak, the production-process of these societies from without. Yet as forms of capital they do represent the self-augmenting motion of value. It is for this reason that they constitute the antecedents and the vital ingredients of industrial capital, the form of capital which actually takes possession of the process of production and establishes the capitalist mode of production. The hegemony of industrial capital, however, does not entail a summary dismissal of these traditional types of capital, money-lending and merchant, but rather their adaptation and reinstatement in the new context. Since industrial capital too must circulate and incurs in the process some unproductive circulation-costs, these must be saved and 'economised' on a capitalist-social basis; the formulae of money-lending and merchant capital are relied upon to pursue this end. Thus the two traditional forms of capital now obtain their capitalist-economic explanation, in the light of which their original activities in pre-capitalist societies as well as their surviving operations in capitalist society can better be appreciated.

## Loan-Capital and Bank-Capital

96. The reproduction-process of capital, as already remarked, constantly generates idle money-capital of various magnitudes. Such money-capital arises, in the first place, as a temporary form of asset in the course of converting commodity-capital (C′) into productive capital (C . . . . P); secondly, as depreciation funds for the replacement of fixed capital; thirdly, as accumulation funds [prior to the conversion of surplus value into capital]; and lastly, as reserve money against price fluctuations and other contingencies. In all these forms, the existence of idle money-capital passively constrains the value augmentation of individual capitals; in the community of capitalists, the magnitude of such unproductive money-capital must be reduced to the minimum, provided that this retrenchment does not impede the sale of commodities. For example, commodities may

be purchased for bills payable at a definite future date, and these bills may in turn be used by the sellers of the commodities on credit for the purchase of other commodities. Commercial bills in that case circulate in place of money; if later the bills are mutually cancelled, no money need interfere in the chain of transactions. This so-called *commercial credit*, however, cannot displace the circulation of money altogether for several reasons. For instance, coal dealers may give credit to cotton manufacturers, but the latter cannot reciprocate. Wages, in general, cannot be paid either directly in the products of capital or in promissory notes of any kind. Because of various special circumstances, moreover, every individual capital is compelled to restrict the credit sale of its product within a certain, fairly stringent, limit. Banks, therefore, emerge as the institution capable of converting these individual trade-credits into a society-wide system of credits.

97. Banks, in other words, assemble in the form of deposits money-capital that inevitably remains idle for definite periods of time in the process of the motion of industrial capital. The money that industrial capitals therefore deposit with banks is then loaned by the banks to other industrial capitals for definite durations of time. Banks, therefore, generalise individual commercial credits into a capitalistically organised system of *bank-credit*. The representative operation of commercial banking is, of course, the discounting of trade-bills generated by credit transactions among industrial capitals. Because of the facility of discounting, industrial capitalists who sold their products on credit can 'monetise' the bills that they hold as the need for cash arises; the discounting bank, in effect, loans the money-value of the commodities already traded to the purchaser *via* the sellers. As the bills fall due the purchasers pay back the money to the bank. Instead of directly lending the money to the purchasers, however, the bank makes a loan to them through the sellers on the recognition that the commodities have already been sold. The bank-credit thus enables the sellers to dispose of the commodities which they would otherwise not have sold; it, in other words, expedites the sale of commodities and reduces the magnitude of circulation-capital with which the economy would otherwise be burdened.[1]

98. A reduction of circulation-capital in a capitalist society undoubtedly means the corresponding increase of productive capital, and consequently a promotion of surplus-value production. Banks pay an interest in collecting deposits and charge interest in making loans; they earn the interest-differential as profit on their own capital invested in the operation of finance, that is to say, in the function of intermediating the capitalist-social utilisation of idle funds. This function, which is absent in the relation of individual credits, is carried out by the banks according to the formula M . . . . M′ of *loan-capital*. Banks, it must be stressed, do not lend their own capital; they merely act as an intermediary between the lenders and the borrowers of funds. But because of their intermediation

funds can assume the form of commodity and can be traded in the money market, in which interest conclusively becomes the price for the use of funds during a specified period of time. The rate of interest, which could not be socially determined in the tangle of commercial credits given and taken by individual capitalists, is now well established in the money market. Moreover, the capitalist-social accommodation of credit by the trading of funds in the money market assists the formation of the general rate of profit as well because loans are made available to the spheres of industry with a relatively higher expected profit-rate, i.e., with the promise of a greater value augmentation. Even though banks' own capital is no more than reserve money against the risk of trading in funds, and although, in profiting from interest-differential according to the practice of buying funds cheap and selling them dear, banks act in the same way as merchant capital, it is certainly incorrect to identify *bank-capital* with merchant capital proper. The real source of bank profit lies in the ability of banks socially to convert the idle money-capital of industry into productive capital. Both interest on deposits and interest on loans originate in surplus value, the increased production of which is made possible by banking in a capitalist society; moreover, the rates of interest are determined by the commodity-economic mechanism because of the *conversion of funds into commodities*.[2]

99. Banks, however, do not merely lend the money deposited with them by others; they also lend their own promissory notes that are convertible into cash on demand. In other words, they discount commercial bills with banknotes that they themselves issue. Since banks are quasi-public institutions intermediating the capitalist-social reallocation of funds, banknotes can circulate more generally than commercial bills issued by individual capitalists; thus the circulation of banknotes, to some extent, replaces the circulation of money. The issuing function of banks then tends to be concentrated and centralised in order to promote an even more general circulation of banknotes, the supply of which is eventually monopolised by a *central bank* standing above the so-called city-banks and country-banks. Even when exclusively issued by the central bank, however, banknotes unlike paper money printed by the government, are not used by the issuer for the purchase of commodities or for making real payments. Banknotes are issued only when the reproduction-process of capital demands loans; they flow back to the issuing bank as soon as capitalists cease to need them. It is thus clear that the volume of money as the means of circulation and payment required by the reproduction-process of capital is capable of being flexibly adjusted by the banks, whose lending activity regulates the movement of the rate of interest.[3]

100. The expansion of the reproduction-process which constitutes the basis for the supply of banknotes generates from within itself its own material pre-conditions, namely, the means of production that the expanding scale calls for and the articles of consumption required for the

reproduction of labour-power. Hence, as already stated, there exists no inherent limit to the expansion of capital except the availability of additional labour-power. It is the incapacity of the capitalist method of production directly to regulate the supply of labour-power that determines the underlying cause of industrial cycles. Indeed, relative surplus population is formed in the phase of depression so as to allow an expanded reproduction in the subsequent phase of prosperity. At the first sign of recovery the expectation of future gains impels capital to expand the scale of reproduction. A vigorous demand for loanable funds then arises and the central bank responds to it with an accelerated issue of banknotes. The widening scale of productive capacities brought about by the expanded reproduction of capital under the given production-relation, however, invariably leads to an upsurge of wages which sharply depresses the rate of profit. Sooner or later the state of an *excess of capital* must develop when the accumulation of capital is no longer accompanied by an increase in the magnitude of profit. At this point any further issue of banknotes intended to accommodate the expanding demand for bank-loans would not release the economy from the impasse, as banks can only respond to the prior development of credit-relations among individual capitals. As the magnitude of profit falls, the formation of idle funds diminishes; if the demand for loanable funds still keeps increasing, discount rates of all banks must necessarily rise. When, therefore, the issue of banknotes is most intensely desired, the central bank is forced to contract the issue. Thus a few individual capitals become insolvent and can no longer expand their reproduction or even maintain their present scale. The disruption of the social reproduction process then unleashes a chain reaction, in consequence of which the system explodes in an industrial crisis. Individual capitals at this point demand cash payment and mutually paralyse the over-extended scale of their production with the result that even the commodities already produced remain unsold. Thus the economy is caught in a state of the apparent over-production of commodities.[4]

101. The selection of the sphere of investment by individual capitals in the light of the expected rates of profit generally tends to equalise them. However, as idle money-capital generated by the motion of these individual capitals is converted into socially utilisable funds of the capitalist community and channelled into the more profitable spheres on easier terms, the rate of interest also plays a subsidiary part in achieving the proper allocation of capital investments. Though originating in the activity of individual capitals, loanable funds once socialised by the banking system can impose an external discipline on the overall accumulation of capital, as described above. Since funds are socially utilised as they are formed in the accumulation-process of individual capitals, their prices are inevitably subject to cyclical fluctuations. Indeed, as Marx says, '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' (*Capital*, III, p. 360). And yet it is also 'possible for low interest to go along with stagnation, and for moderately rising interest to go along with revived activity' (p. 361). Issuing from the motion of individual capitals, funds are separated from capital before being traded in the money-market as commodities possessing definite time restrictions. These commodities are useful to capital in serving to reduce the burden of circulation-costs; at the same time they impose a social discipline on the free motion of individual capitals. A capitalist commodity-economy thus creates for itself a truly congenial method of self-regulation in the *conversion of funds into commodities*.[5]

## Commercial Capital and Its Profit

102. By converting idle money-capital that the motion of industrial capital generates into socially utilisable funds and by reallocating them, bank-capital *directly* contributes towards the extension of society's surplus-value production since the capitalist-social employment of funds reduces the burden of circulation-capital and, at the same time, increases the magnitude of productive capital. *Commercial capital*, in contrast, promotes the social production of surplus value *indirectly* rather than directly. It replaces industrial capitals in the conversion of commodity-capital into money-capital by specialising in, and expediting the hazardous process C′—M′ of selling commodities in the motion of industrial capital. In both cases, society's production of surplus value is enhanced because circulation-costs are saved, but the nature of commercial capital to be discussed below differs from that of bank-capital.[6]

103. If commercial capital purchases commodities wholesale, industrial capital can immediately plough back the proceeds into further production. From the point of view of individual industrial capitals, the amount of money-capital that they have to hold is thus reduced to that extent. But this alone does not save society any circulation-costs, which are merely shifted from industrial to commercial capital. Of course, commercial capital too makes use of funds that banks intermediate in order to save circulation-costs just as much as industrial capital, if not more. The service of commercial capital is, however, not limited to merely taking over from industrial capital the business of selling commodities. [By handling a variety of commodities at once or even one kind of commodity in great bulk, commercial capital in fact promotes the efficiency of the selling business.] The circulation-period of a commodity may be of diverse lengths depending on market conditions; hence an industrial capital specialised in one sphere of production cannot by its own activity cause the shortening of the circulation-period in the same way as the production-period. Commercial capital [because of its efficiency due to diversification and bulk-selling] can shorten the circulation-period of

capital to some extent and also saves the various circulation-costs. It has already been pointed out that the variability of the circulation-period required for the selling of commodities makes it difficult for industrial capitals to accurately foresee their rate of profit. The relegation of the selling business to commercial capital, however, relieves industrial capitals from this uncertainty and contributes to the efficiency of the equalisation of profit-rates, i.e., to the efficiency of the allocation of industrial capital to the various spheres of investment.[7] Moreover, for industrial capitals the *pure costs of circulation* due to the operation of a sales shop, the keeping of books, etc., cause direct deductions from their surplus value and are hence quite unlike the *ordinary costs of circulation* attributable to the mere length of the circulation-period. Although in return for these pure circulation-costs the period of circulation is shortened in one way or another, the relation is not clear enough for industrial capitals to establish by themselves a socially recognisable norm. In the case of commercial capital, which simultaneously handles various kinds of commodities or even one kind of commodity in great bulk, the extent to which the expenditure of pure circulation-costs contributes to the efficiency of the selling operation can be fairly accurately calculated on an average basis. In other words, pure circulation-costs become part of the investment of commercial capital, together with the commodities that must be purchased for resale, both of which are recovered in the retail price of the commodities. Commercial capital invests its own 'capital' in these things, and its profit-seeking activity accomplishes a capitalist-social economy of circulation-costs by the shortening of the circulation-period of social capital at large. This explains the substantive content of *commercial profit* or the average profit that accrues to commercial capital.[8]

104. Exactly the same consideration applies to the case in which commercial capital hires workers for commercial operations. Although the costs of storage and transportation are classified as circulation-costs in the broader sense, storage-labour and transportation-labour do form value, as pointed out earlier, and consequently produce surplus value too which is subject to redistribution as profit. Purely *commercial labour* applied to the buying and selling of commodities, however, does not form any value or produce surplus value, even if it is performed by hired workers since no value is created in circulation.[9] Commercial labour is the only labour that 'capitalists' may perform. If it is done by hired workers in place of capitalists, it does not therefore become 'productive' in the sense of actively adding value to the product. Here again commercial workers let their capitalist recover the wages and earn profit only by contributing to the 'economy' of circulation-costs. These commercial workers, just as industrial workers, are indeed paid wages in return for the sale of labour-power as a commodity, but this does not make commercial labour productive since neither the necessary nor the surplus part of commercial labour form any value at all. This kind of labour is peculiar to commercial

activity whose purpose is to merely shorten the circulation-period and thereby to save circulation-costs to society.

105. Commercial profit arises from the saving of circulation-costs which, though necessary, encumber the formation of surplus value, the only source of industrial profit. It is this circuitousness that leads to a peculiar misconception originating in the circulation-form of capital itself. Since the acceleration of the turnover of capital by the policy of 'quick sales at small gains' often promotes commercial profit, the cause of this profit is naturally attributed to the judicious activity of the commercial capitalist himself. The capitalist view of profit based on the old concept of 'profit upon alienation,' which has preoccupied all forms of capital since the heyday of merchant capital, that is, the concept that profit is nothing but the difference of the selling price over the unit-cost, now appears well endorsed. At the same time, the early transfer of the commodity-product to commercial capital enables industrial capital to repeat its reproduction-process prior to the final sale of the product. As the anarchistic aspect of capitalist production is mainly, though never completely, shifted from industrial to commercial capital, commercial capitalists become capitalists *par excellence* and their speculative activity enshrouds every reality of the capitalist economy.[10] At this point, the part of their capital devoted to the purchase of commodities for resale appears to belong to the same category as *loan-capital* made available by the bank for a given length of time. Hence interest on that 'cash' must automatically be subtracted from commercial profit to determine the so-called *entrepreneurial profit*, or the reward for the purely capitalist activity of buying and selling commodities. Underlying this capitalist conception of entrepreneurial profit, however, is the even more self-deceptive notion that 'capital automatically begets interest,' with which notion indeed the fetishism of the capitalist economy is consummated.

## Capital as an Automatically Interest-Bearing Force

106. The division of commercial profit into interest and entrepreneurial profit fixes the idea of capital *as an automatically interest-bearing force*. Even industrial capital mobilises not only its own money-capital but also loanable funds made available by the bank, paying interest on them, while at the same time it deposits whatever idle money-capital it currently possesses with the bank to earn some interest. Consequently industrial capital too begins to view its own capital as 'funds' lent to it by itself. On the other hand, industrial capital, which produces surplus value in its production-process with the means of production and labour-power purchased as commodities, must redistribute the social surplus value as profit among its constituent members in proportion to the money-value of capital advanced by each of them. This relation mystifies the true source

of profit and makes all profit appear to spring from the mere operation of 'buying cheap and selling dear.' In other words, even industrial capital reckons that it earns profit because of its capitalist-commercial activity rather than because of its production. The division of profit into interest and entrepreneurial profit is, therefore, not the idiosyncrasy of commercial capital alone. Neither industrial nor commercial capital actually pay interest on their own capital, nor can surplus value that is capable of being redistributed as profit be produced by capitalist-commercial activity of any kind.[11] Yet the practice of dividing profit in general into its two components, interest and entrepreneurial profit, reflects the peculiarly commodity-economic method of capital in efficiently organising its own economic process. By this method, idle money-capital that necessarily accompanies the production-process of individual capitals is converted as much as possible into active money-capital and the stock of commodity-capital is sold for money as speedily as possible. It conforms with the spirit of capital that the means of production and labour-power should not be left idle even for a moment. Indeed, for capital as an automatically interest-bearing force to lay idle at all would constitute a cost in the sense of 'interest foregone.'

107. Capital as an automatically interest-bearing force, however, has no power in itself to determine the rate of interest. In stipulating what interest it should earn, *interest-bearing capital* merely reflects the rate of interest already formed in the money market. But the prior determination of the general rate of interest in the money market permits capitalism to substantiate the capitalist concept of interest-bearing capital, and opens the way for a 'formal' possibility of *converting even capital itself into a commodity*. In capitalist society a definite series of periodic revenues is capable of identification as a series of interest-payments on a definite money-sum of capital; in other words, the periodic revenues are capable of being capitalised by the rate of interest prevailing in the money market, and regarded as interest on the so-called *fictitious capital*. Just as a privately-owned lot of land yielding a series of periodic rent-revenues can be converted into a commodity and be traded at a price determined by the capitalisation of these incomes, so is industrial capital, which is incorporated and which distributes part of its profit as dividends to the owners of equity, convertible into a commodity, to be traded at a price determined by the capitalised value of its future dividends. Interest-bearing securities such as public and private bonds are similarly traded as commodities. The market in which bonds and equities are thus traded is called the *capital market* in contrast to the *money market* in which funds are bought and sold as commodities. Although the capital market does not determine the rate of interest, it reflects in the prices of fictitious capitals traded in it the rate of interest already determined in the money market. The relation between the two markets is such that the former potentially develops into an adjunct to the latter. At this point, however, funds invested in the capital market can no

longer be generally viewed as originating in the idle money-capital formed by the motion of industrial capitals. Actual 'investments' in land and in various forms of fictitious capital, whether for the purpose of securing future interest-incomes or for that of making speculative gains, presuppose and develop such concrete social relations that the pure theory of capitalism cannot treat them within its scope.[12]

108. The fetishism of the commodity-economy emanating from the production-process of capital based, as already repeated many times, on the conversion of labour-power into a commodity is now completed in its fulness in the conception of capital as an automatically interest-bearing force. This fetishistic concept, of course, is not a mere delusion; it directly governs the motion of capital itself. In correspondence with the reification of the social relation founded upon the conversion of labour-power into a commodity, capitalist society finds its Idea, or its ideological acme, in the concept of automatically interest-bearing capital.

## The Class Structure of Capitalist Society

109. Arising from a commodity-economy capitalism demands the development of an historical society entirely governed by the principles of a commodity-economy. Hence capitalist society does not form its class-structure directly on a master-servant relation such as the one that characterises a feudal society; capitalism can, at least on the surface, maintain a social relation compatible with 'freedom and equality' that commodity exchanges require. Yet a commodity-economy in which only the products of independent producers are mutually exchanged, i.e., a commodity-economy that is sometimes described as 'simple commodity production,' does not develop into a self-sustaining social entity. Only the commodity-economy that involves the conversion of labour-power into a commodity has any chance of evolving an historical society called capitalism, in which all the social class-relations of earlier societies are resolved into the commodity-economic forms and 'modernised.' That is to say, the class-structure of capitalist society is bound to be concealed beneath the apparently classless commodity-forms,[13] the penetration of which requires nothing less than the science of political economy.

110. Political economy, however, cannot achieve its purpose of exposing the real relations among the classes of capitalists, workers and landowners, the three representative classes of capitalist society, as long as it insists on the superficial associations of 'profit with capital,' 'wages with labour,' and 'rent with land.' If the association of 'profit with capital' is even more obscured by the association of 'interest with capital,' political economy degenerates into vulgar economy. The coupling of 'profit with capital' most strikingly exhibits the fundamental limitation of classical political economy which, perceiving no historical implication of the form of capital, confused capital with the material means of production. At the

time when the form of capital was about to take possession of the social economic substance, that is to say, when the process of social production increasingly conformed to the chrematistic activity of capital, classical political economy simply adopted the commonplace notion of capital as the material means of production, reckoning capital as one of the three factors of production together with land and labour. As already stressed, however, capital earning profit as income does not confront land in general but landed property historically adapted to the capitalist mode of production. Neither does capital contrast itself with labour in general but more specifically with labour of the propertyless workers, whose labour-power capital purchases as a commodity and consumes at will. Wages, therefore, do not represent remunerations for concrete labour-services rendered but simply represent the price of labour-power. Wages do not constitute a freely disposable income and hence cannot be associated with labour in the same manner as profit can be associated with capital. If capital must be regarded as mere means of production, and be reckoned as one of the three elements of production together with land and labour, why should labour not be the Subject of the production-process rather than capital? The triplicate 'income-class' classification stands in the way of scientific progress in political economy, as it glorifies commonplace trivialities. But the association of interest, rather than profit, with capital is even more outrageously assertive of the fetishism of capital, the highest expression of which is found in the conception of interest-bearing capital. Indeed, if capital as such earns interest only, then entrepreneurial profit which is now capable of rationalisation as reward for capitalists' 'labour' must surely be included in wages. In order to be consistent, should not then rent and interest be classed together as 'income from property' as opposed to 'income from labour'? Income classifications of this sort merely reveal the extent to which the class-structure of capitalist society can be obfuscated by the phenomenal form of commodity.[14] The true science of political economy must not limit itself to exposing the futility of these income classifications but must also unmask the capitalist motivations for clinging to such superficialities.

III. The class-structure of capitalist society, not being immediately apparent, requires economic analysis to be exposed. But the same analysis also clarifies the general economic foundation of class-relations in prior societies. The fact that the economic base of class-relations in general must, in the final analysis, be revealed by the conversion of labour-power into a commodity, the form specific to the historical society known as capitalism, is not as strange as might appear at first sight. For the totality of the material conditions of life, or the so-called economic base, which historical materialism claims to characterise the nature of any society, is clarified by the science of political economy specifically designed to explain capitalism, an historically particular institution, and not by a general study of all societies. Capitalist society is an economic society *par* *excellence* in the sense that its social relations tend to be reified, to appear in purer forms, and to become more abstract as its commodity-economic mechanism evolves. It, in other words, materially forms an object of scientific investigation. This does not, of course, mean that studies of earlier societies are futile; on the contrary, such studies will confirm that capitalist society alone possesses this fundamental characteristic which is absent elsewhere. But in order to understand the real social relation that characterised all prior societies, it is necessary that these societies should be studied in the light of capitalist society in which the social relation takes its most transparent form. Thus political economy clarifies not only the class-relations in general common to all societies in human history but also the specifically commodity-economic form in which the class-relations of capitalist society appear. The scientific foundation for socialism whose objective is to realise a classless society, therefore, lies in political economy, and in the pure theory of capitalism in particular.[15]

## Notes

[1] On the discounting of bills Marx writes as follows:

The ordinary businessman discounts, in order to anticipate the money form of his capital and thereby to keep his process of reproduction in flow; not in order to expand his business to secure additional capital, but in order to balance the credit he gives by the credit he receives. And if he wants to expand his business on credit, discounting bills will do him little good because it is merely conversion of the money-capital which he already has in his hands from one form to another (*Capital*, III, p. 425).

But this view neglects the crucial aspect that the seller who discounts a bill has sold his commodity which he would otherwise not have sold. Discounting expedites the conversion of his commodity into money, by making funds available to him. It is not a mere conversion of his 'money-capital' from one form to another.

Engels, too, appears to offer a false explanation of discounting as follows:

If the loan is granted by discounting bills, then even the form of an advance disappears. Then it is purely a matter of buying and selling. The bill passes by endorsement into the possession of the client. There is no question of any return payment on his part. If the client buys hard cash with a bill of exchange or some similar instrument of credit, it is no more and no less an advance than were he to buy cash money with his other commodities, such as cotton, iron, or corn. Still less can this be called an advance of *capital*. Every purchase and sale between one merchant and another is a transfer of capital. But an advance of capital occurs only when the transfer of capital is not reciprocal, but unilateral and for a period of time. An advance of capital through discount can, therefore, only occur when a bill is a speculative one, which does not represent any sold commodities, and no banker will take such a bill if he is aware of its nature. In the regular discounting business the bank client does not, therefore, receive an advance either of capital or of money, what he receives is money for sold commodities (*Capital*, III, pp. 428–9).

Here Engels does not explain why the seller *must* discount the bill. The expressions such as 'the client buys hard cash with a bill of exchange,' 'he buys cash money with his other commodities, such as cotton, iron or corn' and 'every purchase and sale between one merchant and another is a transfer of capital' reveal a rather egregious confusion of the distinct properties and functions of commodity, money, and capital. But it is even more unconscionable to say: 'what the client receives is money for sold commodities.' The sold commodities are in the hands of the purchaser, not of the bank. Even if the bank is reckoned to have purchased the bill as a commodity, the price paid for it is at a discount. Its full price is paid by the purchaser only when the bill falls due. Thus it is certainly wrong to take the bill for a commodity. What is traded here as a commodity, as I shall presently explain, is a [loanable or investible] fund, of which the seller is the bank and the purchaser the industrialist who offers the bill for discounting; the price on the fund is the discount on the bill. Both Marx and Engels appear to have misconceived the nature of discounting because they lack the clear conception of loanable funds. Engels intended to criticise the conception of 'the banker' who 'has become so accustomed to act as distributor (through loans) of the social capital available in money-form that he considers every function whereby he hands out money, as loaning' (*op. cit.*, p. 428). But he (Engels) allowed himself to be misguided by the appearance of 'trade in bills.'

[2] In order to define the concept of interest-bearing capital Marx writes as follows:

Money . . . 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 (*Capital*, III, pp. 338–49).

He then elaborates on this 'commodity *sui generis*' in the following manner:

Suppose the annual average rate of profit is 20 per cent. 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, 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 (p. 339).

Here the owner of the £100 is called the 'money-capitalist' as opposed to the 'functioning capitalist' to whom the £100 is lent (p. 340); the relation between the two types of capitalist is explained by 'the form of lending, which is peculiar to this commodity, to capital as commodity' (p. 341).

The above explanation, however, does not give a clue as to why the 'money capitalist' must lend the £100 to the 'functioning capitalist' instead of using it as capital himself. In practice, of course, it is conceivable that an old 'money capitalist' entrusts his capital to a younger and more active 'functioning capitalist.' The pure theory of capitalism, however, does not permit such an arbitrary and pragmatic generalisation. The pure theory merely says that a capitalist produces, with his own capital of £100, a surplus value of, say £20. It does not imply any relation such that a 'functioning capitalist' should pay £5 to a 'money capitalist.' Moreover, why should the latter lend his capital to the former 'for one year' only instead of permanently? Even if money does acquire 'the additional use-value, namely that of serving as capital,' in order for that money to become a commodity it must first become a non-use-value to the 'money capitalist.' This important point is completely forgotten in the claim that the presence of the additional use-value by itself converts capital into a commodity. An argument such as this is beyond my comprehension, unless the prior specifications of the nature of commodities, money, and capital in *Capital* are to be summarily abandoned at this point. In the pure theory of capitalism the concept of a 'functioning capitalist' who does not possess a capital of his own is surely unreasonable, even if the concept is proposed to pair off with that of a 'money capitalist.'

I do not mean to deny the presence of 'functioning capitalists' in an actual context, but a 'capitalist' in the pure theory cannot be other than the personification of capital. Without an accurate and rigorous theory of lending in the pure theory even the significance of 'functioning capitalists' in a more concrete environment would fail to be properly understood.

3 In practice, however, the extent to which banknotes may be supplied cannot be determined generally, as it depends on such complicated factors as foreign trade, etc., which cannot be considered in the pure theory of capitalism. The ambiguity increases even more, if, as in recent years, the convertibility of banknotes into gold is suspended so that banknotes and fiat paper money become almost indistinguishable. In such circumstances the lending activity of banks cannot be rigorously theorised.

In the earlier half of the nineteenth century, there was a controversy in England over the extent to which the Bank of England might issue notes. The celebrated controversy between the Banking School which emphasised the need for the banking function of the Bank of England and the Currency School which was more concerned with the safe level of cash reserves ended in the victory of the more popular and pragmatic Currency School, whose principle was incorporated in the Bank Act of 1844. The Act, which prohibited beyond a certain limit any further issue of the Bank of England notes unbacked by gold reserves, had to be quickly repealed in the following period of industrial crisis. I wish to stress here the fact that even in the context of pure capitalism from which foreign trade must be excluded, economic theory does not offer a practical guide towards the determination of a limit to the supply of banknotes. I shall presently show that the capitalist process of reproduction is itself cyclically interrupted by a crisis. Banks can only adapt to whatever credit relations that industrial capitals generate among themselves in response to the nature and scope of the current reproduction-process.

4 The phenomenon of crisis is not directly caused by an over-production of commodities. Both the means of production and the articles of consumption that capital requires for its expanding reproduction are produced, as they are socially regulated by the movement of prices, so that no general over-production of commodities is theoretically possible. Some partial over- and under-production of commodities are indeed unavoidable, but these must eventually be corrected by the motion of prices. Sometimes the consuming-power of the labouring-class is believed to be too restricted vis-à-vis the expanding production of commodities. But there is no reason why the price of labour-power cannot be raised; indeed, in the phase of prosperity wages do rise beyond the value of labour-power, permitting the workers to consume more than usual. The expanded reproduction is curbed only by an *excess of capital*, although this excess does not become manifest unless the capitalist-social restraint, suddenly applied to the accumulation of capital in the form of a drastic rise of interest-rates, engenders a crisis. In the actual course of capitalist development it is true that the speculative purchase of certain commodities, often carried to excess by commercial capital, induces an over-production of these commodities, and that the failure to realise in money these over-produced commodities frequently initiates a crisis. But even in this case the general proposition still holds that a real crisis develops only when industrial capital already suffers from an excess of capital.

5 As already pointed out, Marx would rather call the 'conversion of capital into a commodity' what I have here described as the *conversion of funds into commodities*. At the present stage, however, capital itself cannot be regarded as being 'commoditised.' Interest is the price

for the use of funds for a definite period of time, not the price of capital itself. Later I shall show that capital too is converted into a commodity as a title to a series of interest incomes. But the price of that title is evidently different from current interest charges.

[6] It might appear strange to discuss the activity of *commercial capital* in the theory of interest. But commercial capital, just as bank-capital, serves to 'economise' the unproductive costs of circulation. In this function commercial capital presupposes and makes full use of loan-capital which banks intermediate, as will become apparent in the following. Marx's method in *Capital* of treating commercial capital prior to loan-capital does not appear to me to be effective in confirming this important relation.

[7] The historical development of industrial capital presupposes indeed the trading activities of merchant capital. In theory, however, this historical order must be reversed; the function of commercial capital must be explained, as if it were a differentiation from the selling activity that industrial capital originally performed. That is why earlier in the theory of profit (Part III: Chapter 1) it was necessary to reserve the full discussion of circulation-periods and circulation-costs. An expedient such as this, which might cause some difficulty to the reader, cannot be avoided in the pure theory of capitalism.

[8] What I said in the preceding note is again relevant here. Even though the pure circulation-costs of buying and selling commodities were traditionally regarded as part of merchants' capital, it is theoretically impossible to consider them as part of the investment of industrial capital whose formula is an extension of that of merchant capital. For an individual industrial capital the adequate magnitude of these pure circulation-costs is even more difficult to determine than the length of the circulation-period. Since, by incurring these costs, an industrial capital can reduce the length of the circulation-period, these costs which alleviate the dead-weight on surplus-value production may be said to be indirectly conducive to an increased production of surplus value. But these costs cannot therefore be integrated into productive capital and be viewed as part of capital that directly contributes to the production of surplus value. If these costs cannot be part of productive capital, neither can they be part of commodity- or money-capital. They are merely costs of reducing the magnitude of circulation-capital.

When these costs are expended by commercial capitalists, instead of industrial capitalists, for exclusively commercial operations, the context radically changes. Here commercial capital can calculate on an average basis the efficiency of these costs, which become 'capital' in the sense that a commercial investment in them saves society the ordinary costs of circulation associated with the length of the circulation-period by the shortening of the circulation-period of capital in general. Commercial capital, which reduces the pure circulation-costs more than industrial capital is capable and which simultaneously saves society the ordinary costs of circulation associated with the length of the circulation-period, realises an average profit in the difference between the price at which it purchases commodities and the price at which it sells them. Industrial capital, in consideration of the burden of the pure circulation-costs that it would have to bear and the length of the circulation-period that it would have to finance, gains somewhat by parting with its products at a price lower than the production-price. Commercial capital, by selling commodities at their production-price, not only recovers its current business expenses and the depreciation of its sales shops, etc., considered as its 'capital advanced,' but also realises the average profit that would accrue to any capital investment. It is important to clearly understand the fact that commercial capital can recover the value of its 'capital advanced' and earn a commercial profit because its activity saves society unproductive costs which otherwise could not have been saved. The activity of commercial capital does not depend on an excess of the selling-price over the production-price.

There are actually many commercial firms which do not seem to operate in the manner described here. Indeed few would ever approach the purely theoretical image of commercial capital since the traditional elements of merchant capital widely persist in actual commercial practice. Yet the true source of commercial profit cannot be explained, unless the activity of commercial capital is set out in this abstract and purely theoretical context. As in other cases, the concrete forms of commercial capital imbued with the traditional elements of merchant capital must be analysed as a degenerate form of its purely theoretical image.

[9] The formation of value by storage and transportation labour involves a little complication because the 'socially required' storage and transportation cannot be easily distinguished from those connected, for example, with the speculative buying and selling of commodities. Moreover storage and transportation, even when productive, leave no physical trace in the product and appear only in the form of fees and commissions. In the case of transportation, both 'things' and passengers are relocated in consequence of its activity. The pure theory of capitalism, however, need not, and must not, attempt to explain all aspects of transportation [or of storage for that matter]. If some concrete aspects of these things remain unexplained in the abstract theory, it does not mean that the theory is futile. It only means that more concrete information is needed, in addition to the theory, for a fuller explanation of these aspects. What is futile is an attempt at an empty generalisation in which everything is explained by the 'phenomenal' theory of price formation. That sort of theory reduces the laws of motion of the capitalist economy to a set of commodity-economic formalisms and frustrates the aim of political economy as an historical science. The same craving for an empty formalism sometimes even culminates in the asinine rejection of the labour theory of value just because, so they say, labour does not determine the value of an antique. What is the use of a general theory if it obliterates the historical fact that capitalist society rests on the social relation that confronts the workers with the capitalists? Marxists, on the other hand, must also be wary of vain attempts at explaining all the recent phenomena of finance-capitalism directly in terms of the pure theory of capitalism; for such an attempt would also spoil the integrity of the pure theory.

[10] During the advanced phase of prosperity immediately preceding a crisis speculative activities of merchant capital often overshadow the real factors pregnant with the crisis. The widely-held view that over-production causes a crisis usually stems from the vivid impression made by this speculative phenomenon. Speculation which is in the nature of merchant capital is, of course, very much alive in commercial capital too, as it is described in the pure theory of capitalism. But the speculative activities of commercial capital only add colour to the process of industrial cycles, the real cause of which must be explained by the more fundamental activities of industrial capital in the course of its accumulation. In other words, the real cause of industrial cycles must be found in the accumulation-process of industrial capital, even though the speculative activities of commercial capital always accompany the external manifestation of industrial cycles. This, of course, does not mean that the theory of a purely capitalist society, in which the law of value asserts itself through the motion of prices, capital accumulates though business cycles, and the general rate of profit is approximated through the constant equalisation of unequal profit-rates, must presuppose capital that does not speculate. That would be sheer nonsense. But to explain the cause of a crisis by the speculative activities of commercial capital would nevertheless be futile, just as it is so to explain the substance of value by the motion of prices itself rather than by what lies under the central limit of that motion.

It is true that the *form* of value cannot be deduced from the *substance* of value; the former must be explained separately from the latter. But once the substance is revealed, the form that contains the substance can be restated as being grounded on the substance. That this restatement does not involve an abdication of the form is quite clearly expressed by the proposition that the value of a commodity is the centre of attraction for the motion of its prices. Similar considerations apply to the case of capital. Although the general form of profit is associated with the merchant activity of any capital, profit in the pure theory of capitalism is no longer mere 'profit upon alienation' because the substance of profit there is grounded in the production-process of industrial capital, and because the form of profit is restated as a redistributive form of surplus value. Yet even when capital takes possession of a production-process, which it makes the substantive base of its activity, it cannot manage the circulation-process in the same way as it manages the production process. In order to deal with the specific problems of circulation, the newly designed forms of bank-capital and commercial capital must be introduced as derivatives of the form of industrial capital. In the context of the pure theory of capitalism then, speculation is no longer an abstract, general category, but an activity *par excellence* of commercial capital the substantive nature of which has already been revealed.

Thus the pure theory of capitalism certainly does not exclude speculation which is almost atavistic to all forms of capital. Even an industrial capital often becomes insolvent because it cannot restrain itself from the speculative propensity to over-produce. The pure theory, however, shows that commercial capital, which deals exclusively with the circulation of commodities, has the natural tendency to indulge in over-trading, and that this over-trading as such does not explain the excess of capital, the deep-rooted cause of an industrial crisis.

[11] If an industrial capitalist purchases the means of production and labour-power cheaply and sells his product dearly, or if he employs the means of production sparingly and exploits the workers rapaciously, he may make more profit than others. But it is clear to everyone that this extra profit does not represent any part of surplus value produced actually in his factory. If, on the other hand, he earns a surplus profit because of the adoption of some new productive method, it is often thought that the profit issues from his capitalist activity, and that this capitalist activity must be regarded as 'value-forming.' But I have already pointed out that costs and labour applied to the invention and discovery of such a new productive method do not form value or produce surplus value. The adoption of the method by the capitalist does not make him productive of value either. On the contrary he eventually reduces the value of his commodity. Even the extra surplus value that he earns while the new method is not yet generally adopted, represents no labour of his workers producing with the new method, as already mentioned. The new method merely reduces the labour-time required for the production of the commodity, and this promotes the production of relative surplus value. The payment for patent rights that permit the use of new inventions and discoveries is no more than an expedient device in capitalist society for the encouragement of such inventions and discoveries.

Even if a capitalist himself discovers a new commodity which might appeal to the fancy of the public and invests money in it, he does not in any sense produce value. It is quite correctly asserted that capitalists too are rendering some useful services to society, but rendering a useful service is, of course, not the same thing as creating value. There are indeed many who perform socially useful functions and who are paid for their functions without, however, forming any value in the economic sense. To claim, for instance, that educators 'create value' with their labour is no more than to pronounce a vulgar analogy that their efforts are comparable to the production of some material objects. In a capitalist society capitalists without any doubt perform a definite kind of socially useful service, which moreover has important economic consequences. For example, by investing in the branches of industry in which the rate of profit is higher than the average, capitalists accomplish a proper allocation of resources. But such an activity cannot be described as 'formative of value,' even though it is indispensable to society.

[12] In the pure theory of capitalism, capital is invested for the purpose of earning a profit, not merely for earning interest. Even loan-capital which earns interest cannot function except as a subsidiary operation of industrial capital [there being no loan-capitalist separate from an industrial capitalist]. Only by the conversion of funds arising from the circulation of industrial capital into commodities, can the general economic significance of the rate of interest be understood consistently with the abstract context in which the theory of pure capitalism must be stated. This means that the money market is theoretically prior to, and independent of, the capital market in which bonds and equities are traded. More concrete relations between the two markets become understandable because of the prior account of the money market in the pure theory of capitalism. In ordinary parlance the two markets are

distinguished without a clear line of demarcation, presumably because practical people do not know how to characterise the money market in an abstract context.

The diffusion of the joint-stock-company (corporate) system in industry, promoted by the employment of increasingly heavier fixed-capital equipment, ushers in the epoch of the so-called *finance-capital* and entails a host of new phenomena quite beyond the scope of the theory of pure capitalism. For example, an incorporated enterprise already implies the division of the capitalists into ordinary share-holders and those holding controlling interest. The former tend to become mere *rentiers*, while the latter grow into capitalists capable of commanding capital belonging to others as well as their own. Such a division of the capitalist class unfolds a variety of concrete economic relations, which can only be classified into 'types,' and which are not amenable to the level of abstraction required by the pure theory. An attempt to treat even these concrete relations within the pure theory would not only be futile but would spoil the integrity of the pure theory itself. The behaviour of *finance-capital* must be understood in the light of the purer forms of capital already well established; this does not, however, mean that finance-capital itself should be discussed in the pure theory of capitalism. Such a treatment would not only obscure the theoretical meaning of capital in its pure forms but also make any correct explanation of finance-capital impossible. I wish to emphasise once again the importance of sharply separating the pure theory of capitalism from the stages-theory of capitalist development. Even 'industrial capital' in its historical concreteness comparable to that of finance-capital must not be confused with the pure form of industrial capital. In the earlier half of the nineteenth century an historical 'type' of industrial capital developed in England, repealing the Corn Laws, realising the regime of free-trade, and imposing its influence over wider areas of Europe. This 'type' of industrial capital which marked the liberal stage of capitalist development must be subjected to an independent stages-theoretic study because the historical concreteness of its behaviour cannot properly be treated in the abstract context of pure theory of capitalism.

[13] In a country like Japan, in which capitalist society developed only at the so-called finance-capitalist stage of world capitalism, a high level of capitalist development has not been incompatible, as already pointed out, with the survival of the traditional class of 'small producers.' The observation of this fact has often led to an undue exaggeration of the surviving, pre-modern social relations and ideologies in characterising the class-structure of this country to the extent of neglecting the underlying force of the 'modernisation' of classes. This tendency has been particularly noticeable in the studies of Japanese prewar agriculture.

[14] On this point Marx says,

Just as a scholastic is familiar with God the Father, God the Son, and God the Holy Ghost, so are the vulgar economists with land-rent, capital-interest, and labour-wages (Karl Marx, *Theories of Surplus-Value*, Moscow, 1971, Part II, p. 503).

calling the three couplings of incomes with respective classes the Trinity Formula of bourgeois society. Indeed, as long as the real nature of capital remains ambiguous, political economy reveals no more 'truth' than a mediocre theology professes to do.

[15] Although Marx refers to the 'necessity' of the transformation of capitalism into socialism in Chapter 32 of *Capital*, Vol. I entitled 'Historical Tendency of Capitalist Accumulation,' I do not believe that this necessity follows from the economic laws which Marx discusses in *Capital* of the motion of capitalist society. I have argued this point elsewhere, particularly in *Kyōkō-Ron* [*Theory of Economic Crises*] (pp. 184–5) and *Keizaigaku Hōhōron* [*Methodology of Political Economy*] (pp. 143–7). The pure theory of capitalism must represent the capitalist commodity-economy as if it were a self-perpetuating entity in order to divulge the laws of its motion. It, therefore, seems to me quite impossible for economic theory to demonstrate at the same time a transformation which involves the denial of these laws. I certainly do not mean that economic theory, for this reason, should assert the permanence of capitalist society. I only mean that the laws of pure capitalism cannot possibly be exposed without

envisioning an indefinite duration of pure capitalism itself. Political economy, precisely because it exposes the economic laws *completely* in this context and thereby makes the total cognition of the object of its study possible, albeit in an abstract and general context, endorses scientifically the feasibility of abolishing capitalism. The ability of political economy to comprehend the object of its study completely and totally, the property which presumably is not shared by other sciences, derives from the fact that the pure theory of capitalism, of all the social sciences, studies the historical institution at its most abstract level. Empirical studies of a capitalist economy provide more concrete information which might prove useful to political action. But neither the pure theory of capitalism nor empirical studies of an actual capitalist economy, nor for that matter the stages-theory of capitalist development which mediates them, offer an economic explanation of the process of transition from capitalism to socialism. It is for this reason that the organised 'practice' of socialist movements always requires a Subject, whose action does not merely materialise the deterministic course of economic necessity but instead consciously exploits the knowledge of the social sciences of which political economy is the core. Even in this case, it must be emphasised that the knowledge of society does not admit technical applications as the knowledge of nature might. The usefulness of the knowledge of society is limited to providing the standard for practical action. That is to say, the correct use of the knowledge of society is to frustrate ill-advised actions; this is of paramount importance. In any case, whether or not the victory of socialism is necessary depends on the practice of socialist movements, not directly on the economic laws of motion of capitalist society. But with the economic laws of motion the class-structure of capitalist society is laid bare, and this throws light on the general economic foundation of class-antagonisms even in prior societies and at the same time confirms the historical transience of capitalist society. It is on the basis of this knowledge that socialist movements can proclaim the abolition of capitalism as a practical implication of science.

APPENDIX I

# AN ESSAY ON UNO'S DIALECTIC OF CAPITAL

Thomas T. Sekine

*York University*
*August, 1977*

This compact book of Uno is a masterpiece of *dialectic* although he does not even once mention this word dialectic in it. It will be difficult, I fear, for anyone to really appreciate the significance of this book without an adequate conception of the method which characterises its exposition. In what follows I shall, therefore, try to clarify the nature of that method.[1] Uno's is certainly very different from what 'materialistic dialectic' is made out to be in popular literature. I ought to stress immediately that the dialectic which underlies Uno's writing is a method of cognition, that is to say, that it is a method of 'knowing' the subject-matter. It, in other words, has something to do with the theory of knowledge and nothing at all to do with social action, ideology, praxis, etc. For this reason I begin by contrasting the dialectical method with another method of cognition, called analytical (or perhaps better empirico-analytical), which has come to dominate contemporary discussions on the scientific method (Section I). I shall next review Hegel's dialectic in order to establish what precisely is meant by 'discovering the rational kernel within the mystical shell'[2] (Section II). Finally, I will show how Uno's dialectic boils down to the method of social science in contradistinction to the method of natural science (Section III).

Throughout this Appendix, notes in brackets refer to the Bibliography on page 167.

# I. THE ANALYTICAL METHOD OF NATURAL SCIENCE

At the beginning of the twentieth century physics was said to be in a state of crisis (Bocheński, pp. 12–14). The realisation that the elegant system of classical mechanics approximated reality only in the case of low-velocity motions of bodies destroyed the faith in the Newtonian view of nature which had optimistically promoted the rationalism, determinism, and natural scientific materialism of the nineteenth century. To Mach, Duhem, Poincaré and others it suddenly appeared as though 'matter has disappeared' (Lenin, p. 240), as the mystery of nature deepened calling for a drastic revision of the traditional view. The effect was acutely felt in philosophy and scientific methodology; it was, however, only after Einstein's discovery of the relativity principle which revolutionalised physics that logical positivists began to propound their *analytical* theory of knowledge purporting to keep abreast with the new development of scientific practice (Ayer, 1958).

1. **Meaning and Truth**. In an effort to reaffirm Newton's warning to 'beware of Metaphysics,' logical positivism demands a sharp dichotomy of theory and facts (Ayer, 1939). Thus all propositions or meaningful statements are, according to this school, either *a priori* analytic or empirically synthetic, other statements being residually defined as metaphysical, i.e., meaningless or nonsensical. *A priori* analytic statements are tautological in the sense that their denial involves a self-contradiction. Such statements are logically necessary, i.e., irrefutable from the standpoint of formal logic, although they are emphatically devoid of any factual connotation. They are nonetheless indispensable to scientific knowledge inasmuch as they stipulate the linguistic usage or convention of science. Synthetic-empirical propositions, on the other hand, refer to 'matters of fact' and must be attested by human experience (i.e., by experiments or observations). Since science is concerned with matters of nature, it must, with the help of purely logical propositions, produce such statements as are empirically testable, and hence can be either validated or invalidated in fact.

The immediate difficulty that this methodological proposal faces, however, is the impossibility of conclusive 'verification.' For, as well known since Hume, it is impossible to guarantee that certain instances *will* be experienced because they have so far been repeatedly experienced, however great the number of repetitions may be. Thus even such a self-evident proposition as 'The sun rises once every twenty-four hours in the Mediterranean region' cannot be conclusively verified, there being always a possibility that the sun may not rise tomorrow as expected. Popper who rejects the inductive logic, therefore, proposes to replace the verification principle with the falsification principle. With this replacement, it is possible to claim, although this is not Popper's intention, that a falsifiable statement is meaningful in the sense of non-metaphysical.[3]

To abandon the verifiability of scientific propositions and remain content with their falsifiability, however, has a far-reaching epistemological consequence. Since no testable hypothesis can be shown to be true or false once for all, science must renounce its claim to the knowledge of any definite truth. Science can know for sure only what nature does not do but never what nature actually does.[4] If a scientific theory has not been falsified, it is only a so-far-so-good conjecture which may at any moment turn out to be an illusion in the light of new evidence. No theory can, therefore, be conclusively pronounced to be true unless it is factually empty (i.e., merely tautologically or axiomatically true); it can be meaningful at most in the sense of being possibly true.

2. **The Problem of Demarcation**. Is it then possible to demarcate science from metaphysics or pseudo-science by this criterion of meaningfulness? This turns out to be impossible because no science can restrict itself to stating only meaningful sentences. A testable hypothesis cannot be proposed without simultaneously specifying how actually the test should be carried out. But the specification of the manner in which the test should be conducted can neither be tautological nor falsifiable. It is not tautological because its denial is not self-contradictory; it is not falsifiable because there is no way of empirically refuting it. Consequently it has to be meaningless, i.e., willy-nilly metaphysical; yet it is obvious that no science can be free from such metaphysics. This difficulty can be easily illustrated by the following example.

Consider the well-known Euclidean theorem that the three inner angles of a triangle always add up to a straight line. This theorem is an immediate consequence of the axiom of parallel lines; it is tautologically true and factually empty. In order to translate this proposition into a testable hypothesis, however, one has to interpret some physical reality as an approximation to the theoretical triangle. Hence if science wants to test this proposition, it must state an interpretative sentence, called a 'bridge principle' by C. Hempel, which cannot on the basis of the above criterion be meaningful (Hempel, 1966, pp. 72–5). P. W. Bridgman's claim (Bridgman, 1927) that the theorem can be 'operationally meaningful' if and only if it shows how a physical triangle may be constructed as an approximation to a pure triangle involves the same difficulty (Hempel, 1966, pp. 88ff; 1952, p. 34). For short of an operational specification, which implies an interpretation, the theorem can never be 'empirically refutable, [even] under ideal condition' (Samuelson, 1947, p. 4), i.e., the theorem can never be translated into a testable proposition.[5] If this translation which no empirical science can avoid is a metaphysical activity, the demarcation of science from metaphysics on the ground of meaningfulness becomes a crass joke, Newton's warning remaining completely ineffective.

This problem cannot be circumvented by merely declaring that an operational specification or a physical interpretation of theoretical concepts so far as it assists an experiment or observation shall henceforward be deemed 'meaningful.' In that case it becomes rather embarrassingly obvious that the definition of meaningfulness itself is and has always been metaphysical. It is therefore quite right for K. Popper to abandon logical positivism together with its meaningfulness criterion. The alternative that he proposes, however, is the following:

> In contrast to these anti-metaphysical stratagems . . . my business, as I see it, is not to bring about the overthrow of metaphysics. It is, rather, to formulate a suitable characterisation of empirical science, or to define the concepts 'empirical science' and 'metaphysics' in such a way that we shall be able to say of a given system of statements whether or not its closer study is the concern of empirical science.
>
> My criterion of demarcation will accordingly have to be regarded as a *proposal for an agreement or convention*. As to the suitability of any such convention opinions may differ; and a reasonable discussion of these questions is only possible between parties having some purpose in common. The choice of that purpose must, of course, be ultimately a matter of decision, going beyond rational argument (Popper, 1934, p. 37, italics original).

Popper here wishfully hopes that the scientific establishment can somehow agree on the meaning of the word 'science' as a matter of convention, and that once agreed upon the adherence to such a convention should be deemed as a qualification for membership in the scientific community. He freely admits that 'in aiming at my proposal I have been guided, in the last analysis, by value judgements and predilections' (p. 38). These value judgements presumably include his unstinting praise of 'the dignity of modern theoretical physics in which I and others see the most complete realisation to date of what I call "empirical science"' (ibid.).

This view is tantamount to the practical definition that science is what scientists do, or more accurately that science is what good scientists like modern physicists appear to Popper to be doing. The question, therefore, boils down to what they in fact do. According to Popper good scientists offer falsifiable hypotheses or rather hypotheses that are most readily falisfiable. For example, scientists may predict that water vaporises when heated up to and beyond 100°C. This proposition is readily falsifiable because anyone can test it as many times as he pleases and easily confirm the result unless his thermometer is inaccurate. To translate an abstract theory into an experimental 'recipe' is part of the scientist's job even though it may involve metaphysics from the point of view of the logical positivists. To Popper only those theories from which one cannot generate a conclusively testable hypothesis are metaphysical or pseudo-scientific. The hypothesis must refer to 'events that recur in accordance to rules and regularities' because only then can the result of the test be observed, in principle, by anyone and inter-subjectively (i.e., objectively) confirmed (pp. 44–5).

Popper's 'liberal' characterisation of science as opposed to pseudo-science would be adequate if in fact all scientists do what they are supposed to be doing. However, they may not be such paragons of methodological virtue, as Feyerabend has recently argued; so far as the method is concerned, they may indeed be ruthless opportunists in their hectic search for possible truth quite oblivious of Popper's code of good behaviour (Feyerabend, 1975). At this point it may be remarked that a disillusioned liberal often becomes an anarchist. When things work out automatically one can afford to be a liberal asserting complacently that the imposition of an organised discipline would always be futile. But if things do not work out nicely by themselves, the continued refusal to submit to any control leads to unprincipled permissiveness and the worship of chaos. Thus when Feyerabend discovers that scientists are in fact not doing what according to Popper they should be doing, it is not surprising at all that methodological anarchism follows.[6] The liberal methodology of Popper has always lacked a self-confident philosophy, the philosopher not being supposed to think actively for himself but rather vicariously to record what scientists have already decided to do, right or wrong.

Thus Popper himself may have sown the seed of methodological anarchism when he defined science by scientists' own practice. But the epistemological question: 'How do modern physicists and chemists acquire valid knowledge of nature?' still stands. Feyerabend's 'dadaist' answer that they resort to the anti-method of 'anything goes' does not appear to be satisfactory because the philosophical problem of the validity of knowledge is not even faced by him, if instead surreptitiously replaced by the psychology of learning.[7] Again Popper himself has prepared the ground for this abdication of philosophy by asserting that all knowledge is a conjecture which can never be absolutely validated. In this case whoever possesses a falsifiable but not yet falsified hypothesis can claim a negative knowledge, i.e., the knowledge that the hypothesis has so far not been counter-evidenced. It is then very difficult to distinguish between an educated guess and a madman's fantasy;[8] if no authority can be trusted to rule on the distinction, anarchism cannot be avoided.

3. **The Dogma of Reductionism**. So far as physics and chemistry are concerned Popper's method which intends to allow maximum freedom to scientific practitioners may well be regarded as liberal, if verging on anarchism in the limit. But so far as other (less dignified!) branches of science are concerned his view develops in the diametrically opposite direction. The extreme intolerance and bigotry with which he misinterpreted and belittled Marxian political economy in some of his well-known

books (Popper, 1945, 1957) shows how a liberal professor can overnight turn into a Spanish Inquisitor or a Stalinist bully, giving more credibility to the 'broad-mindedness' of Feyerabend's anarchism. Reductionism, explicit or implicit, is a dogma (i.e., a metaphysical doctrine according to any criterion) most widely shared by the methodologists of the analytical school.[9] For this dogma which requires all sciences regardless of their purpose to model themselves after physics and chemistry is a natural outcome of the analytical philosopher's fascination with the early twentieth-century development in the physical sciences. I do not need to quibble on the lexical definition of 'science,' a word so often used as a synonym for 'natural science' in contemporary English; in the present methodological context the word 'science' is meaningful only in its original sense of knowledge, whether pertaining to nature or to society.

By denying social science its own method and by demanding its methodological compliance (or even subservience) to natural science, reductionism most unambiguously exhibits the limitation of analytical philosophy including the critical rationalism of Popper. The limitation consists in prescribing arbitrary rules *in vacuo* and imposing them on science from outside as constraints. This limitation is inherent in the analytical method of scientific cognition; for it does not (and cannot) arise from the nature of the subject-matter itself but is posed as a set of norms artificially contrived by the philosophical observers of science who are not even free from value-judgements. This difficulty stems from the fact that nature does not conclusively reveal its inner laws of motion. If what Popper says is true, one can only be sure of the anti-knowledge of nature; that is to say, science can know only certain things that nature does not do. So long as natural science has to depend on empiricism, in other words, it is impossible to expose all of the jealously guarded secrets of nature; for empiricism knows no theory other than hypothetical or conjectural.

I personally do not wish to make any dogmatic assertion on the present state of knowledge concerning nature. There may be no such thing as 'nature' cut and dried independent of our observation; there may be no pure empiricism, i.e., no presumption that experience is not already conditioned by theories. It may even be, as Bachelard is reported to have claimed, that no knowledge of nature need be philosophically sanctioned as objective for in the history of scientific practice truth imposes itself by itself (Lecourt, p. 12). What is obvious to me, however, is that the physical sciences cannot really be free from empiricism of some sort or other and hence not be free in the final analysis from Hume's problem. If therefore natural scientific truth is never absolute and natural scientific theories always conjectural and hypothetical, then nature (whatever it may be) cannot be totally known. Hence follows Popper's guarded statement: 'If we wish to study a thing, we are bound to select certain aspects of it. It is not possible for us to observe or to describe a whole piece of the world, or a whole piece of nature' (Popper, 1975, p. 17). This is another way of saying that the theory is not 'grey' and hence that the world cannot be understood.[10]

If this is the case, it is certainly incorrect to apply the epistemological method of the natural sciences to the study of social phenomena; for any knowledge of society which is partial (and hence ideological) is strictly meaningless. For example a partial interpretation of an historical institution such as capitalism can make of it either a paradise of Pareto-optimality or a dismal world of alienation or anything that fits the fancy of the prevailing ideology. Neoclassical economics which has most willingly followed the reductionists' advice[11] has indeed created a travesty of celestial mechanics, dubbed general equilibrium theory, claiming it to be positive rather than normative. The impossibility of such a theory to produce readily falsifiable hypotheses, however, is surely not due to the economist's lack of enthusiasm but to the very nature of economic reality which in general does not permit sufficiently 'repeatable' experiments or observations. The less rigorous and systematic the theory is, the more readily it is tested;[12] but the test is hardly ever refuted because econometric operations allow almost any amount of *ad hoc* justification. Contemporary economics, therefore, is not a good 'empirical science' to satisfy Popper's criterion.[13] This fact is becoming obvious to an increasing number of practitioners who frequently complain about the 'emptiness of the theory.' An economic theory, however, has never been abandoned because it is empty of empirical content; it has always been rejected on an ideological ground.[14]

The analytical method of cognition is thus not fully satisfactory even when it pertains to the physical sciences, though it may have to be tolerated in that context short of a better alternative. When, however, it is forcibly applied to the study of historically unique social phenomena, it does more harm than good. The purpose of social science is to overcome one-sided ideologies based on partial knowledge of society; social science can be objective because society, a complex of human relations, can be totally exposed.[15] If nature is a great mystery, it does not follow that society must also be. The dogma of reductionism, originating from the misconception of the nature and the purpose of social science, ties social reality to the Procrustean bed of a partisan ideology and constructs a pseudo-knowledge of society by disregarding (if not blatantly accusing) whatever fails to conform to the chosen prejudice as scientifically irrelevant. In order to be objective and rise beyond ideologies, social science must liberate itself from the tyranny of the analytical method; the only method of scientific cognition which fits the need of social science is the dialectical method. Let us, therefore, proceed to examine what this alternative method has to offer.

# II. THE DIALECTICAL METHOD OF HEGEL

In 1817 Hegel wrote as follows:

> Newton gave physics an express warning to beware of metaphysics, it is true; but to his honour be it said, he did not by any means obey his own warning. The only mere physicists are the animals: they alone do not think: while man is a thinking being and a born metaphysician. The real question is not whether we shall apply metaphysics, but whether our metaphysics are of the right kind: in other words, whether we are not, instead of the concrete logical idea, adopting one-sided forms of thought, fixed by the understanding, and making these the basis of our theoretical as well as our practical work (Wallace, p. 144).

According to Hegel sensible things do not by themselves hang together in a coherent whole; only the super-sensible categories of thought can be logically interwoven in a total, self-contained system. The world of sensible objects is therefore irrational, illusory, and false; the world of pure thoughts or the metaphysical world is rational, real, and true. 'Logic therefore coincides with Metaphysics, the science of things set and held in thoughts' (p. 36). Man can know truth or 'the concrete logical idea' only because he 'is a thinking being and a born metaphysician.' To deprive man of metaphysics would therefore be to deprive him of his native intelligence, his faculty of thinking. Clearly metaphysics as such has nothing to be blamed. What Hegel criticises is the 'one-sided forms of thought, fixed by the understanding' which characterised the method of 'the Metaphysics of the past as it subsisted among us previous to the philosophy of Kant' (p. 47).

By the 'understanding' Hegel quite specifically means 'the mode of mind which seeks precision above all things, and insists upon clear distinctions' (Stace, p. 101); it is the 'stage of the development of mind at which it regards opposites as mutually exclusive and absolutely cut off from each other' (ibid.). This understanding which tends to regard the categories of thought (or concepts roughly speaking) as 'static, fixed, and lifeless' (ibid.) and which therefore promotes dogmatic metaphysics is not an adequate mode of mind to deal with speculative issues. It is the power of 'reason' that overcomes the one-sidedness, empty formality, and static lifelessness which the understanding imposes on cognition, thus making a comprehensible synthesis of the metaphysical world possible, the only aim of speculative philosophy. Reason's method of thinking is dialectic or the logic of synthesis.

1. **The Problem of Idealism**. Hegel does not deny that there is a world of sensible objects, i.e., a world of things external to thought. But

this world which provides mere sense-experience cannot be objectively comprehended since the mental faculties of sensation and perception are individually subjective and hence not universal. Commonsense and empirical sciences consequently proceed to the 'picture-thinking or conception' (Wallace, p. 30) of the world consisting of isolated and finite concepts (or super-sensible objects) to which they apply certain forms of universality by drawing on the mental faculty of 'understanding.' Even here the knowledge is not fully objective;

| | Existence-Reality | | The Faculty of Mind | | The State of Knowledge |
|---|---|---|---|---|---|
| I | Sensible world | | Sensation-Perception | | Sense-Experience |
| II | Super-sensible world (finite) | | Understanding (*Verstand*) | | Conception (*Vorstellung*) |
| III | Super-sensible world (infinite) | ≡ | Reason (*Vernunft*) | ≡ | Thought (*Begriff*) |

for if its form is abstract and universal, its content is individually subjective.[16] 'Philosophy may be said to do nothing but transform conceptions into thoughts' (Wallace, p. 31). Philosophy, in other words, uses the power of reason, the highest of the mental faculties, to construct the world of super-sensible objects which are logically related among themselves in an organic unity. It is this world of pure thoughts that constitutes the inner logic of the sensible world and that can be totally comprehended, i.e., comprehended without leaving Kant's thing-in-itself unknown. It is also this world of pure thoughts that can be objectively comprehended because pure thoughts, i.e., thoughts freed from sensuous qualities, are truly universal in that they are no longer interfered with by individual subjectivity either in form or in content.

Hegel characterises his own philosophy as absolute idealism, claiming that 'every philosophy is essentially an idealism or at least has idealism for its principle' (Miller, pp. 154–5). 'The idealism consists in nothing else than in recognising that the finite has no veritable being' (p. 154); 'a philosophy which ascribed veritable, ultimate absolute being to finite existence as such, would not deserve the name of philosophy' (p. 155). This, however, does not mean that Hegel rejects the finite existence of material things prior to thought. Hence if Lenin asks 'are we to proceed from things to sensation and thought?' (Lenin, p. 31), the answer is 'yes'; for Hegel does so in *Phenomenology*. But if Lenin further asks 'Or are we to proceed from thought and sensation to things?' (ibid.), the answer is also 'yes'; for this is what Hegel does in *Encyclopaedia*. As Colletti has persuasively argued, it is quite incorrect to say that the first 'yes' makes Hegel a materialist as the second 'yes' makes him an idealist (Colletti, 1973). If Lenin's definition of materialism and idealism were to be believed, Marx himself would have to be split in the same way into a materialist and an idealist; for in his 'descending method' or 'method of inquiry' Marx proposes to move from the concrete to the abstract, and in his 'ascending method' or 'method of exposition' he does the reverse.[17]

Clearly Hegel's idealism cannot be adequately represented only by such statements as 'the real world is the copy of the Idea' or 'the Absolute ≡ God creates the world,' even though these statements do indeed dramatise some important aspects of Hegelian philosophy. What truly characterises Hegel's idealism in my view is the belief that 'To think is in fact *ipso facto* to be free, for thought as the action of the universal is an abstract relating of self to self' (Wallace, p. 36). Hegel thus claims:

> In point of contents, thought is only true in proportion as it sinks itself in the facts; and in point of form *it is no private or particular state or act of the subject*, but rather that attitude of consciousness where the abstract self, freed from all the special limitations to which its ordinary states or qualities are liable, restricts itself to *that universal action in which it is identical with all individuals*. In these circumstances philosophy may be acquitted of the charge of pride. And when Aristotle summons the mind to rise to the dignity of that attitude, the dignity he seeks is won *by letting slip all our individual opinions and prejudices, and submitting to the sway of the fact* (ibid., my italics).

In other words, thought is capable of self-abstraction or self-universalisation such that *pure* thought is no longer interfered with by subjective opinions, prejudices, etc., but becomes completely objective, having penetrated the inward truth of the object. Pure thought divested of the individuality of the subject, the thinker, is objective because the subject has become universal so that thought itself has become inter-subjectively universal (the identity of Subject and Object in thought).[18] Having reached this state, however, thought can freely produce thought in the 'abstract relating of self to self,' and makes of itself a self-developing totality with increasingly concrete-logical, i.e., synthetic, specifications. This philosophical position is 'idealist' because of its claim that thought can do all this *by itself*, i.e., *unassisted by any material motion*.[19] Even though Hegel does not deny the existence of matter, he would certainly deny the proposition that matter itself possesses the power of self-abstraction and self-synthesis automatically divesting itself of contingent irregularities and exhibiting itself as a rational system. *Hegel is an idealist for this reason*.[20]

Thus if it is wanted to transform this idealism into a materialism while preserving other properties of Hegel's philosophy, there is only one thing to do, namely, to assert that the self-abstraction and the self-synthesis belong to the nature of the matter and that thought merely follows or copies the self-motion of the material reality, instead of freely acting on its own. This is precisely what Marx did insofar as capitalism is the 'matter.' Engels, Lenin, and the whole school of dialectical materialism overlooked this crucial point completely. Even Colletti whose devastating criticism of dialectical materialism is generally correct does not see this point; with the belief that material reality by itself contains no contradiction, he is led to the inevitable conclusion that dialectic is inseparable from idealism (Colletti, 1975).

2. **Dialectic or the Logic of Synthesis**. Hegel begins with the phenomenology of the sensible world. But as consciousness, proceeding through the stages of sense, conception, and thought, 'sinks into the facts' and reaches the inner truth of the world, it finds there the Christian Logos or 'God as he is in his eternal essence before the creation of nature and a finite mind' (Miller, p. 50). Logic which 'is to be understood as the system of pure reason, as the realm of pure thought' (ibid.) is, therefore nothing but the wisdom of God which underlies all the sensible things. In his encyclopaedic system of philosophy Hegel retraces his steps. Here the divine wisdom or the inner logic of the world asserts itself in nature and finite mind so that the real world is shown to be fundamentally governed by the laws of God (or *νοûς*). The manner in which these laws prevail upon ephemeral contingencies of the material world is sometimes described as 'the cunning of reason.' In the system of pure reason, however, no 'cunning' is necessary, there being no contingencies to obstruct the self-development of reason. The mode of this self-government of reason is dialectic.

Dialectic, in other words, is the logic of proceeding from the abstract to the concrete. But 'the concrete' here does not mean a concretely sensible thing; it means instead a concretely specified, i.e., a synthetic idea. The purpose of dialectic is to totally comprehend its object of study X, i.e., to reproduce X in thought as the concrete universal or the true infinite $X^{\star}$. The procedure is as follows. First, X is viewed at its most general, i.e., the least specified, level of abstraction $X^a$. If at this level of abstraction X is predicated as A, this predication presupposes the opposite statement: X is non-A($\equiv A'$) such that $X^a$ is completely described by being both A and $A'$. Then the relation between the two predicates A and $A'$ must be studied. When this relation $R_a(A, A') \equiv A^{\circ}$ is established, X is now viewed more concretely, i.e., at a more synthetic level of abstraction, as $X^b$; the same procedure repeats itself at this new level so that $R_b(B, B')$ gives rise to the third level of abstraction $X^c$. But the levels of abstraction too follows the dialectical sequence such that $X^c$ is justified in consequence of the previously established relation $R_x(X^a, X^b)$. The same procedure continues until no further elaboration is necessary or possible. The end-product of the dialectic $X^{\star}$ is 'the concrete logical idea' of X. Thus the form of dialectical reasoning is schematically shown as follows.

$$X \qquad \left.\begin{array}{l}(A \quad A' \quad A^{\circ}) : X^{a} \\ (B \quad B' \quad B^{\circ}) : X^{b} \\ (C \quad C' \quad C^{\circ}) : X^{c}\end{array}\right\} \rightarrow \bar{X}$$

$$\left.\begin{array}{l}\bar{X} \\ \bar{\bar{X}} \\ \bar{\bar{\bar{X}}}\end{array}\right\} \rightarrow X^{\circ} \qquad \left.\begin{array}{l} X^{\circ} \\ X^{\circ\circ} \\ X^{\circ\circ\circ}\end{array}\right\} \rightarrow X^{\star}$$

If (A, A′, A°) represents the first Hegelian triad of being, nought, and becoming, the X-terms correspond to the categories of *Logic* as follows: $X^a$ = being; $X^b$ = determinate being; $X^c$ = being-for-self; $\bar{X}$ = quality; $\bar{\bar{X}}$ = quantity; $\bar{\bar{\bar{X}}}$ = measure; $X^{\circ}$ = Being; $X^{\circ\circ}$ = Essence; $X^{\circ\circ\circ}$ = the Notion; $X^{\star}$ = the Absolute Idea.

It is often wondered whether or not this method of dialectical reasoning contravenes the law of contradiction, since the mutual exclusiveness of A and A′ is also called a dialectical contradiction. My belief is that dialectic does not offend the law of contradiction because the word 'contradiction' is dialectic does not mean the same thing as in formal logic. For example, the law of contradiction prohibits such a statement as 'Mr. Jones is a husband' to be both true and false. This is perfectly reasonable; for if he were simultaneously the husband of a woman (A) and not her husband ($\bar{A}'$), the predicate 'being a husband' gives us no meaningful information at all. Dialectic, however, never claims that A and $\bar{A}'$ are simultaneously true. It merely says that if Mr. Jones is a husband, that does not prevent him from being a son, a father, an uncle, a brother, a cousin, etc., of a person or persons other than his wife. It certainly does not offend the law of contradiction, therefore, to say that 'Mr. Jones is a husband' (A) and simultaneously that 'he is something other than a husband' (A′). If this 'something' includes all the properties of Mr. Jones other than, but at the same level of abstraction as (e.g., so far as his family relationships are concerned), being a husband, then the dialectic says that A and A′ 'contradict.' But this contradiction in effect boils down to dividing the persons related to Mr. Jones into the two groups: his wife and the rest. The meaningfulness of such a partition depends on whether the wife (A) and the rest of Jones' family (A′) are so related R (A, A′) as to specify Mr. Jones more concretely and hence to let the idea of his person rise to a new level of abstraction ($X^b$). For example if his wife and the rest of his family are on unfriendly terms, the first proposition at level $X^b$ may become: 'Mr. Jones is a worried husband' (B).

As we proceed in this way the concept of 'Mr. Jones as a husband' becomes more and more concretely informative even if we may never have an occasion to meet him in person. If, on the other hand, the dialectical procedure is not followed, the single statement that 'he is a husband' (A) gives us only the trivial information that Mr. Jones is married like many other people, and no more. Since there are millions of other married men, Mr. Jones very soon disappears from our memory into the archives of census data. Formal logic, or the method of the 'understanding,' with its law of contradiction destroys the identity of Mr. Jones by merely letting him belong to the abstract-universal category of 'being a husband' i.e., by merely classifying him as 'married.' Dialectic, or the method of reason, does precisely the opposite; it tells us everything we want to know about Mr. Jones by elaborating what he is step by step in an increasingly concrete-universal idea of his person. An important question, however, arises. How long should the dialectical process of reasoning continue before Mr. Jones is completely known? Where should the dialectic begin, and where should it end?

These questions cannot be answered formally without regard to the content of the subject-matter X. For example, if X is 'Mr. Jones who divorced his wife', then the corresponding logical system X* must explain all circumstances that led up to his divorce. In the case of Hegel, X was the collection of all metaphysical ideas occurring in the history of philosophy up to his time,[21] and the corresponding X* was his *Logic*. Given that 'philosophy advances nothing new,' its business being 'only to bring into explicit consciousness what the world in all ages has believed about thought' (Wallace, p. 35), Hegel had before him all the categories (at least the important ones) ready to be assembled together. His task was to arrange these categories from the simple to the synthetic, beginning with 'pure being' and ending with 'the absolute idea,' in such a way that one idea leads to another in the dialectical sequence. What Hegel accomplished was, in other words, little more than a grand jig-saw puzzle of already known ideas. It should be remarked that these metaphysical ideas were strictly super-sensible objects even if they may have originated in the sensible world. Their synthesis therefore depended only on the 'abstract relating of self to self' in thought and did not in any sense parallel the synthesis or genesis of materially sensible objects. If Hegel occasionally resorted to a pictorial illustration in terms of sensible things, he only violated his own principle in the heuristic vein. The problem would not have been so simple had X been other than the collection of metaphysical ideas sharply separated from the sensible objects. Had X been a collection of scientific categories the synthesis of ideas could not have been independent of the synthesis of matters.

3. **The Theory is Grey**. If X is a collection of scientific categories with material objects or relations as their counterparts in the sensible world, the

problem which Hegel's absolute idealism so tactfully circumvented can no longer be ignored. The abstraction and the synthesis must be confirmed 'not only in theory but in reality,'[22] where theory and reality respectively refer to thought and sensible things. This is the problem of materialistic dialectic. The reason why the Engels-Lenin version of dialectical materialism has failed to solve this problem is this, that it places no restriction on the object of cognition X. In their naive enthusiasm dialectical materialists indeed want to outdo Hegel by claiming that the whole material world X is governed by some immutable laws (material *voûs*?) without realising that in doing so they only make themselves mystics, i.e., idealists worse than Hegel. Since the material world fundamentally consists of nature, man and society being part of natural history, dialectical materialists first undertake to build 'the dialectic of nature' before specialised attention is given to historical materialism and political economy. But Engels' own unfinished work[23] shows that the dialectic of nature is an impossible proposition.

In 1873 when Engels began to work on the theoretical synthesis of nature, he may have vaguely felt that 'science advances nothing new' apart from irrelevant details, and that at least the basic outline of the scientific view of nature had already been given by the path-breaking discoveries of the nineteenth century. Had this been the case all the scientific categories of nature would have been available for Engels to assemble in a dialectical system. But in the early 1880s when he ceased to work further on this theme, it must have become obvious to him that the contemporary scientific profession did not regard its knowledge of nature nearly as final. The so-called crisis of physics was already looming up on the horizon. All the scientific categories then available to Engels were quite plainly tentative, ready to be overthrown with the discovery of new evidence. How could nature be totally known if its knowledge was only 'relative,' i.e., dependent on so-far-so-good hypotheses and conjectures? The fundamental question that had to be settled before undertaking a dialectical synthesis of nature was why the knowledge of nature was incomplete and would always remain incomplete.

The answer to this important question is contained in Hegel's celebrated metaphor that 'the owl of Minerva spread its wings only with the falling of the dusk.' These cryptic words are preceded by the following explanation:

> One word more about giving instruction as to what the world ought to be. Philosophy in any case always comes on the scene too late to give it. As the thought of the world, it appears only when actuality is already there cut and dried after its process of formation has been completed. The teaching of the concept, which is also history's inescapable lesson, is that it is only when actuality is mature that the ideal first appears over against the real and that the ideal apprehends this same real world in its substance and builds it up for itself into the shape of an intellectual realm. When philosophy paints its grey in grey, then has the shape of life grown old. By philosophy's grey in grey it cannot be rejuvenated but only understood (Knox, pp. 12–3).

Precisely what Hegel means by the 'world' or 'the shape of life' here may not be clear, but there is little doubt that he vaguely refers to the object of cognition X by these terms. Thus his message is as follows: Only when X 'is grey,' 'has grown old,' 'has completed its process of formation,' and 'can no longer be rejuvenated,' is it possible at all to obtain its concrete-logical synthesis X*. The fact, as Hegel regarded it, that 'philosophy advances nothing new' signifies that the metaphysical conception of the world (*Weltanschauung*) has reached a certain stage of maturity in human mind, which is to say that God has by now revealed his wisdom to men almost completely. That is why Hegel was capable of constructing his system of metaphysical philosophy. But the scientific conception of nature is an altogether different thing from the metaphysical or religious conception of the world. The age of (empirical) sciences had just begun, when the age of theology and metaphysics was nearing its end.

It is therefore not surprising that the scientific conception X cannot so easily be systematised as the absolute knowledge X* of nature. The question is whether it ever will be. The scientific conception of nature cannot become 'grey' unless nature itself becomes old, whatever this might mean. Even if nature is an evolutionary and historical process it is certainly not clear whether nature as a whole has any tendency at all to approximate its own ideal image. But if nature does not abstract itself, it does not logically synthesise itself either. A dialectical and hence total comprehension of nature is, in that case, impossible. This explains why Engels, or anyone else for that matter, has never succeeded in completing a dialectical system of nature, the 'petrified intelligence' as Schelling called it. The impossibility of the dialectic of nature, however, does not imply the impossibility of materialistic dialectic itself. Whether the latter is possible or not depends on whether or not there exists a collection of material objects or relations X which actually possesses the powers of self-abstraction and self-synthesis. Marx identified at least one such X in the historical institution of capitalism.

Just as Hegel was a most accomplished historian of metaphysical thought, so was Marx of economic thought. When Marx wrote *Capital* in the 1860s not only had capitalism grown mature and grey having 'completed its process of formation,' but political economy too had by that time generated most of the essential categories necessary to build a theoretical capitalist society. Not only in reality but also in theory the abstract synthesis of the capitalist mode of production was in the process of making. 'Marx therefore worked at the right time,' as Uno used to say, on the dialectic of capital. To Marx's mind there was little doubt that the collection X of material relations that constitute capitalism could be dialectically synthesised 'in their pure form'[24] as X*, since the capitalist relations were becoming increasingly definite divesting themselves of the remnants of pre-capitalist relations with the development of the capitalist method of production. Marx did not merely copy capitalism as it was; he also copied capitalism's own method of abstraction and synthesis. In this way Marx extracted 'the rational kernel' of dialectic from 'the mystical shell' of Hegelian metaphysics.

# III. THE DIALECTICAL METHOD OF SOCIAL SCIENCE

To say that only capitalism, an historically very particular society, possesses the powers of self-abstraction and self-synthesis and hence can be dialectically comprehended might appear to restrict the scope of materialistic dialectic much too narrowly. It may perhaps be disappointing that dialectic, which in Hegel's hand could explain every conceivable thing in the universe, should be reduced to as modest a rôle as the logic of theoretically describing capitalism when 'turned right side up.' What is the use of materialistic dialectic, one may ask, if it cannot explain nature, history, and the whole material world? Marxist philosophers who habitually talk of grand designs in an obscure language may be exasperated by the suggestion that the only possible materialistic dialectic is the dialectic of capital as the theory of a purely capitalist society. A closer examination, however, shows that the knowledge of society does not need any other 'pure theory.'

A purely capitalist society, as I shall presently explain, is a global commodity-economy in which all social relations appear necessarily as relations between commodities. In other words, social relations between men are complete reified and impersonalised in a purely capitalist society. But social relations which are not impersonalised cannot be deemed objective, at least not 'universal' in Hegel's sense of 'identical with all individuals'; indeed a 'personal' social relation is a contradiction in terms. Hence capitalist society which possesses the inherent and automatic tendency to reify basic human relations is not just as any other society from the point of view of the knowledge of society. Capitalist society in which the relations between men tend to appear transparently in purer forms, i.e., increasingly divested of idiosyncrasies, arbitrary discretions, chance or habits holds the mirror up to all other societies. That is to say, an objective knowledge of society would not be possible unless socio-economic relations were fully exposed for the first time in the context of a purely capitalist society. This important conclusion is indirectly borne out by the fact that a feudal society, though itself an historically unique institution, does not reify human relations and hence not develop social science in a systematic fashion. Feudal laws prescribe how human relations *ought to be* precisely because these relations do not evolve by themselves. If 'the anatomy of man is a key to the anatomy of the ape' (Marx, 1859, p. 211), so is the comprehension of capitalist society to the comprehension of feudal and other societies.

1. **The Inner Logic of Capitalism.** 'Bourgeois society is the most advanced and complex historical organisation of production. The categories which express its relations, and an understanding of its structure, therefore, provide an insight into the structure and the relations of production of all formerly existing social formations' (pp. 210–11). This well-known thesis of Marx has never been seriously disputed. But Marx here makes an important error of omission. 'Bourgeois economy provides a key to the economy of antiquity, etc.' (p. 211), not simply because 'bourgeois society is the most advanced and complex historical organisation of production,' whatever 'the most advanced and complex' is supposed to mean. Bourgeois or capitalist society organises its real economic life with the principles of a commodity-economy; real economic life which is common to all societies, therefore, appears in reified and objectified forms only in commodity-economic bourgeois society. Marx was certainly not unaware of this fact (which he elsewhere referred to as the contradiction between use-value and value),[25] but his failure to constantly articulate its significance as exemplified in the above-quoted passage has left some methodological ambiguities in his political economy. Uno's theoretical contribution lies fundamentally in removing such ambiguities from the system of *Capital* and restating the dialectic of capital as the theory of a purely capitalist society.

The theoretical concept of a purely capitalist society, i.e., a society in which real economic life is entirely governed by commodity-economic, and hence objective, principles occupies in Uno's political economy the same position as the *Logic* occupies in Hegel's philosophical system. In other words, a purely capitalist society is the theoretically synthesised concrete-universal, or the inner logic, of capitalism X* to be set against the concrete-empirical totality of an historical capitalism X. The significance of this parallel cannot be underestimated. According to Hegel, non-metaphysical thoughts, i.e., thoughts which are not yet 'pure' retaining some sensuous connotations cannot be objective, and hence cannot form a dialectical system. In political economy the 'pureness' or the objectivity of social relations is proportional to the degree of reification in just the same way as the purity of thoughts in philosophy is proportional to the degree of non-sensuousness. Thus, for example, the direct exploitation of a serf by the lord is not a fully objective (i.e., pure) social relation because this form of master-servant relationship involves no tendency to be reified,[26] but the exploitation of wage-labour by the capitalist can be objective (or pure) because the rate of surplus value automatically tends to become uniform throughout the economy. The dialectic of capital is, therefore, possible on the ground of the reifying force that is inherent in the working of a commodity-economy.

In this book Uno treats the theory of a purely capitalist society in the three doctrines of circulation, production and distribution in just the same way as Hegel expounds his *Logic* in the three doctrines of being, essence, and the notion. In both cases the first doctrine studies the mode of existence (or operating principles) of the object of study without reference to its substantive content; the second doctrine shows the way in which the inner content of the object of study is subsumed by, and is consistently reflected in, its existential mode; the third doctrine exhibits what the object of study is by itself capable of developing once the consistency of its mode of existence and its substantive content is guaranteed. In the first doctrine the logic of *transition* (or of passing-over from one form to another) determines or specifies the object of study externally; in the second doctrine the logic of *reflexion* (or of dependency) shows how the object of study can contain the ground or foundation of its existence within itself; and in the third doctrine the logic of *development* (or of self-fulfilment) lets the object of study unfold its working mechanism in an ideal environment. Thus if the object of study is a purely capitalist society as in Uno's dialectic of capital, the first doctrine of circulation studies the reifying properties of a commodity-economy as such without explicit reference to the general norms of economic life; the second doctrine of production examines how real economic life common to all societies may be governed by the commodity-economic principles so as to assure the self-dependency and self-containedness of the capitalist mode of production; the third doctrine of distribution shows how the capitalist mode of production develops and regulates its own market so as to produce all use-values that are socially needed in a manner that is most satisfactory to the self-adopted aim of capital.

This method of dialectical exposition conforms well to the nature of capitalism itself. Capitalism essentially is a system of organising production as individual merchant activities. Commodity-trade never develops within a family or a self-subsistent tribal community; goods exchanged with aliens are the first to become commodities. Hence commodities always imply external relations. The expansion of commodity exchanges not only increases contact with aliens but disintegrates the existing community into individual trading units. The distinction between external and internal trade becomes irrelevant so long as the same money is used to mediate commodity exchanges since any trade is external to trading units. Capitalists who originally are merchant middlemen profiting from arbitrage tend to unify a trading market, undermining the self-sufficiency of traditional economic communities. The historical evolution of commerce which generates commodities, money, and capital agrees with the modal specifications of a fully developed capitalism 1) as the collection of commodities, 2) as a monetary exchange economy, and 3) as unity of the chrematistic operations of capital, in the doctrine of circulation. The Hegelian triad of quality, quantity, and measure is here translated into the expressions of value by commodities, the functions of money as the value-reflecting object, and the operations of capital as value in motion. It is significant that not only in theory, which here follows the logic of *transition*, but also in actual history the operating mode of capitalism (commodity exchanges) must precede capitalist production itself.

Although the development of commerce always undermines the integrity of the traditional mode of production, the latter never gives way to capitalism until labour-power itself is commoditised. The commoditisation of labour-power which requires the extra-economic force of primitive accumulation does not automatically follow the development of commodity exchanges and simple commodity production. Once labour-power is made available as a commodity, however, the chrematistic operation of capital can take possession of the labour-and-production process which forms the material foundation or the inner substance of all societies. Only then does capitalism arise as a global commodity-economy in which all goods are produced as commodities by means of commodities. In the doctrine of production the consistency of the commodity-economic principles and the general norms of economic life is demonstrated by the logic of *reflexion* which is timeless and hence does not in general reproduce the historical development of capitalism. The Hegelian triad of the ground, appearance, and actuality is now translated into the following propositions of the dialectic of capital: 1) capitalist production secures itself on the basis of the workers-versus-capitalists production relation; 2) industrial capital circulates indefinitely and without interruption while avoiding all unnecessary waste of resources; and 3) capitalist society reproduces itself on an expanding scale supplying basic and non-basic goods in an appropriate proportion, while alternating between the widening and the deepening phases of capital accumulation.

The ability of industrial capital to periodically innovate its productive technology so as to assure the availability of labour-power as a commodity makes capitalist society an historically viable society, i.e., a self-dependent system that Hegel calls 'actuality.' Capitalism as the commodity-economy which completely engulfs within itself the substance of economic life is thus securely established. It is on the basis of this knowledge that the dialectic of capital proceeds to the doctrine of distribution in which the capitalist-rational method of sharing already produced surplus value is explained. Here the logic of *development* only makes explicit what is already implicit in the nature of capital. The Hegelian triad of the subjective notion, the objective notion, and the Idea can now be translated into the following propositions of the dialectic of capital: 1) specialised units of industrial capital producing different use-values determine equilibrium prices in the capitalist market so as to divide surplus value among themselves in the form of average profits; 2) part of surplus value must be ceded as rent to private landed property not only to guarantee the principle of equal opportunity to all units of capital but also to ensure capital's access to land in general; and 3) in order to save unproductive costs of circulation capitalist society develops banking and commerce as specialised capitalist operations, but the consequent division of average profit into interest and entrepreneurial profit 'externalises the relations of capital' so that even capital itself can, in principle, be converted into a commodity.[27]

With its conversion into a commodity, capital returns to where it originated, completing its dialectical circle; a 'commodity,' in other words, is the simplest logical category (or the abstract-universal) which anticipates the genesis of capital and also the most synthetic logical category (or the concrete-universal) in which capital finds its ultimate expression.[28] A purely capitalist society which constitutes the inner logic of capitalism is thus completely exposed, without leaving a thing-in-itself unknown, as a self-generating and self-concluding totality, i.e., as the dialectic of capital. The dialectic of capital therefore means the self-explaining logic of capital, this latter being both the object and the subject. At this point the exact correspondence between the dialectic of capital and Hegel's *Logic* can scarcely be doubted; Hegel and Uno use exactly the same dialectical method of total comprehension except that the subject-object is different. If Hegel's subject-object was 'reason,' Uno's is 'capital.'

2. **The Cunning of Capital**. Uno did not arrive at this remarkable correspondence by studying Hegel's philosophy in which he never claimed an expertise, but rather by developing what makes good economic sense in Marx's *Capital*. Since, however, Uno's logic coincided with economic theory in exactly the sense in which Hegel's logic coincided with metaphysics, Uno was able to complete the dialectic of capital more systematically than Marx without in the least trying to 'coquet the modes of expression peculiar to Hegel.'[29]

The economic theory of capitalism does not permit arbitrary or mechanical abstractions but only such abstractions as the development of capitalism itself warrants. For example, the abstraction that the rate of surplus value is uniform throughout the capitalist economy is justifiable because, if it is not so at present, further development of capitalism is expected to eliminate individual differences that still remain. But the abstraction that the value composition of capital should be equal over all industries is not, in general, permissible because no amount of capitalist development can conceivably eliminate technical differences in the production of different use-values.[30] Similarly, the abstraction that labour is simple and homogeneous is justifiable on the ground that the development of the capitalist method of production tends to mechanise the labour-process enabling almost any commodity to be produced with simplified and unskilled labour. It is, however, not warranted to assert that the technique of producing a given use-value must always be unique because the development of capitalism does not, for example, remove differences in the natural conditions of production so that the same commodity may have to be produced with different combinations of productive elements.[31] If by strictly following the self-abstracting process of capitalism itself economic theory constructs the system of a purely capitalist society, this system cannot be a mere figment of the imagination but must be 'a product of the thinking intellect which assimilates the world in the only way open to it' (Marx, 1859, p. 207).

The self-contained theoretical system of a purely capitalist society, in other words, is the product of copying the factual tendency of capitalism to increasingly purify itself. Without this tendency there would be no such theoretical construct; for economic theory cannot be constructed without presupposing the limit of this tendency as a self-contained, and hence a permanently self-repeating, system. The classical economists justified this methodological presupposition by claiming that the perfection of capitalism was the ultimate goal of human civilisation. Marx instead viewed capitalism to be an historically transient institution but believed that a purely capitalist society, which works as if it were a self-perpetuating system, would in fact materialise in history before breaking up. Of course, Marx made significant scientific progress by regarding capitalism as an historical entity, but his conviction that a purely capitalist society would be factually realised was contradicted by the subsequent development of capitalism.

Although economic theory must always 'extrapolate' the tendency for capitalism by itself to become purer (which was real enough) and envisage a purely capitalist society, it is not correct to believe that such a theoretical society should in fact come into existence at any moment in history. Marx, who did not have a chance to observe the full evolution of capitalism in its imperialist stage, did not clearly realise this problem and treated in *Capital* the following three things as if they needed no differentiation at all. These three things are: the theory of a purely capitalist society, capitalism in its liberal stage of world-historic development, and the economic history of England up to the middle of the nineteenth century. Marx's failure to differentiate these three levels of economic study left his dialectic of capital incomplete; the relation between the inner laws of capitalism and their external manifestation was never explicitly shown. As Uno states in the introduction to this book, however, the problem of Revisionism cannot be overcome unless this crucial relation is satisfactorily established.

The theoretical construct of a purely capitalist society presupposes that real economic life is *wholly* organised by the principles of a commodity-economy. But real economic life capable of being completely engulfed and governed by the reifying force of a commodity-economy is a theoretical abstraction which can only be approximated in reality.[32] Even in mid-nineteenth-century England in which capitalism most closely approximated its theoretical image, a considerable part of real economic life remained outside of the commodity-economic management incapable of being fully reified. If capitalism tended to eliminate such non-commodity-economic elements during the period 1848–1870, it was because the development of productive technology historically supported that tendency in that period. But the autonomous development of technology does not always play into the hands of the commodity-economy. If the first industrial revolution of the late eighteenth to the early nineteenth century produced such technology as most fitted commodity-economic exploitation, the second industrial revolution in the 1870s and 1880s highlighted by the adoption of new steel-making techniques did not so easily conform to the commodity-economic design.[33]

Generally speaking, an industrial economy whose output is standardised and is not directly affected by changes in natural conditions can be more easily managed capitalistically than an agricultural economy. But even a predominantly industrial economy can be at different stages of technological development and be more or less difficult to operate as a commodity-economy. The light industries of mid-nineteenth-century England centring around the mechanised production of cotton goods provided an almost ideal technological base for industrial capitalism. The handicraft manufactures prior to the Industrial Revolution, however, required the ascendancy of merchant capitalism over industrial capitalism, as the steel-based heavy industries in late nineteenth-century Europe needed the corporate system or the financial control of production to be capitalistically operated. Capitalism in history approximates its theoretical image of a purely capitalist society only to the extent that the technological characteristics of real economic life conform to the reifying force of a commodity-economy. Thus it is warranted to distinguish the three typical stages of capitalist development (the mercantilist, the liberal, and the imperialist stages) on the ground of the distinct technological peculiarities of real economic life to be subsumed under the commodity-economic principles in each of these stages.[34]

After referring to 'the infinite wealth and variety of forms and, what is most irrational, the contingency which enters into the external arrangement of natural things,' Hegel declares that 'this impotence of Nature (to strictly adhere to the Notion) sets limits to philosophy' and that 'it is improper to expect the Notion to comprehend these contingent products of Nature' (Weiss, pp. 220–1). In other words, Nature is not wholly, i.e., in every detail, governed by the Notion since there are contingent factors that escape from the dictate of reason. Hegel further continues:

> Nature everywhere blurs the essential limits of species and genera by intermediate and defective forms, which continually furnish counter examples to every fixed distinction. [Even within the genus of man, for example, monstrous births occur.] In order to consider such forms as defective, imperfect and deformed, one most presuppose a fixed, invariable type. This type, however, cannot be furnished by experience, for it is experience which also presents these so-called monstrosities, deformities, intermediate products, etc. The fixed type rather presupposes the self-subsistence and dignity of the determination stemming from the Notion (p. 221).

In other words, 'man' in nature is not a logical category; it is a 'fixed type.'[35] This type cannot be obtained from empirical observations which always include exceptions and degenerate cases; it can only be justified as a specific mode of the external manifestation of the Notion.

One merely has to substitute 'the world-historic stages of capitalist development' for 'Nature' and 'the logic of a purely capitalist society' for 'the Notion' in order to translate Hegel's philosophical language into the language of political economy. It is indeed improper to expect economic theory to comprehend the 'contingent products' of historical capitalism; the stages of capitalist development as 'the external arrangements of historical things' cannot be fully explained by the dialectic of capital alone because the reifying force of a commodity-economy cannot by itself determine the technological peculiarities of real economic life which shape the stages of capitalism in history. Its 'impotence' to strictly adhere to the logic of a purely capitalist society sets limits to economic theory. The stage-characteristics of capitalist development, in other words, must not be directly inferred from the logical categories of economic theory; these characteristics form a 'type' which mediates economic theory and historical contingencies of capitalism. Thus, according to Uno, the three stages of capitalist development (mercantilist, liberal, and imperialist) are typified by the mode of accumulation of the three dominant forms of capital (respectively merchant capital, industrial capital, and finance-capital).

In one of the so-called 'plans' Marx sketched the proposed scope of political economy as follows:

> The disposition of material has evidently to be made in this way: (1) General abstract definitions, which . . . appertain in some measure to all social formations . . . (2) The categories which constitute the internal structure of bourgeois society and on which the principal classes are based. Capital, wage-labour, landed property and their relation to one another. Town and country. The three social classes; exchange between them. Circulation. The (private) credit system. (3) The State as the epitome of bourgeois society. Analysis of its relation to itself. The 'unproductive' classes. Taxes. National debts. Public credit. Population. Colonies. Emigration. (4) International conditions of production. International division of labour. International exchange. Export and import. Rate of exchange. (5) World markets and crises (Marx, 1859, p. 214).

It is not clear what exactly Marx meant by (1) and (5). But something like a formulation of historical materialism may have been meant for (1), and economic history of capitalism with particular attention to 'world markets and crises' for (5). Then the remainder consists of: (2) the inner logic of bourgeois society, (3) public finance and national economic policies, and (4) international economic relations. But the content of *Capital* corresponds roughly to (2) only, and omits any systematic discussion of (3) and (4). Thus the question is asked whether or not a self-contained dialectic of capital is possible without incorporating the materials of (3) and (4). Some Marxists insist that the three volumes of *Capital* do not conclude Marx's economic theory in view of the omission of (3) and (4).

It is, however, an easy matter to show that the pure dialectic of capital cannot contain the materials of (3) and (4) without negating its own significance. If indeed capitalism is a system which 'internalises' the commodity-exchange relations, the relations that originally arose outside of a self-sufficient economic community,[36] a fully developed capitalist society cannot distinguish between external (foreign) and internal (domestic) trade. Otherwise, a fully developed capitalist society would have to consist of at least two economic communities of which the external trade relations are not yet completely assimilated to each of the two constituent communities. If that were the case, neither of these communities nor their union could be properly described as 'fully developed' capitalist society. Hence it involves a contradiction to say on the one hand that a purely capitalist society is capitalistically fully developed, and on the other hand that foreign trade and domestic trade must be distinguished in a purely capitalist society. But if there is no national boundary in a purely capitalist society there cannot be a state and its public finance either. The state clearly is an institution alien to capital. The whole purpose of the dialectic of capital is precisely to show that capital can by itself constitute an historical society without depending on alien principles. Hence follows the conclusion that the dialectic of capital cannot achieve a self-contained logical synthesis without leaving aside public finance and economic policies (3) as well as foreign trade distinct from domestic trade (4).

This, of course, does not mean that a capitalist nation has ever actually existed without foreign trade and public finance. Their obvious presence simply confirms our proposition that a purely capitalist society is never in fact realised in history and that capitalism in history always leaves part of real economic life uncommoditised. When that part is minimal, the policies of laissez-faire and cheap government render the state and its national boundary almost negligible.[37] But if that part is substantial, more active economic policies are called for to clear the ground and to consolidate the external conditions for the self-propelled motion of the commodity-economy; a nation-state is clearly needed to carry out these policies. It is, therefore, not at all surprising that the three distinct types of economic policies of the leading capitalist state in the mercantilist, the liberal, and the imperialist era most obviously characterise the three stages of capitalism in its world-historic development. Thus, if for technological reasons real economic life cannot be wholly contained in the commodity-economy, capitalism requires national states to pursue economic policies such as to ensure maximum efficiency of society's commodity-economic management. The way in which capitalism makes use of the bourgeois state, an institution alien to capital,[38] and consolidates the external conditions for the best working of the commodity-economy may be referred to as 'the cunning of capital' in imitation of the well known expression 'the cunning of reason' in Hegel's philosophy of history.

3. **The Knowledge of Society**. If in each stage of capitalist development part of economic life always remains uncommoditised, that certainly does not diminish the supremacy of capital so long as labour-power is kept available as a commodity. The dominant form of capital in each stage controls the core of society's real economy historically characterised by a particular technology, and shapes economic policies of the state such as to ensure a maximum efficiency for capitalist operations. The national state in which these policies are practised in the most typical manner and in which the capitalist organisation of production is therefore most successful constitutes the centre of capitalism in its world-historic development. The concept of the stage, roughly speaking, corresponds to the economic aspect of the centre-state which would be unchanged if transplanted to other countries. The centre-state and the international economic relations surrounding it form a type of specific to the stage of capitalist development.

In the periphery of the capitalist orbit, however, there may exist countries or regions in which the commoditisation of labour-power is not secured. These areas cannot be described as capitalist even though they in fact maintain active trade relations with the centre of capitalism. Economic development generally tends to establish capitalism even in these areas unless obstructed by extra-economic forces working either inside or outside of them.[39] From this is sometimes adduced that the existence of capitalism depends on non-capitalist regions in its periphery (Luxemburg, 1913, pp. 351–52). This questionable thesis, originally propounded by Rosa Luxemburg, puts the cart before the horse. Capitalism, though logically self-dependent once labour-power is commoditised, always tolerates alien elements tending however to assimilate them if necessary. Capital creates for itself the required form of landed property, the state, peripheral regions, etc., so as to make them 'suit' the capitalist mode of production.[40]

If the non-capitalist part of economic life remains, whether in the centre-state or on a more extended scale in the periphery, that part of economic life does not reify itself of its own accord. Economic history, therefore, cannot objectively describe the socio-economic relations subsisting in that part unless they are studied in the light of the corresponding relations in the reified part of the world economy. For example, in the post-liberal era the pre-capitalist peasant agriculture does not disintegrate even with the development of capitalism, so that peasants constitute an important social class whose economic position cannot be directly accounted for by the laws of capitalism. If economic history merely collected concrete-empirical data concerning the living conditions of the peasants and imposed some conclusions based on arbitrary value judgements, it would hardly be a scientific enterprise. Economic history, in order to be objective, must show the difference of the peasant agriculture from capitalist agriculture[41] and explain to what extent that difference may be due to the *modus operandi* of the dominant form of capital that characterises the stage of capitalist development, and to what extent it is attributable to purely geographical, traditional, and other contingent factors. Similarly, the question of colonies during the imperialist era cannot be objectively studied except in their relation to the mother country, the world market, and the mode of accumulation of finance-capital which characterise the world-historic development of capitalism in its imperialist stage.

The same considerations apply to the study of pre-capitalist economic life which fails to exhibit itself objectively in a reified form. Economic historians, however, can probe into the production-relations of pre-capitalist societies if enlightened by the knowledge of reified production-relations that form themselves under capitalism. Hence follows Uno's conclusion that historical materialism cannot be directly confirmed *in toto*. It is, for instance, impossible to claim that the economic substructure determines the superstructure of any society unless there is such a thing as the substructure separable from the superstructure as in capitalist society. It is not reasonable to conjecture that production-relations always depend on the level of development of productive powers except after the conversion of labour-power into a commodity (upon which capitalism hinges) is shown to require a certain range of productive technology. Nor is it meaningful to claim that a class society should be characterised by the specific manner in which surplus labour is disposed of unless the capitalist method of appropriating surplus labour in the form of surplus value is first explicitly shown.

Historical materialism, in other words, is a fundamental hypothesis in the study of pre-capitalist societies in view of the objective social relations which are exposed for the first time in capitalist society. Historical materialism, an hypothesis, is grounded on the science of political economy; not the other way around. Another way of saying the same thing is that social science is impossible prior to the historical experience of capitalism. But even under capitalism the objective social relations that constitute it do not appear directly; they appear always as an historical type mediated by the state which, as the agent of economic policies, forms the vital link between the substructure and the superstructure of capitalist society. The relations between political economy and the other social sciences must be understood in this background. Through political processes the state legislates and enforces laws that organise the socio-cultural life of men, but the capitalist state is an institution that brings the inner laws of capitalism into observable action.[42] Political science, jurisprudence, and sociology accordingly develop as studies of the different aspects of the capitalist state, the foundation of which is given by political economy. All social sciences can, therefore, be integrated in the study of capitalist society. Other societies, even in their non-economic aspects, can be scientifically accounted for only in the light of the integrated knowledge of capitalist society.[43]

With respect to capitalist society in which human relations reify themselves, social science can form an integrated system rather than a collection of fragmentary and practical lessons because the political economy of capitalism possesses objective laws. The study of capitalist society requires political economy to adopt the three-level approach consisting of i) the theory of a purely capitalist society, ii) the characterisation of the three developmental stages as types, and iii) the empirical investigations of economic history. In this approach 'theory,' 'policy,' and 'history', into which political economy is ordinarily trichotomised, are systematically related rather than merely paralleled. Political economy, however, is on its own only in pure theory; stage-characteristic economic policies cannot be studied without regard for such concrete economic institutions as the financial system, foreign trade, public finance, etc., which directly involve political, juridical, and sociological considerations. The fact that these concrete economic institutions form different types in the three stages of capitalist development suggests that the political, juridical, and sociological processes reflecting themselves in those economic institutions are also stage-typical. It follows that the political science, jurisprudence, and sociology of capitalism which ignore the three stages of capitalist development lose contact with political economy and soon degenerate into an ideological doctrine built on empty generalisations, or into a set of practical rules-of-thumb applicable only to certain clinical cases under capitalism.

The systematic knowledge of capitalist society which also throws light on the understanding of other societies does not, however, make predictions.[44] The knowledge is systematic because it is 'grey'; social science claims objective knowledge because 'the prehistory of human society' ends with capitalism (Marx, 1859, p. 22). Social science, therefore, cannot be said to be an empirical science in the same sense as natural science is an empirical science; social science does not offer testable hypotheses. Social science should rather be called historico-empirical because its 'empiricism' consists only in its unquestioned acceptance of the experience of history (no one denies capitalism, for instance, as an historical experience). Hence the method of social science necessarily differs from the method of natural science which does not expose the inner laws of nature *in toto*. Since nature cannot be totally known, natural science only teaches how to predict, and how to conform to, the blind forces of nature on the basis of its partial knowledge. A question such as reforming nature or creating a new natural order has never even been posed. But if conformity to nature is ideologically neutral, conformity to the existing social order cannot be.[45] Popper's call for 'piecemeal social engineering' (Popper, 1957, pp. 64ff.) rather than a wholesale social reform merely amounts to an indirect admission of reactionary conformism which Popper rationalises by the questionable dogma of reductionism. It is, therefore, strange that even a philosopher as clear-headed as Colletti, unable to overcome the reductionist aberration, has felt compelled to opt for Popperian 'neo-positivism' in favour of the 'spiritual idealism' that dominates today's Continental European philosophy. Colletti clearly does not know the third alternative offered by Uno.[46]

Without this third alternative, however, which grounds historical materialism on the science of political economy, the significance of socialism would not be understood. According to Engels socialism is 'the ascent of man from the kingdom of necessity to the kingdom of freedom.' His explanation is as follows:

> Man's own social organisation, hitherto confronting him as a necessary imposed by nature and history, now becomes the result of his own free action. The extraneous objective forces that have hitherto governed history pass under the control of man himself. Only from that time will man himself, with full consciousness, make his own history—only from that time will the social causes set in movement by him have, in the main and in a constantly growing measure, the results intended by him (Engels, 1878, p. 336).

Although the broad outlines are correctly drawn, this explanation contains a few ambiguities. For example, it is not obvious what Engels means by 'the extraneous objective forces that have hitherto governed history'; it is much too vague to talk, for example, of capitalism merely 'as a necessity imposed by nature and history.' Hence the significance of 'man himself making his own history' remains quite obscure. It would be a mistake not to recognise that capitalism too accomplished an important freedom; capitalism freed real economic life from extra-economic coercions. In fact the only fundamental non-freedom that capitalism still retains is the necessity or compulsion of managing society's real economic life under the commodity-economic principles.[47] It is for this reason that every 'piecemeal social engineering' or 'policy prescription' under capitalism works only as a catalyst of the cunning of capital. Man is not free under capitalism because he cannot act against its inner laws of motion; he is forced to conform and comply to the sway of capital so long as he inhabits the capitalist 'kingdom of necessity.'

With this irrevocable conclusion political economy points to the unspoken alternative: the socialist 'kingdom of freedom' in which man is free to manage his real economic life unconstrained by the commodity-economic necessity. Political economy, however, only poses the question of socialism without offering to solve it.[48] Although capitalism can be abolished by reconverting labour-power into a non-commodity, that does not *ipso facto* guarantee socialism in the true sense of the word since uncommoditised labour-power can still be subjected to extra-economic exploitation. In order to enable man to freely manage his economic life a political organisation which can stipulate the aim of society as the 'volonté générale', rather than the 'volonté de tous', of the public must be formed.[49] It is this that requires the true wisdom of man. Even in socialism, economic life that constitutes the material foundation or substructure of society does not disappear, but it is the superstructure that must now dictate the management of the substructure. The economic life under socialism must be so planned and executed as to maintain and develop a particular superstructure of man's free choice. This implies an 'overturning' of historical materialism; for 'man himself will make his own history' if and only if the substructure is under his control. Thus in the construction of socialism economic planning reduces to a technical handmaiden in service of the political and juridical administration, whose function is to directly promote creative social life and to ensure the management of the economy consistent with that goal.

## Notes

[1] In this book Professor Uno does not utter mere opinions of a Japanese Marxist; he makes a positive contribution to the objective knowledge of society. The purpose of this essay is to specify what precisely is meant by the objective knowledge of society and to show how Uno actually achieves it.

[2] 'The mystification which dialectic suffers in Hegel's hands, by no means prevents him from being the first to present its general form of working in a comprehensive and conscious manner. With him it is standing on its head. It must be turned right side up again, if you would discover the rational kernel within the mystical shell.' Afterword to the Second German Edition of *Capital*, I. (Marx, 1867, p. 20).

[3] Popper, of course, rejects the whole question of 'meaningfulness'; hence it is quite contrary to his intention to use falsifiability as the criterion of meaningfulness. However, Popper himself complains that 'my position has repeatedly been described as a proposal to take falsifiability or refutability as the criterion of *meaning* (rather than of demarcation) . . . Even Carnap . . . feels himself compelled to interpret [my position] as a proposal to exclude metaphysical statements from some language or other' (Popper, 1963, p. 253). This suggests that some logical positivists believed it possible to appropriate Popper's innovation to their advantage.

[4] Science, for example, knows for sure that water does not boil at 95°C because a statement to that effect has been conclusively falsified. However, the fact that water in fact vaporises at 100°C is not definite or conclusive because it may still be falsified in future.

[5] According to Milton Friedman (1953), economic theory is on the one hand 'systematic and organised methods of reasoning' on the other hand 'a body of substantive hypotheses designed to abstract essential features of complex reality' (p. 7; p. 91). In Hempel's language these correspond to 'internal principles' and 'bridge principles' of the theory respectively. For example, the concept of a 'commodity' is to Friedman an 'analytical filing box' of a 'label,' but 'not a word for a physical or technical entity to be defined once and for all independently of the problem at hand' (p. 57). As Marshall wrote, 'the question where the lines of division between different commodities should be drawn must be settled by convenience of the particular discussion' (ibid.). Thus black tea and green tea may be viewed either as two distinct commodities or may combined into a single commodity 'tea', depending on the purpose of the analysis. The statement of the purpose cannot, of course, be either tautological or empirically testable.

[6] 'Wherever we look, whatever examples we consider, we see that the principles of critical rationalism and, *a fortiori*, the principles of logical empiricism give an inadequate account of the past development of science and are liable to hinder science in future. They give an

inadequate account of science because science is much more "sloppy" and "irrational" than its methodological image. And, they are liable to hinder it, because the attempt to make science more "rational" and precise is bound to wipe it out . . . The difference between science and methodology which is such an obvious fact of history, therefore, indicates a weakness of the latter, and perhaps of the "laws of reason" as well. For what appears as "sloppiness", "chaos" or "opportunism" when compared with such laws has a most important function in the development of those very theories which we today regard as essential parts of our knowledge of nature. *These "deviations", these "errors", are preconditions of progress*. They permit knowledge to survive in the complex and difficult world which we inhabit, they permit *us* to remain free and happy agents. Without "chaos", no knowledge' (Feyerabend, p. 179). 'Like the Dadaist, whom he [the epistemological anarchist] resembles much more than he resembles the political anarchist, he not only has no programme, he is against all programmes . . . " (p. 189).

[7] In chapter 17 of his book Feyerabend considers 'incommensurability' (between theories) which 'depends on covert classification'. This 'phenomenon' to which 'the reader must be led up by being confronted with a great variety of instances' (p. 225) does not permit 'an explicit definition'. Since this kind of question 'must be attacked by *research*, and cannot be settled by methodological fiat' (p. 229), Feyerabend examines a large number of psychological findings. Having abandoned all epistemological programmes, Feyerabend has nothing left but psychological research to bear upon the problem of cognition. It is noteworthy that Popper (1972) has reduced Hume's problem of induction to 'a logical problem ($H_L$) and a psychological problem ($H_{Ps}$)' (p. 3). Since Feyerabend dismisses the logical side of the Humean method there is only the psychological side left to consider.

[8] Russell, 1946, pp. 645–47, the relevant part of which is quoted by Popper, 1972, p. 5. Russell talks of a clash between empiricism and rationalism when beliefs based on repeated observations cannot be logically verified. Popper, on the other hand, claims that conjectural knowledge and the trial-and-error approximation to truth that it implies are critically rational. But clearly the issue is not solved by Popper's restatement of Hume's logical problem and its 'heuristic transference' to the psychological problem of beliefs. The 'intellectual difference between sanity and insanity' is merely reduced to the matter of 'pragmatic preference' (Popper, 1972, pp. 21–2). Scientists are said to be more sensible than madmen by definition, i.e., by logicians' fiat.

[9] Typically inconclusive discourses on reductionism are found in Hempel, 1966, pp. 101ff.; Hempel, 1965, pp. 439ff.; Nagel, 1961, pp. 336ff. It is, however, a great mistake to believe that Marxists are generally exempt from this dogma. On the contrary, leading Marxist writers including Engels, Lenin, Mao, etc., and even in some cases Marx himself appear to take an implicit reductionism for granted.

Thus, according to Lucio Colletti: 'There is a second position which insists on the heterogeneity of the social and natural sciences. The danger of this alternative is that the social sciences then tend to become a qualitatively distinct form of knowledge from the natural sciences, and to occupy the same relationships towards them, as philosophy used to occupy towards science as such. It is no accident that this was the solution of the German historicists—Dilthey, Windelband and Rickert. It was then inherited by Croce, Bergson, Lukács and the Frankfurt School. The invariable conclusion of this tradition is that true knowledge is social science, which because it cannot be assimilated to natural science, is not science at all but philosophy. Thus either there is a single form of knowledge, which is science (the position I would still like to defend)—but then it should be possible to construct the social sciences on the bases analogous to the natural sciences; or the social sciences really are different from the natural sciences, and there are two sorts of knowledge—but since two forms of knowledge are not possible, the natural sciences become a pseudo knowledge. The latter is the ideologically dominant alternative. Continental European philosophy in this century has been virtually united in its attack on the natural sciences—from Husserl to

Heidegger, Croce to Gentile, Bergson to Sartre. Against the dangers of this spiritualist idealism, I personally would prefer to incur the opposite risks of neo-positivism. But I am divided on the issue, and have no ready solution to the problem' (Colletti, 1974, p. 20).

Clearly Colletti's problem lies in the 'either reductionism or social sciences $\equiv$ philosophy' alternative. In view of the last quoted sentence I hope that he will reach a more satisfactory solution once Uno's third alternative is explained to him. *Vide infra* III.

[10] The significance of this statement will become apparent in the following section. *Vide infra* II. 3.

[11] 'There are no separate methodological problems that face the social scientist different in kind from those that face any other scientist. It is true that the social scientist is part of the reality he describes. The same is true of the physical scientist. It is true that the social scientist in observing a phenomenon may change it. The theory of quantum mechanics, with its Heisenberg uncertainty principle, shows that the same is true of the physical scientist making small scale observations. Similarly, if we enumerate one by one the alleged differences between the social sciences and other sciences, we find no differences in kind' (Samuelson, 1952, pp. 61–2).

[12] For example, the so-called Philip's curve, the quantity theory of money, etc., are most readily testable so long as they remain broad empirical assertions free from sophisticated theoretical reservations.

[13] 'Some genuine testable theories, when found to be false, are still upheld by their admirers—for example by introducing *ad hoc* some auxiliary assumption, or by reinterpreting the theory *ad hoc* in such a way that it escapes refutation' (Popper, 1963, p. 37).

[14] The so-called theory of comparative advantage whether in its original Ricardian form or in its neo-classical Heckscher-Ohlin version has never been empirically established, but continues to occupy the core of international economics. In the 'development' context, however, few believe in the relevance of the static specialisation theory.

[15] This thesis which is most clearly articulated by Uno in this book has never been appreciated by dialectical materialists such as Lenin, Mao, etc., who demand 'partisan' outlook on social science. Since they are reductionists (see footnote 9), natural science too must be partisan. *Vide infra* II. 3. By an 'ideology' I mean any set of value judgements, more or less clearly stated, leading to a definite (social) action or practice. It may also be called a vision or an *Anschauung* provided that they imply a definite action (including conscious acceptance of the *status quo*). In its widest sense 'ideology' may include Popper's 'pragmatic belief in the results of science' (Popper, 1972, p. 27). Thus, in general, any partial or incomplete knowledge, unless it is irrelevant to human practice, entails an ideology. But, as Popper claims, it is not necessarily irrational to pragmatically assume that the sun will rise tomorrow. Nor is it irrational or reactionary to tentatively believe in certain regularities of nature and to try to conform to them. Such an ideology or practical wisdom merely defines the relationship of men in general to nature and may be described as neutral. On the other hand, an ideology which accompanies a one-sided interpretation of social reality cannot be neutral; it divides people among themselves and sets them antagonistically against each other. The purpose of social science is to expose the partiality and one-sidedness of the pseudo-knowledge that breeds such an ideology.

[16] For example, the concept of 'speed' is not free from sensuous connotation. Thus the same speed at which a motor-car runs may be felt too fast by the cautious driver and too slow by the reckless one. But the speed can be given a universal form of a number (e.g., 70 mph). In this case the sensuous content of the speed and the individually subjective sensation of it drop out completely. It is often said that the concept of 'force' axiomatically defined in mechanics

must not be taken to imply the exertion of muscles or energy. The sensuous content with which the primitive notions of speed, force, etc., are still associated is artificially suppressed in the formal definitions which the 'understanding' imposes. The objectivity of these concepts are, in Hegel's view, imposed from the outside and do not emanate from the inside of the concepts themselves. This incongruity of the form and the content does not exist in the truly abstract categories such as being, naught, essence, etc. These sensuousness-free categories are called pure thoughts.

[17] The expression 'the ascending method' is suggested by Marx's phrase: 'die Methoden vom Abstrakten zum Konkreten aufzusteigen'. Marx does not, I believe, use the expression 'the descending method'. Marx, however, distinguishes between 'the method of enquiry' and 'the method of exposition' in the Afterword to the Second German Edition of *Capital*, I (Marx, 1867, p. 19).

[18] Because of the identity of the subject and the object, epistemology and ontology need not be distinguished in Hegel's idealism.

[19] By 'material motion' I mean any dynamics of the existents outside of thought.

[20] This statement might be surprising to some. But if Lenin's definition of idealism and materialism is seen to be inadequate, and if it is still desired to characterise Hegel as an idealist in contrast to materialist Marx, this is the only possible way I can think of.

[21] Or perhaps more accurately in the history of man's metaphysical consciousness of which the history of philosophy up to Hegel's time is the record.

[22] This, or a similar phrase, recurs from time to time in Marx's writing. For example, in an unfinished rough draft originally intended for the introduction to *A Contribution to the Critique of Political Economy* but not published in Marx's lifetime: 'Labour, not only as a category but in reality, has become a means to create wealth in general, and has ceased to be tied as an attribute to a particular individual' (Marx, 1859, p. 210).

[23] Engels' *Dialectics of Nature* was published posthumously by the MEL Institute in Moscow in 1925 based on his notes written between 1875 and 1882 (Engels, 1925).

[24] 'But in theory it is assumed that the laws of capitalist production operate in their pure form' (Marx, 1894, p. 175).

[25] The contradiction between value and use-value is the fundamental contradiction that characterises capitalist society. The simplest expression of this contradiction is already seen in the fact that a commodity is made up of the two mutually exclusive properties of value and use-value. But the contradiction recurs throughout the dialectic of capital in many other forms. For example: no use-value can be produced except as a value; surplus labour (or surplus product) cannot be appropriated except as surplus value; capital must circulate as well as produce; the depreciation of fixed capital does not exactly correspond with the diminution of its use-value; the accumulation of wealth occurs only in the form of the accumulation of capital; the reproduction of the capitalist social relation cannot be independent of the reproduction of the means of production and the articles of consumption as use-values in an appropriate proportion; the accumulation-process of capital alternates between the widening phase in which the organic composition is constant and the deepening phase in which it is raised. All these and more are manifestations of the contradiction between value and use-value in different contexts. The general sense of this fundamental contradiction, therefore, is that capitalist society has to manage its real economic life by the commodity-economic principles. Since capitalism is a synthesis of the commodity-economic management (the value aspect) and real economic life (the use-value aspect), the two aspects are

viewed as 'contradictory' to each other. The contradiction, however, does not mean absolute incompatibility; it means that the synthesis of the two aspects can be achieved only in an historically particular period and not always.

[26] This does not mean that the exploitation of a serf by the lord is only imagined or non-existent; it is factual. But the purely social relation that underlies this fact cannot be objectively identified because of the many contingent factors which pervert and obscure that relation. Thus exploitation may be harsh or lenient depending upon the greed of the lord, the geographic and climatic condition of agriculture, the religious and cultural traditions of the fief, etc. There is no inherent force in the feudal master-servant relation to automatically establish a socially uniform pattern. Medieval historians are, therefore, obliged to subjectively construct a pattern or an ideal type and impose it on the fact, so to speak, from the outside in order to generalise it. This is the method of the 'understanding' not of 'reason' in Hegel's language.

[27] By the 'Externalisation of the relations of capital in the form of interest-bearing capital' (the title of chapter XXIV, *Capital* III) Marx means roughly the following. Capital is a chrematistic operation which produces and distributes surplus value; capitalist society is organised by the social relations that capital establishes with other parties in the course of the production and the distribution of surplus value. But on the reified surface of the market those social relations internal to capitalist society are not visible. The exterior of the activity of capital thus appears only as the mysteriously interest-bearing force of an asset. As this asset acquires the form of a tradable item, it is converted into a commodity. See Part III, chapter iii, Section 3 of the text and items 97 and 98 of the glossary.

[28] After explaining the nature of the dialectical logic in some detail, Hegel writes as follows: 'Each step of the *advance* in the process of further determination, while getting further away from the indeterminate beginning, is also *getting back nearer* to it, [so that] what at first sight may appear to be different, the retrogressive grounding of the beginning and the *progressive further determining* of it, coincide and are the same. The method . . . thus winds itself into a circle' (Miller, p. 841). 'By virtue of the nature of the method just indicated, the science [of metaphysics or speculative philosophy] exhibits itself as a *circle* returning upon itself, the end being wound back into the beginning, the simple ground, by mediation' (p. 842).

[29] 'I therefore openly avowed myself the pupil of that mighty thinker [Hegel], and even here and there, in the chapter on the theory of value, coquetted with the modes of expression peculiar to him'. Afterword to the Second Edition of *Capital*, I (Marx, 1867, pp. 19–20). In public Uno always disclaimed any expert knowledge of Hegel's *Logic*. He never suggested a Hegelian interpretation of *Capital* or a Marxian interpretation of the *Logic*. He even took exception to Lenin's well known advice that the *Logic* must be fully studied in order to understand Marx's *Capital*. Although it is likely that Uno carefully studied the *Logic* at least once, he certainly did not allow Hegel to dictate economic theory. For example Uno's theory of the circulation of surplus value cannot possibly be deduced from Hegel's doctrine of Correlation (Verhältnis). Uno believed that the dialectic of capital can throw light on the meaning of the *Logic*, not the other way around.

[30] In the doctrine of production, however, inter-industrial differences in the value composition of capital may be abstracted from because capitalists' specialisation in the production of different use-values is as yet irrelevant in that context. Only in the doctrine of distribution must differences in the value composition of capital be explicitly questioned. Hence the appearance of parenthetic phrase 'in general' in this sentence.

[31] Uno's treatment of 'skilled labour' in this book is a good illustration. The development of the capitalist method of production increasingly simplifies the labour-process by mechanisation. Labour is 'simplified' if it can be shifted from one concrete-useful form to another

without significant cost. Thus even if a skilled craft still subsists in capitalist society, the same product can be supplied more flexibly in the mechanised process with simple labour. In view of the principle of market value, it is warranted to neglect skilled labour. But the principle of market value could not be explained, if the technique of producing a use-value is from the beginning supposed to be unique.

[32] Perhaps it may be said that 'purely capitalist society' is as unreal as the miracle of levitation. Even a most saintly person cannot levitate because his body weight is heavier than the weight of the air. When, however, this earthly fact becomes irrelevant relative to his saintliness, he may be imagined to actually lift himself in the air. Similarly, even the most liberal capitalism does not in fact reify all human relations. But when the unreified part of real economic life tends to become negligible relative to the commodity-economic organisation of society, it is possible to conceive a purely capitalist society.

[33] A commodity-economy is always an important catalyst of the transmission of technology. Thus, even in the ancient times, the techniques of making pottery, weaving cloth, and working various metals quickly spread from China to Europe through Persia. It is, however, a grave mistake to suppose that technology does not develop without commerce, or develops always in such a way as to consolidate a commodity-economy. In general, only the techniques of manufacturing small, i.e., readily commoditisable, objects with relatively 'light' means of labour agree with the working of a commodity-economy. The development of industrial technology from the first industrial revolution up to the 1860s was largely of this kind.

[34] It is often wrongly believed that 'free competition gives rise to the concentration of production, which, in turn, leads to monopoly'. Free competition implies a large number of firms in each industry. If they all accumulate capital and concentrate production, more or less uniformly, the number of firms does not decline; it may even increase with 'the division of property within capitalist families' (Marx, 1867, p. 625). Hence the concentration or accumulation of capital as such does not automatically 'lead to monopoly'. But if in consequence of technological advances the production of many use-values requires heavy investment, small partnerships will be displaced by joint-stock companies. Large monopoly firms then tend to dominate industry abolishing the regime of free competition. If even products become 'heavy' or 'large', a commodity production becomes still less viable. For example, steamships cannot be 'anarchistically' produced in large quantities and marketed for whatever price they can fetch. They must be produced under some sort of contract, but contractual production is not a genuine commodity production.

[35] In other words, the 'logic which coincides with metaphysics' does not produce 'man' as a metaphysical category. Man belongs to nature. But man as he ought to be (or *comme il faut*) in the light of reason constitutes the 'type' of man. A man of subnormal intelligence or excessive violence would then be an empirical 'counter example' or 'deformity' in the sense of Hegel, and must be evaluated as a deviation from the standard type. In other words, 'man' as a type mediates reason and an empirically observable man.

[36] 'In fact, the exchange value of commodities evolves originally not within primitive communities, but on their margins, on their borders, the few points where they come into contact with other communities. This is where barter begins and moves thence to the interior of the community, exerting a disintegrating influence upon it' (Marx, 1859, p. 50). 'The exchange of commodities, therefore, first begins on the boundaries of such communities [a patriarchal family, an ancient Indian community, a Peruvian Inca State, etc.], or 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' (Marx, 1867, p. 87).

37 Political anarchism is probably a mental reflexion of this tendency. But even in the liberal stage capitalism in fact needed the apparatus of a national state to maintain the law and order of the home market and to oversee the reproduction of labour-power as a commodity. It is interesting that the bourgeois state in this period was still largely dependent on the representatives of the land-owning class who alone had resources to invest in social capital and time to spare for politics.

38 The bourgeois state is an institution alien to capital because a purely capitalist society is logically self-sufficient without making the state explicit.

39 For example, the pre-1868 feudal system in Japan strictly tied peasants to land and restricted the activities of merchant capital in various manners so as to make the conversion of labour-power into a commodity virtually impossible. In this respect extra-economic forces worked inside Japan against the introduction of capitalism. On the other hand, the collapse of the Japanese feudal system under external pressure could have occurred earlier than 1868, if European powers had taken less time to commercially stabilise the Chinese Empire. In this respect, the modernisation of Japan was postponed by extra-economic forces working outside of her.

40 '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' (Marx, 1894, p. 617). Capitalism does not create landed property; it inherits the existing form of landed property which it adapts to its own need. The same thing can be said of the state and the peripheral region. It is not always necessary to transform the existing state into a strictly bourgeois state or to fully capitalise the existing non-capitalist regions so long as capital can subordinate para-feudal states and underdeveloped regions to its advantage.

41 The 'subordination of agriculture to capital,' however, is a particularly difficult operation. Although the theory of a purely capitalist society must presuppose a fully capitalist management of agriculture, the tendency towards it could be observed only to a limited extent even in mid-nineteenth-century England. Agriculture which is so unpredictably dependent on the variability and vagaries of nature is not an industry congenial to the commodity-economic management. Since, however, agriculture forms the foundation of real economic life, the bourgeois state is never without a ministry of agriculture, commissions on agrarian affairs and a series of agricultural policies.

42 This point is often overlooked by the so-called Marxist theory of the state according to which the state is always an instrument of the oppression of the productive class. Such a theory is as empty and 'hypothetical' as the propositions of historical materialism. Only in the light of a more specific theory of the bourgeois state can the function of the state in general be evaluated.

43 For instance, such a currently fashionable topic as the rôle of women in society could not be objectively studied if the rôle that capitalism assigns to women in its superstructure is not clearly grasped. Unless the reason why the bourgeois state in its juridical and sociological process constrains the freedom of women is properly understood, it is not clear what women should be emancipated from. So-called 'male chauvinism' would be much too general a concept to be helpful at all to scientific women. See footnote 47 below.

[44] 'The only relevant test of the *validity* of a hypothesis is comparison of its predictions with experience. The hypothesis is rejected if its predictions are contradicted; it is accepted if its predictions are not contradicted' (Friedman, pp. 8–9). Thus empirico-analytical science always 'predicts'. Popper, 1957, *passim*, argues that empiricists' predictions are of different kind from historicists'. Dialectical knowledge makes no prediction either empiricist or historicist.

[45] See footnote 9 above.

[46] See footnote 9 above.

[47] This point should be relevant to my comments in footnote 43 above.

[48] In this sentence 'political economy', of course, means the political economy of capitalism or Engels' political economy in the narrower sense.

[49] 'The distinction . . . between what is merely in common, and what is truly universal, is strikingly expressed by Rousseau in his famous *Contrat social*, when he says that the laws of a state must spring from the universal will (*volonté générale*), but need not on that account be the will of all (*volonté de tous*). Rousseau would have made a sounder contribution towards a theory of the state, if he had always kept this distinction in sight. The general will is the notion of the will: and the laws are the special clauses of this will and based upon the notion of it' (Wallace, p. 228).

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APPENDIX II

# A GLOSSARY OF TECHNICAL TERMS

Compiled by
Thomas T. Sekine

## 1. *Political Economy*

In this book political economy means a systematic enquiry into the properties specific and peculiar to a commodity-economy, and to capitalism in particular which is the most advanced form of a commodity-economy (see 4). Political economy does not directly study the general norms of economic life (see 2); that is to say, it does not investigate the processes of production, consumption, exchange, and distribution as they occur in all forms of society, but only insofar as they are governed by the principles of a commodity-economy.

## 2. *The General Norms of Economic Life Common to all Societies*

The material foundation of any society regardless of its form is an organised economic life of men. The supra-historic aspects of the organisation of such economic life are called general norms. For example, the fact that both the means of production and the means of livelihood must be produced in an appropriate proportion for society to maintain itself or to grow in a particular manner is a general norm of economic life common to all societies. It is also a general economic norm that all unnecessary waste of productive labour should be avoided, and that a productive worker produces more than is necessary for the reproduction of his own labour-power. Another important general norm of economic life is that society's reproduction process cannot expand faster than the natural rate of growth of the working population so long as productive technology remains constant.

## 3. *The Laws of Capitalism*

The laws of capitalism refer to the specifically commodity-economic manner in which capitalism fulfills the general norms of economic life. For example, the law of value working through the fluctuation of prices enables capitalism to produce all use-values that society wants without wasting productive labour, to maintain the existing working population adequately, and to wholly appropriate the surplus products of the wage-earners in the hands of capitalists. The laws of capitalism are stated in the doctrines of production and distribution but not in the doctrine of circulation (see 8).

## 4. *Commodity Economy*

Economic life based on commodity exchanges and/or commodity production is referred to as a commodity-economy. A commodity-economy in this sense exists in pre-capitalist societies to a greater or a lesser extent, but a non-capitalist commodity-economy never engulfs the whole economic organisation of society, remaining always a partial and subsidiary activity relative to the prevailing mode of production. Capitalism alone is a global or total commodity-economy in the sense that the mode of production itself is governed by the commodity-economic principles. This is brought about by the conversion of labour-power into a commodity which makes 'the production of commodities only by means of commodities' possible (see 11).

### 5. *Simple Commodity Production by Small (Commodity) Producers*

Production of commodities by self-employed artisans or handicraftsmen (called small producers) who own their means of production is called simple commodity production. Simple commodity production in this sense exists in capitalist or in pre-capitalist societies, but a whole historical society cannot be organised on the basis of simple commodity production. A self-sustaining economic regime of small commodity producers is a dialectically unwarranted abstraction.

### 6. *Materialistic Conception of History*

Marx's general outlook on world history which is called historical materialism or the materialistic conception of history consists of the following propositions: (i) the economic substructure determines legal, political, religious, and other ideological components of the superstructure of any society; (ii) the production-relation, or the manner in which men are socially organised to carry out productive activities, must correspond with the level of development of society's general productive powers; (iii) bourgeois society is the last class-antagonistic society with which the pre-history of mankind will be concluded.

### 7. *The Three Levels of Study in Political Economy*

Political economy must study capitalism at three distinct levels. They are (i) the pure theory of capitalism or theory of a purely capitalist society, (ii) the stages-theory of capitalist development through the epochs of mercantilism, liberalism, and imperialism, and (iii) empirico-historical studies of actual capitalist economies.

### 8. *The Pure Theory of Capitalism*

The pure theory of capitalism studies the functioning of a purely capitalist society, an abstract-theoretical construct, in which all goods are produced as commodities by means of commodities alone. Purely capitalist society, being a theoretical abstraction, must be conceived of as a self-perpetuating system, even though capitalism in reality is an historical institution existing only for a finite span of time. This abstraction is not the result of a subjective, i.e., arbitrary mental operation but follows the objective historical tendency for the self-abstraction or self-perfection of capitalism itself towards the middle of the nineteenth century in England where pre-capitalist economic relations were actually in the process of being eliminated. The history of capitalism, however, did not consummate this tendency because of the intervention of factors alien to the nature of capital itself, so that even English capitalism of the 1860s only approximated the theoretical image of a purely capitalist society. Hence follows the need for the stages-theory of capitalist development. The pure theory of capitalism is stated in the three doctrines of circulation, production, and distribution (see 26).

9. *The Stages Theory of Capitalist Development*

The history of capitalism exhibits three typical stages of development: mercantilism, liberalism, and imperialism. These historical epochs of capitalism can be readily distinguished by the characteristic economic policies, foreign trade, and public finance in each epoch. Since, however, capitalism does not develop uniformly throughout the world, there is bound to be a leading nation in which the stage-characteristics of capitalist development are most typically represented. The stages-theory, therefore, studies such a nation to the extent that it typifies the working of capitalist society *in concreto*, i.e., given the historical and technological environment. The mercantilist stage is abstracted from the background of seventeenth century England in which the chrematistic of the dominant merchant capital depended on the 'manufacture' production of woollen and worsted articles. The stage of liberalism is visualised in the perspective of mid-nineteenth-century England in which industrial capital centring around the cotton textile industry developed the regime of free competition based on the policies of *laissez-faire*. The imperialist stage which evolved in the last part of the nineteenth century, however, is best represented by Imperial Germany; the production of iron and steel in that country under the organised monopoly system of finance-capital challenged the industrial hegemony of Great Britain at the turn of the century.

10. *Empirico-historical Studies of Actual Capitalist Economies*

The ultimate task of political economy is to explain how an actual capitalist economy works. In view of the extreme complexity of reality, however, empirical facts of a capitalist economy cannot be described systematically or objectively without a definite method of evaluating them. Yet any attempt at directly relating empirical data with the abstract laws of capitalism would either vitiate the integrity of the strict laws or lead to an unduly mechanical interpretation of historical experience. Hence an actual capitalist economy must first be studied in the light of the stage-characteristics most typically manifested by the leading capitalist nation of the epoch. Only with the mediation of the stages-theory of capitalist development can particular 'facts' of capitalism be properly related with the pure theory of capitalism. Any empirical study which is not mediated by the stages-theory of capitalist development, and hence not evaluated in the light of the pure theory of capitalism is bound to be subjective and arbitrary.

### 11. *Commodities, Commodity-form*

Goods or products are not necessarily sold and purchased before being used or consumed. Only when men are socially related so as to habitually exchange them do goods or products assume the *form* of commodities. In this book the word 'form' is frequently employed. When something is said to acquire or adopt a form, it means that the form defines or stipulates what the thing can do in the particular context; that is to say, a 'form' is a contextual specification of something which need not always belong to the context. Thus, for example, goods or products which need not necessarily be traded acquire the form of commodities when they are traded. Once converted into a commodity, a good must obey certain rules prescribed by the context. Thus, for instance, a commodity can never be consumed by its owner although a good which is not, or is no longer, a commodity may be.

If economic life is operated in such a way as to transform goods into commodities, it is called a commodity-economy (see 4). When goods are regularly traded, economic relations tend to be impersonalised or 'reified'; economic relations which are basically 'man-to-man' social relations superficially appear as 'thing-to-thing' physical relations. The so-called fetishism peculiar to a commodity-economy therefore develops (see 40). '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' (*Capital*, I, p. 35). Personal services which are not material and hence cannot be completely impersonalised are not commodities; only physical objects whose consumption yields a flow of service can become commodities.

### 12. *Commoditisation, Conversion into a Commodity (or Commodities)*

Since goods are not originally commodities, they must be commoditised or converted (transformed) into commodities, i.e., they must adopt the form of commodities under a social arrangement requiring trade. Products of labour can be easily converted into commodities by being capitalistically produced. Once labour-power is purchased as a commodity by a capitalist, the product of its consumption (i.e., of labour flowing from the consumption of that labour-power) must necessarily be sold by the capitalist as a commodity. In other words, no good can be capitalistically produced without *ipso facto* becoming a commodity. But things which are not products of labour and hence cannot be capitalistically 'produced' can also adopt the form of commodities under various circumstances. Labour-power, or man's capacity to perform productive labour which is never capitalistically produced as a commodity, is converted into a commodity by a social institution peculiar to capitalism. Idle funds (see 20, 87) are not a direct product of labour but are commoditised in the money market. Land is not a product of labour but can acquire a fictitious value and can be traded as a commodity (see 83). Even capital in the sense of a profit-making operation can eventually acquire the form of a commodity (see 97) to be traded piecemeal as equities in the capital market. It is always important to know under what specific context or circumstances the conversion of a thing into a commodity takes place.

### 13. *Circulation, Circulation-forms*

When commodities and money change hands they are said to be in simple circulation. When capital takes on and off the forms of commodities and money, it is said to be in the process of simple circulation. Commodities, money, and capital are therefore called the three basic forms of circulation. Goods or products take the form of commodities when they are sold and purchased. A particular commodity takes the form of money when it is excluded from the ranks of ordinary commodities so as to physically represent their value. When a sum of money is used to acquire a greater sum of money, it takes on the form of capital. The word 'form' must always remind the reader of the contextual definition or specification (see 11). Thus money is a form that attaches to a particular commodity when commodity exchanges become truly universal, i.e., when any commodity can be exchanged for any other commodity. The adoption of the form of money prohibits the chosen commodity to behave in the same manner as other ordinary commodities and requires it to perform certain specific functions which are not performed by other commodities. Similarly, capital is a form that attaches to money when money is used in a special manner. Money converted into capital is no longer permitted to simply function as a store of value but must actively pursue a chrematistic operation (see 20, 21). In order to achieve its own unity a commodity-economy requires that some money should be used in the form of capital. A commodity-economy which is fundamentally a circulation-economy presupposes the transformation of goods into commodities, of one commodity into money, and some money into capital.

### 14. *The Value of a Commodity*

All commodities can be priced because they possess a socially homogeneous quality apart from their materially heterogeneous use-values. The value of a commodity refers to its quality of homogeneity to any other commodity; as value one commodity differs from any other only quantitatively. In the sphere of circulation the substantive nature of this homogeneous social quality cannot be identified because the value of a commodity must be expressed there in the use-value of another commodity, i.e., value can only take the form of exchange-value. Only in the production-process of capital can the substance of value be revealed to consist of the quantity of abstract-human labour socially necessary for the production per unit of the commodity.

### 15. *The Use-value of a Commodity*

'The utility of a thing makes it a use-value.' The utility is 'limited by the physical properties of the commodity.' 'A commodity, such as iron, corn, or a diamond is, therefore, so far as it is a material thing, a use-value, something useful' (*Capital* I, p. 36). However, the use-value of a commodity is not the same thing as the use-value of a good in general. The use-value of a good is at the disposal of a consumer only to be directly used or consumed; hence it does not co-exist with value. The use-value of a commodity in contrast is still in the hands of its seller who is not the consumer. The purchaser of the commodity cannot consume its use-value until he takes possession of the commodity by trade, i.e., without first realising its value to the seller.

### 16. *Value-form or Value in Exchange (Exchange Value)*

A commodity cannot express its value except in a definite quantity of the use-value of another commodity. Value thus expressed is called its exchange value or value in exchange. The value-form means a specific form or mode of expression of value as exchange-value. Thus if the value of a commodity, say A, is expressed in a given quantity of only one other commodity, say B, this mode of value expression is called the *simple or elementary value-form*. If the value of A is expressed by definite quantities of many other commodities, B, C, D, . . . etc., the mode of value expression is called the *expanded or extended value-form*. If the value of A is expressed in the use-value of a commodity X in which all other commodities express their values, the mode of value expression is called the *general value-form* and the particular commodity X a *general equivalent*. When X is unique so that it is *the* general equivalent the same mode of value expression is called the *money-form of value*. The price of a commodity is its money-form of value per physical unit of the commodity. A commodity whose value is expressed is said to occupy the position of the *relative value-form* and the commodity in the use-value of which the value of another commodity is being expressed is said to occupy the position of the *equivalent form of value*.

*17. Money*

Money is a commodity excluded or set aside by all the others in a system of exchanges so as to serve as the value-reflecting object or the general equivalent (see 16) of the system. Once a particular commodity, such as gold, settles in this position because its use-value is best suited for that position, it becomes an immediate purchasing-power or *means of purchase* of all other commodities. Money has three specific functions: as the measure of value, as the means of circulation, and as funds (*shikin*). In this last function money takes the forms of (i) reserve funds, (ii) the means of payment, and (iii) idle funds (or monetary saving).

*18. Money as the Measure of Value*

One of the three functions of money is to measure the value of other commodities. Ordinary (i.e., non-monetary) commodities express their value in the form of a money-price, but by this unilateral expression their value cannot be measured or socially certified. By repeatedly purchasing a commodity at a price, money measures its value; i.e., money measures the value of a commodity in the repetitive act of purchase M—C. The measuring of the value of a commodity must not be confused with the determination of the magnitude of its value. By purchasing a commodity repetitively money reveals the central price of the commodity, i.e., the price at which it is most frequently purchased. The greater the frequency of trade, the more certain, of course, is the convergence of actual prices to the central price. But unless such a price regulates the supply quantity of that commodity in the market, and hence the quantity of socially necessary labour for its production, the magnitude of its value cannot be determined. The measure-of-value function of money is instrumental to the determination of value but this latter determination further depends on how commodities are produced.

*19. Means of Circulation, Circulating Medium, Currency*

If the sale of a commodity (or commodities) C—M is immediately followed by the purchase of another commodity (or other commodities) M—C′, money functions as a means of circulation in the unbroken sequence of C—M—C′, intermediating the exchange of commodities. Since the money received is almost immediately parted with, it is said to remain permanently in the sphere of circulation as currency while commodities are withdrawn from that sphere to be consumed. The circulating medium which is never held for any significant length of time outside of the sphere of circulation can be substituted for by *money symbols* in order to save society the cost of circulating *coins* or full-bodied money. These symbols are worthless outside the sphere of circulation whereas coins can be retired from circulation either as they are or as converted into bullion, luxury articles, etc., without losing their value.

20. *Funds (Shikin) or Money at Rest*

This is a special word which Uno uses generically to describe the third function of money as the store of value or, as Marx calls it, the function of money 'as money.' The Japanese word *shikin* which describes the hybrid between money and capital has been translated into 'funds' for lack of a better alternative, even though the English word *money* includes the meaning of *shikin* particularly when qualified by the adjective 'idle.' For example, in the 'money' market loanable funds, i.e., various types of inactive money are traded; the expression such as 'I have money to build a house' means that a certain amount of *shikin* or monetary saving has been kept aside from the circulation sphere and may be used for this purpose. *Shikin*, however, does not mean, as the term funds often does, such non-monetary resources as bonds and equities the interest and dividend of which are devoted to a specific purpose. It is important to distinguish *shikin* from *money-capital* which is a sum of money already integrated into the motion of capital. (Uno sometimes uses the words 'idle money-capital' to describe *shikin*.) In order for money to be used as capital it must first become idle or inactive, i.e., kept aside from the sphere of commodity circulation. Money in this state of rest is *shikin* or funds. Money first becomes idle in the hands of traders as *reserve funds*. When traders must repay loans, they are obliged to set aside funds as *means of payment* in order to avoid a default. But *idle funds* in general can be accumulated for less specific purposes as monetary savings or mercantile wealth in general. It is money in this form that is readily converted into capital.

21. *The Three Circulation-Forms of Capital*

Capital means the activity or operation of making a certain sum of money M into a greater sum of money M′. This operation is sometimes also described as *chrematistics*. In this strictly formal sense capital is a circulation-form. Three circulation-forms of capital can be distinguished by the formulae: M—C—M′; M . . . M′; M—C . . . P . . . C′—M′. These formulae represent the chrematistic operation of *merchant-capital*, *money-lending capital*, and *industrial capital* respectively. Merchant capital augments a value M into a greater value M′ by dealing with specific commodities C. This form most simply and abstractly describes the fact that the chrematistic operation of capital involves a commodity or commodities. At the same time it is an imperfect form of capital because the use-value of the specific commodities involved constrains the freedom of the operation of capital. The form of money-lending capital is free from such a constraint and in this sense less restricted; money-lenders, however, cannot operate in the absence of merchants. Hence money-lending capital too is imperfect because it is not self-dependent. Industrial capital alone is the adequate form of capital since it is self-dependent and can make a free choice of the commodity C′ which it wants to circulate. The strictly formal sense of merchant capital and industrial capital must be distinguished from the other sense of these two capitals as the dominant forms of capital in the stages of mercantilism and liberalism.

22. *The Three Types or Dominant-forms of Capital*

In each of the three stages of capitalist development there is a dominant-form or type of capital whose mode of accumulation characterises the stage. In the mercantilist stage *merchant capital*, which made use of the putting-out (commission) system in exploiting the rural handicraft manufacture, was the fastest growing form of capital. In the liberal stage *industrial capital*, which controlled the modern factory system, played the leading rôle in the process of capitalist accumulation. In the imperialist stage *finance-capital* (a very special variant of money-lending capital), which established the joint-stock company system to indirectly exploit heavier industrial technology, outpaced the other forms in the accumulation of capital. (See 9.)

23. *Primitive Accumulation*

The accumulation of commercial wealth alone does not introduce the capitalist mode of production which requires labour-power in the form of a commodity. In order to initially convert labour-power into a commodity it was necessary to create a large mass of propertyless workers who are free, as well as obliged, to sell their labour-power as a commodity. The process of the formation of the modern propertyless workers by extra-economic forces which separated the traditional direct producers from land which was their primary means of production is often called primitive accumulation.

24. *Metamorphosis of Capital*

Capital which is an operation of rendering a sum of money M into a greater sum of money M′ can also be described as a motion or growth of value. In this motion capital takes on and off the forms of commodities and money as in M—C—M′, or undergoes a 'metamorphosis.' This expression is reserved by Uno to describe the case in which one and the same thing, capital or value in motion, alternately takes the circulation forms of money and commodities. Marx also talks of the metamorphosis of commodities by referring to the formula C—M—C′, but this application of the word is considered inappropriate in this book because, unlike M—C—M′, the transformation C—M—C′ has no self-repeating property. Indeed, the C at the beginning and the C′ at the end of this exchange formula are different commodities, so that there is no necessity that C arises again from C′. On the other hand, once capital makes an M into an

M′, the chrematistic process does not stop at M′ but automatically converts this M′ into another M so as to continue the motion of capital.

25. *The Turnover of Capital*

Although capital is a continuing and never-ending motion of value, it repeats the cycle that begins with money M and ends with the recovery of money M′ together with surplus value. This cycle is called the turnover of capital. Since it takes time to complete the cycle, there are expressions such as the turnover-time, the turnover-period, the turnover-speed, the rate of turnover, etc., of capital (see 48).

26. *The Subject*

All dialectical systems require a single subject about which the story is told. In Hegel's *Logic* the subject is the Absolute which brings itself into being, acquires a permanent ground upon which to rest, and develops a self-dependent kingdom of its own. In the pure theory of capitalism the subject is capital which arises in the sphere of circulation, subsumes the labour-and-production process common to all societies, and on that basis develops a self-contained capitalist society. In both cases the dialectic is composed of three doctrines: the doctrines of being (circulation), essence (production), and the notion (distribution).

27. *Labour-process, Production-process, Labour-and-production Process*

When man works consciously on nature with a view to tranform part of it into use-values of his desire, he is said to be engaged in the labour-process. The labour-process which must involve man's purposive action on nature represents the human side of production. But the same process viewed from the point of view of its result, namely of the product, is called the production-process which is a technical input-output relation. It is necessary that production should be examined from both the human and the technical aspect as simultaneously a labour-and-production process. For if production is merely viewed as a technical process the active part that labour-power plays in production is overlooked, and if production is viewed only as a labour-process the technological unity of society's production-processes is overlooked.

28. *Objects of Labour, Means of Labour, and Accessory Materials*

In the labour-process things such as raw materials, on which labour is applied, are called objects of labour; tools, machines, plants, etc., which indirectly enhance the effectiveness of labour are called means of labour; things consumed even more indirectly such as lubricating oil for the machines, dye stuff for the colouring of the products, lighting or heating of the factory, etc., are called supplementary or accessory materials. In other words, the means of production are classifiable into the three categories according to their proximity to nature.

29. *Means of Production and Elements of Production*

The material things classified into three categories in the labour-process, namely, the objects of labour, the means of labour, and supplementary materials are, from the point of view of the production-process, collapsed into the one category of the means of production in contrast to labour-power. Once products are made it becomes unnecessary to differentiate the means of production according to the roles they play in the labour-process. Even the distinction between means of production and labour-power becomes sometimes unnecessary when production is viewed purely technically. In that case both are called the elements (or factors) of production, although labour-power is always the active element (or factor) of production and, from the point of view of the labour-and-production process, means of production are passive elements (or factors) of production.

30. *Means of Production and Means of Livelihood*

As use-values all capitalistically produced commodities are broadly classifiable into the means of production and the means of livelihood (or articles of consumption). If a capitalistically produced commodity is directly consumed, it is a means of livelihood; if a commodity so produced is productively consumed, i.e., for the purpose of producing other commodities, it is a means of production. In other words the means of production are 'basic goods' and the means of livelihood are 'non-basic goods' according to the more recent usage.

31. *Labour-power, Productive Labour*

The capacity of man to work is called labour-power; no human labour flows from any other source. Labour-power is inseparable from the person of the worker and must be reproduced by the worker himself through the consumption of his means of livelihood. Labour-power can generate productive labour, i.e., labour which involves nature directly or indirectly, but labour-power can also be spent on unproductive labour, i.e., labour performed by a person for another person without directly or indirectly involving a transformation of nature, or on recreation for the worker's own enjoyment. Productive labour that issues from the consumption or use of labour-power forms the material foundation of all societies and as such plays the principal part in the labour-and-production process.

### 32. *Productive Workers or Direct Producers*

Those members of society whose labour directly or indirectly involves a material transformation of natural things are called productive workers or direct producers. Supervisory, administrative, commercial and other professional or mental service workers are not productive workers or direct producers.

### 33. *Abstract-human and Concrete-useful Labour*

Productive labour always produces a particular use-value; in this respect all productive labour is concrete-useful labour such as weaving, tailoring, packing, mining, etc. On the other hand productive labour can produce any use-value as occasion demands; in that respect all productive labour is the single abstract-human labour. The mechanisation of industry has enabled simple and unskilled labour to produce all forms of wealth so that the concept of abstract-human labour develops not only theoretically but in reality with the evolution of capitalism. But even in pre-capitalist societies productive labour that forms their material foundation cannot be without the abstract-human aspect. The simplification of labour only reduces the cost of transferring productive labour from one concrete-useful form to another. But the transferability as such is an inherent property of productive labour and does not depend on the extent of the cost.

### 34. *Necessary and Surplus Labour*

It is a general norm of economic life that every direct producer has the capacity to work more than is necessary to maintain and reproduce his own labour-power. This productive labour that the direct producer expends for the maintenance and reproduction of his labour-power is called necessary labour, and productive labour that he spends otherwise is called surplus labour. If his labour-time for a day, a month, etc., is known, it can be divided into his necessary labour-time and surplus labour-time. So far as unproductive labour is concerned, there is no distinction between necessary and surplus labour.

### 35. *Labour-power as a Commodity*

Labour-power is the human capacity to work which is inseparable from the person of the worker who possesses it. It cannot be capitalistically produced as a commodity, nor does it become a commodity automatically unless certain social relations are established. When a capitalist purchases labour-power he obtains the right to consume it for a specified period of time. Once purchased, however, labour-power ceases to be a commodity capable of being resold. Hence the capitalist must consume its use-value or the flow of productive labour as fully as possible while labour-power is still at his disposal. The value of labour-power is its reproduction cost or the value of the means of livelihood necessary for the maintenance of labour-power. The use-value of labour-power is productive labour which implies the ability to produce any use-value of the capitalist's choice in addition to performing both necessary and surplus labour. The capitalist method of production increasingly perfects the use-value of labour-power by making it possible to produce any good with simple and unskilled productive labour.

### 36. *Value formation-and-augmentation Process, Surplus Value*

Labour-power loses its value as soon as it is purchased since it ceases to be a commodity. Hence before leaving the production-process of capital labour-power must form a new value which is greater than the value at which it was purchased by the capitalist. It follows that the production-process of capital must be a process of value formation. The excess of the newly formed value over the value of labour-power is called surplus value which, in money terms, appears as profit or the difference between the sales proceeds of the product and the money value of capital consumed by its production. To the extent that the newly formed value includes surplus value, the process of value formation is simultaneously a value-augmentation process.

### 37. *Variable Capital, Constant Capital, and Surplus Value*

The value of a commodity must be greater than the value of capital consumed in its production in order for the commodity to be capitalistically produced. The difference is surplus value (s). The value of capital consumed by the production of a commodity is divided into constant and variable components. *Constant capital* (c) refers to the value of the means of production used up in the production-process; *variable capital* (v) refers to the value of labour-power productively consumed in the same process. The ratio of constant capital per unit of variable capital (c/v) is called the *value composition* of capital. The value of a commodity, which is also sometimes called the *product value*, consists of c + v + s. The value of capital productively consumed is c + v and newly formed value, which is also sometimes called the *value-product*, is v + s. In contrast to this *new value* v + s, the c-part of the commodity value is often called the *old value* since it already exists before the current process of production begins in which it is merely transferred from the means of production used up to the commodity currently produced. The value of variable capital (v) is not transferred to the product, it is newly formed together with surplus value (s). Constant capital sometimes means not only the value of the means of production actually used up, but also the value of the means of production as a whole, i.e., including the undepreciated value of fixed capital applied in the production of the commodity. If the value of the means of production in this sense is denoted by C, the definition of the value composition changes to C/v.

### 38. *The Law of Value*

The law of value simply states that the value of a commodity is equal to the quantity of socially necessary labour directly or indirectly spent for the production per unit of that commodity. The value of a commodity presupposes its equilibrium price at which only the socially necessary quantity of that commodity is produced. But the value is not the equilibrium price itself, nor does the law of value always require that commodities should be exchanged at values even in equilibrium. The value is the commodity-economic expression of the social substance that underlies the equilibrium price, that is to say, of the expenditure of society's productive labour required to produce a unit of the commodity in a socially necessary quantity. If a commodity is overproduced, i.e., produced more than is socially necessary, its price falls so that its value represents less than the quantity of labour actually spent for its production, and *vice versa*. The law of value proves that, when a commodity is neither overproduced nor underproduced, i.e., produced in just the socially necessary quantity, the amount of productive labour that society actually spends for the production of that commodity tends to agree with the magnitude of its value. The existence of the capitalist mode of production is established by this law because its working guarantees that capitalism, despite its anarchistic production of commodities, can satisfy all the requirements of the labour-and-production process, i.e., the general norms of economic life that all societies must satisfy (see 71). The law of value, in other words, assures that capitalism can constitute an historical society, when capital produces all commodities as values, i.e., as mere embodiments of socially necessary labour quite indifferently to their use-values.

### 39. *The Social Substance*

Marx calls human labour expended for the production of commodities their social substance (*Capital*, I, p. 38) presumably in contradistinction to their material form. Commodities 'looked at as crystals of this social substance' are 'values' (ibid.). The production of use-values involves an organised expenditure of productive labour in all societies; in a commodity-economy this social substance or the communal exertion of productive labour is not directly visible and must be identified as the value of commodities.

### 40. *The Fetishistic Character of a Commodity-economy*

A commodity-economy impersonalises or reifies all human relations; it conceals them underneath material guises and translates them into thing-to-thing relations. Hence on the surface capitalism appears to consist of such mysterious 'things' as commodities, money, and capital animated by some unknown supernatural powers. Fetishism, which means the mystification of what underlies these physical appearances, does not originate in the superstitious mentality of the economists but rather in the very nature of the commodity-economy, which in principle does not permit men to come into direct contact with each other in their economic affairs. Even a limited commodity-economy reifies some social relations and to that extent breeds fetishism. But when a whole society is covered by the commodity-economic forms as in capitalism, the fetishism reaches its perfection. Thus even the labour-theory of value, with which alone the existential base of capitalist society can be demonstrated, appears to some to be *meta*physical because values are not a physical property of commodities. But the refusal to see anything but *physical* relations in capitalist society is a direct consequence of the fetishism from which 'positivist' economists, according to their own admission, are not free.

### 41. *The Rate of Surplus Value*

The rate of surplus value is the ratio of surplus value per unit of variable capital. Only in equilibrium, i.e., only when commodities are produced in the socially necessary quantities, does this rate coincide with the ratio of actually performed surplus labour to necessary labour. The rate of surplus value, which is also sometimes called the degree of exploitation, reflects the fundamental relation between the capitalist and his workers. The word 'exploitation,' however, must not connote moral disapproval which has no place in the pure theory of capitalism. It is important to stress that a capitalist cannot directly appropriate surplus labour because he is not himself the consumer of the surplus product (product of surplus labour); the capitalist can appropriate surplus labour only in the form of surplus value embodied in the value of a commodity which must be sold in the market.

### 42. *Absolute and Relative Surplus Value*

If the production of surplus value is investigated on the assumption that the length of the necessary labour-time is given, the production of absolute surplus value is said to occur. If the production of surplus value is investigated on the assumption that the length of the working day is fixed, the production of relative surplus value is said to occur. Thus the two forms of surplus value are the same thing viewed from two different points of view. Absolute surplus value can be increased by the lengthening of the working day, by the intensification of labour, or by both, given the technology affecting the value of labour-power. But relative surplus value can only be increased by a technical advance such as to lower the value of labour-power. Obviously, absolute surplus value cannot be indefinitely increased without undermining the health and the work incentive of the workers. But there is no limit to the increase of relative surplus value by means of technological progress. All forms of technical progress other than that restricted to the production of luxury goods directly or indirectly raises relative surplus value.

43. *Extra Surplus Value*

Capitalists do not adopt a new method of production because it benefits society, but because it is more profitable to them. If a few capitalists produce, say, cotton yarn with a new and more efficient machine than the conventional one widely used by other cotton-spinning capitalists, then the few innovators reduce the cost of producing yarn below the social average. Since the same product can be sold at about the same price in a competitive market, the cost differential becomes the extra surplus value that accrues to the innovating capitalists on top of the ordinary surplus value received by all the capitalists of the industry. The extra-surplus value, which the innovators earn in the form of special surplus profit (see 73) commonly known as quasi-rent, disappears as more and more capitalists adopt the new technique since the price of cotton yarn falls with the diffusion of the new technique according to the principle of market value (see 71). Extra surplus value may be regarded as representing the cost to society of introducing a new method of production. If a new method is not embodied in fixed capital such as a machine or plant, its adoption can be immediate with hardly any cost to society. No extra surplus value is earned in such a case. The more costly and time-consuming it is to introduce a new technology, the more extra surplus value must be earned, i.e., the greater must be the capitalist incentive for the technical innovation.

44. *Cooperation, Manufacture, Mechanised Industry*

The capitalist method of production is characterised by these three conceptual stages which do not always directly correspond with historical progress. *Cooperation* means the assembling of many productive workers in one place to exploit the productive powers of their collective labour. Whereas pre-capitalist production too may have occasionally resorted to the same method (e.g., for harvesting of crops, for the irrigation of land, etc.), it could not be said to be a universal practice. Capitalist production, however, always presupposes a cooperation which may therefore be considered its most general feature. *Manufacture* means the division of labour by the productive workers engaged in the same process. The manufacture division of labour must be distinguished from the social division of labour, which involves the specialisation by capitalists in the production of use-values. The direct consequence of the manufacture division of labour is the simplification of the labour-process and the reduction of productive workers to partial operatives. The third, and the most decisive, feature of capitalist production is the use of machinery and the organisation of labour to fit the operation of the machines. This feature is called *modern mechanised industry*. In the pure theory, capitalist production possesses all these three features and is, therefore, capable of simplifying and standardising labour-power.

## 45. *The Formation of the Home-market*

'The events that transformed the small peasants into wage-labourers, and their means of subsistence and of labour into material elements of capital, created, at the same time, a home-market for the latter' (*Capital*, I, p. 747). Manufacturing industry originated in the countryside closely allied to agriculture. But the conversion of the small peasants into wage-labourers enabled capitalism to develop manufacture (in the sense of manufacturing industry) in the cities separately from agriculture. The severance of the direct tie between agriculture in the countryside and manufacture in the cities meant the formation of the home-market or the commodity-economic relation between the two basic branches of production.

## 46. *The Form of Wages*

The value of labour-power expresses itself in the form of wages. In reality wages are nothing but the price of labour-power traded as a commodity in a capitalist economy. In form, however, wages do not differ from monetary compensations for a useful work done by an independent craftsman such as a carpenter, a gardener, etc., whose labour-power is not a commodity. Hence follows the capitalist confusion that wages are 'the price of labour' even though labour itself, unlike labour-power, is not a commodity. This confusion is particularly difficult to overcome because wages are often paid in the forms of time-wages and piece-wages. The *time-wage* paid per hour of labour expended, however, is no more than the price of labour-power per day divided by the number of hours normally worked by the standard workman; the *piece-wage* paid by the unit of output produced is also the same thing divided by the number of units of output normally produced by him. In a commodity-economy anything can be priced whether it has a value substance or not; so also can anyone be paid a wage whether he sells his labour-power as a commodity or not. The formal generality of prices and wages must, however, not divert one's attention from the underlying reality of capitalist society; for otherwise its material foundation would not be exposed.

## 47. *The Anarchy of Commodity Production*

In a commodity-economy use-values are produced planlessly, i.e., without any prior coordination by individual entrepreneurs. This fact is described by the word 'anarchy.' The production of use-values as commodities is bound to be anarchistic in the sense that it depends on completely decentralised (atomistic) and socially uncoordinated decisions. The capitalist commodity-economy, however, cannot exist as a whole society unless the anarchy of commodity production is *ex post facto* regulated by the law of value. From the viewpoint of individual capitalist producers the working of the law of value means uncertainty since they can make a windfall gain just as easily as they can be forced out of business. Being always exposed to the vagaries of the market, capitalists cannot exclusively concern themselves with the process of production but must pay close enough attention to the circulation of their capital. The study of the circulation-process of capital shows the extent to which the capitalist production of use-values is constrained by the fact that these use-values are anarchistically produced as commodities by means of commodities. In other words, the circulation-process of capital describes the manner in which capital combines its activity as a producer with its activity as a merchant.

### 48. *The Turnover-time of Capital*

When money M is invested or advanced as capital, a certain length of time must elapse before its value is recovered in the form of money M′ including surplus value (see 25). This length of time is called the turnover-time of capital and consists of a *production-period* and a *circulation-period*. The production-period is further divided into a *working-period*, in which productive labour is actually expended, and a *non-working period*, in which no application of productive labour occurs. The circulation-period is made up of a *selling-period*, in which finished commodities are sold for money, and a *purchase-period*, in which money is spent on productive elements. The length of the production-period by and large depends on technical factors, but the length of the circulation-period varies, reflecting the conditions of the market as well as individual skills of capitalist traders.

### 49. *Circulation-Capital and Productive Capital*

Industrial capital in its process of circulation M—C . . . P . . . C′—M′ alternately takes the form of money M, the form of functioning elements of production P, and the form of a finished commodity C′. These forms are respectively called *money-capital*, *productive capital*, and *commodity capital*. Money-capital and commodity-capital are together called *circulation-capital*, since they are forms of capital belonging to the sphere of circulation, in contradistinction from productive capital which functions in the sphere of production. Productive capital is further classified into *circulating capital* and *fixed capital* according to whether the value of the means of production is transferred to the product wholly in one turnover of capital or piecemeal in several turnovers of capital. Although variable capital (see 37) does not retain its value within the production process, labour-power as it functions in the production-process of capital constitutes an essential part of productive capital. *Circulating capital* and *circulation-capital* must not be confused. Circulating capital is a sub-category of productive capital; circulation-capital is non-variable capital which is not in the form of productive capital.

50. *The Three Circuits of Industrial Capital*

As the circulation-process of industrial capital repeats itself, it can be viewed as *the circuit of money-capital*, as *the circuit of productive capital*, or as *the circuit of commodity-capital*. Each of these circuits, always beginning and ending with the same form of capital, describes a different aspect of the circular motion of industrial capital in its continuing process of circulation.

51. *Circulation-costs and Production-costs*

Since circulation as well as production takes time, capital cannot be wholly invested in the elements of production which capitalists regard as their *production-costs*. In order not to interrupt production while commodities are being bought and sold, it is necessary that part of capital should be retained in the unproductive form of money and commodities as circulation-capital. The longer the circulation-period the greater is the proportion of circulation-capital which must be held outside of the production-process, and hence the lesser is the efficiency of producing surplus value. The holding of unproductive circulation-capital therefore costs the capitalist in diminished surplus-value production and may be called *the ordinary cost of circulation*. In addition to this cost of circulation every capitalist requires considerable resources for strictly circulatory operations, i.e., the operations of buying and selling commodities. The maintenance of sales shops, keeping accounts, exchanging commercial correspondence, etc., consume both human and non-human resources and incur *pure circulation-costs* to the capitalist. The pure circulation costs do not form part of capital since they are paid out of surplus value in the same manner as the living expenses of the capitalist (see 92.)

52. *The Storage and Transportation Cost*

The costs of storing and transporting commodities are in part production-costs and in part pure circulation-costs. To the extent that the storage and the transportation of use-values cannot be avoided in any society, these activities must be considered direct extensions of the production-process. In this case the costs of storing and transporting use-values must be considered productive and belonging to production-costs. But in a commodity-economy use-values may be stored and transported for purely circulatory purposes such as to make speculative gains. The costs of storage and transportation for such purposes do not arise in other societies and must be considered strictly commodity-economic and so unproductive. Such storage and transportation costs are pure circulation-costs.

### 53. *The Formation and Absorption of Idle Funds*

Idle funds (see 20) are formed and absorbed in the circulation-process of capital. If the circulation-period is shortened the capitalist does not need as much money as before to carry out his business; idle funds are therefore released from the circulation-process of his capital. In the reverse case he needs more money than before, so that the circulation-process of his capital ties up more money. If he does not possess the extra money to meet the contingency he may have to borrow. Even when the circulation-period is constant, depreciation funds are constantly released from the circulation-process of capital and will be kept idle only to be activated as money-capital when the renewal time of fixed capital arrives. On the other hand, all capitalists retain part of their surplus value as accumulation-funds without spending it on consumption. These accumulation funds, too, will be kept temporarily idle until they grow into a sufficient magnitude capable of being invested in additional capital. Idle funds of all sorts which cannot be immediately activated as money-capital by individual capitalists are pooled together in the banking system as loanable funds and made available to other capitalists who need active money temporarily to supplement their operation. The development of bank-capital (see 86) has its origin in the circulation-process of industrial capital.

### 54. *Freely Disposable Funds*

When surplus value is monetised, i.e., converted into money, it forms in the first instance freely disposable funds and as such drops out of the circulation-process of capital. In other words, surplus value as freely disposable funds becomes capitalists' income (see 63). The fact that capitalists can either consume or save their income means, from the monetary point of view, that freely disposable funds are either immediately spent as consumption-funds or held temporarily as accumulation-funds. When accumulation-funds are converted into money-capital and spent on additional capital, that part of freely disposable funds is re-integrated into the circulation-process of capital. If such a re-integration occurs, the reproduction-process of capital is said to have expanded; if otherwise, the reproduction-process of capital is described as simple.

### 55. *The Reproduction-process*

Since society cannot cease to consume, it cannot cease to produce. When society's production-process is viewed as a self-renewing continuum, it is called the reproduction-process. Every society's reproduction-process involves not only the reproduction of goods but also the reproduction of labour-power through the individual consumption by workers of periodically reproduced means of livelihood. It follows that the production-relation, or the social relation under which productive labour is organised, must also be reproduced. Capitalist society reproduces goods and labour-power as commodities by reproducing capital; that is to say, the reproduction-process of capital is simultaneously the process of reproducing commodities and the process of reproducing the commodity-economic relation between capitalists and wage-earners.

56. *Technical and Organic Composition of Capital*

The advancement of the productive powers of labour is most adequately measured by an increase in the quantitative proportion of the means of production to labour-power, i.e., by an increase in the quantity of the physical means of production operated per unit of labour-power. Although it cannot be measured simply as a 'capital-labour ratio,' this proportion is called the technical composition of capital and may be considered to be a rough index of the indirectness or roundaboutness of the labour-process. The value composition of capital c/v or C/v (see 37), to the extent that it reflects a prior change in the technical composition, is called the organic composition of capital. Not all forms of technical progress raise either the technical or the organic composition of capital; only those that affect the organic composition have any bearing on the value relation, or the commodity-economic relation between capitalists and workers, and significantly influence the pattern of the accumulation-process of capital. The accumulation of capital which does not involve a rise in the organic composition is sometimes called 'extensive' as opposed to the 'intensive' accumulation of capital which involves a rise in the organic composition.

57. *Concentration and Centralisation of Capital*

'Every individual capital is a larger or smaller concentration of means of production, with a corresponding command over a larger or smaller labour army. With increasing mass of wealth which functions as capital, accumulation increases the concentration of that wealth in the hands of individual capitalists' (*Capital*, I, pp. 624–5). But the concentration of capital 'which is identical with accumulation' in the hands of individual capitalists is counteracted by 'the division of property within capitalist families' and is 'limited by the degree of increase of social wealth' (ibid.). This limit does not exist for the centralisation of capital which 'is concentration of capitals already formed, destruction of their individual independence, expropriation of capitalist by capitalist, transformation of many small into few large capitals' (ibid.). 'The world would still be without railways if it had had to wait until accumulation had got a few individual capitals far enough to be adequate for the construction of a railway. Centralisation, on the contrary, accomplished this in the twinkling of an eye, by means of joint-stock companies' (p. 628). Thus the concentration of capital simply means the accumulation of the elements of production in the hands of individual capitalists; the centralisation of capital means a fusion of many capitalist enterprises into a larger single body.

## 58. *The Excess (or Super-abundance) of Capital*

When accumulation or investment in additional capital does not produce additional surplus value, i.e., when the efficiency of value augmentation at the margin is either zero or negative, capital is said to be in the state of absolute excess or super-abundance. Such a state arises when a sharp rise of wages depresses the rate of surplus value even if the latter rate remains positive. Since the rate of surplus value is $e = \frac{s}{v}$ (v = variable capital; s = surplus value), it follows that $\frac{ds}{s} = \frac{dv}{v} + \frac{de}{e}$. Thus if the rate of surplus value e falls faster than variable capital is accumulated, the absolute magnitude of surplus value falls. Once the state of the excess of capital is reached no further accumulation is possible since the sole purpose of capital, namely, the augmentation of value is denied to capital. The fundamental cause of capitalist crises is an excess of capital (see 76).

## 59. *Surplus Population Relative to Capital, the Law of Population*

Given society's productive technology, a certain level of capital accumulation is needed to fully employ the existing working population. But if the technology advances such as to raise the organic composition of capital, the same level of accumulation would leave some workers unemployed. The population of workers thus technically unemployed is called relative surplus population. The existence of relative surplus population, however, is not a chronic feature of capitalist society. In the depression phase of business cycles, when a large number of workers are already unemployed, the intensity of competition compels capital to introduce new technology in order to drastically reduce the cost of production. Since the new technology generally raises the organic composition of capital, relative surplus population can be generated. In the prosperity phase of business cycles the surplus population is increasingly absorbed until the shortage of labour-power and the consequent rise of wages lead to an excess of capital. The necessity of capital to periodically form and absorb relative surplus population is sometimes referred to as *the law of population peculiar to capitalism*. 'Every special historic mode of production has its own special laws of population, historically valid within its limitation alone. An abstract law of population exists for plants and animals only' '(*Capital*, I, p. 632). By the law of population Marx does not mean the growth of the working population *per se*, but rather the manner in which an historically particular mode of the accumulation of wealth is related to the maintenance and the growth of the working population. Capital not only forms but also absorbs relative surplus population in the course of the cyclical accumulation. The working population grows in the meantime, being sometimes underemployed and sometimes overemployed. Labour-power, therefore, is not permanently available to capital at a subsistence-level wage nor always unavailable except at an impossibly high wage. The law of relative surplus population guarantees that at least in the long run capital has access to labour-power as a commodity, thereby assuring the foundation of capitalism.

60. *The Value of Labour-power*

Although the value of labour-power can be formally said to equal the value of the means of livelihood necessary to reproduce labour-power, the basket of wage-goods adequate to reproduce labour-power is not biologically or otherwise supra-historically given. The living standard of the worker must, therefore, be considered to vary with the level of accumulation of capital. The standard of living enjoyed by the working class in the period of 'average activity' is that which determines the value of labour-power relative to the existing state of industrial technology. Marx's so-called 'historical and moral element' in the determination of labour-power (*Capital* I, p. 171) must be understood in this sense rather than merely in a vague sociological sense.

61. *Industrial Reserve Army, the So-called Law of Pauperisation*

Relative surplus population is a purely theoretical concept. The concrete mode of existence of relative surplus population in England towards the middle of the nineteenth century was named the industrial reserve army by Marx. Its 'stagnant,' 'latent,' and 'floating' forms distinguished different types of unemployment that were commonly observed during that period of capitalist development. Marx's description sometimes gives the impression that the industrial reserve army which capital can never employ steadily increases with the development of capitalism. But it must not be hastily concluded that, even in the prosperity phase of business cycles, capital cannot absorb the relative surplus population. Were it so, the excess of capital would not occur. The absolute size of relative surplus population in a depression period is somewhat greater than in the previous depression period simply because the active working population has grown in the intervening years with the scope of the capitalist economy itself. The so-called theory of *absolute pauperisation of immiserisation* stems from the incorrect view that capital fails to employ relative surplus population even in prosperity. If this were the case, capitalism would not form a self-sufficient historical society, nor would it be an historically meaningful mode of production.

62. *The Reproduction-Scheme*

A schematised representation of the circular flow of a capitalist economy, or its *tableau économique*, is called a reproduction scheme. It always presupposes the two classes of capitalists and workers and the two sectors of production, one for the means of production and the other for the means of livelihood. The scheme aims at confirming 'the absolute foundation of the law of value' as Uno puts it, that is to say, at establishing the reproducibility of capitalist society from the point of view of commodities. In order to survive every society, including capitalist society, must periodically reproduce means of production and articles of consumption in appropriate proportions. Once produced these two categories of use-values must be socially distributed in such a way that they can be produced again at least on the same scale as before, if not on an expanded scale. That is to say, the means of production whether to produce more means of production or to produce articles of consumption must fall into the hands of appropriate producers; the articles of consumption must be acquired by direct producers whose labour-power needs to be reproduced and by others whom society wants to support with surplus labour. In capitalist society this process of the distribution of the products takes the form of the circulation of commodities intermediated by money and results in the renewal and accumulation of the aggregate social capital in both its variable and constant component. The scheme confirms the reproducibility of capitalist society in this respect. The frequent misuse of the scheme in order to demonstrate an inter-industry disequilibrium, a crisis, or the inevitable breakdown of capitalism, etc., ignores the real significance of the theory of the reproduction-scheme.

63. *Capitalists' Income or Revenue*

Surplus value is freely disposable in the sense that, even if it were entirely consumed by the capitalists and their unproductive associates, society can at least maintain a simple reproduction. Hence when surplus value is realised in money and received by the capitalists, it can be considered to form their income or revenue as distinct from capital. This income or revenue can be consumed or saved as fits the occasion while keeping the aggregate social capital intact. The variable component of the aggregate social capital is not freely disposable in the same sense, even though it takes the form of workers' income. From society's point of view, workers' income cannot be separated from capital. Hence the use of the term 'income' as opposed to capital is, in this case, justified *only in the special sense that* the maintenance of variable capital, unlike that of constant capital, involves direct consumption by the workers outside of the production-process. Workers' 'income' cannot be treated in the same way as capitalists' income.

64. *Cost-price and Profit*

From the point of view of a capitalist, the selling price of his commodity is made up of its cost-price, or the purchase cost of the elements of production consumed for the provision of the commodity, and a profit, or the mark up. If all prices were proportional to values, this would amount to regarding the product value c + v + s as consisting of a cost-price c + v and a profit s rather than consisting of an old value c and a newly formed value v + s (see 37). That is to say, without having an adequate conception of value, capitalists could augment value by pursuing a profit which they reckon as the difference between the selling-price and the cost-price of a commodity. In fact they can produce surplus value, even if prices are not proportional to values, so that the cost-price and the profit do not measure production-costs c + v and surplus value s with quantitative accuracy. The concept of cost-price may be made even more remote from the (c + v)-component of the product value when some pure circulation costs are included in it in addition to strict production-costs. Even in that case capitalists can still produce surplus value. This is what the theory of profit shows.

65. *The Rate of Profit*

The proportion of profit to the money value of total capital advanced is called the rate of profit. Total capital advanced must generally include not only the cost-price whose money value is to be recovered by the current sale of the commodity, but whatever is tied up as capital at the present moment to ensure the continuing production of the commodity. Fixed capital in its original value as well as circulation-capital whether in the forms of money or commodities are, in principle, included in the money value of total capital advanced, although circulation capital is often disregarded and fixed capital sometimes assumed to be absent in order to simplify the exposition. Competition among capitals tends to equalise the rates of profit in all spheres of production and to establish the *general rate of profit*. The money value of profit calculated according to the general rate of profit is called *average profit*. For example, if the general rate of profit is ten per cent and if \$1,000 represents the money value of total capital advanced per unit of the commodity, the average profit is \$100 per unit of the same commodity. In its most abstract form the rate of profit (r) is represented by the formula $r = {}^{en}/(k + 1)$ where e is the rate of surplus value, k the organic composition of capital, and n the (annual) frequency of turnover of capital. This formula, however, is strictly valid only under very stringent assumptions.

66. *The Production-price of a Commodity*

The capitalist market is said to be in equilibrium, if no use-value is either overproduced or underproduced relative to the social demand. If at the margin of all industries an average profit is earned, i.e., the general rate of profit is realised, all use-values must be produced in exactly the socially necessary (or desired) quantities. In such a state of equilibrium all commodities can be sold at their production-prices. The production-price of a commodity is equal to its cost-price (evaluated in the production-prices of the elements of production) *plus* the average profit.

67. *The Transformation of Values into Production-prices*

All commodities possess values. But values are not immediately observable quantities and can make their presence known only under the market form of production-prices which quantitatively diverge from values in a definite fashion. This fact is referred to as the transformation of values into production-prices. The transformation does not mean an algorithm by which production-prices may be computed once values are somehow determined independently of prices. Since the value of a commodity is commensurate to the amount of socially necessary labour for its production, i.e., the amount of labour embodied in the commodity when the latter is produced in a socially necessary quantity, it is clearly impossible to determine values without simultaneously determining production-prices. On the surface of the capitalist market production-prices and the general rate of profit are determined as if values and the rate of surplus value never existed. Yet when they are determined, production-prices and the general profit-rate in fact bear a definite relation with corresponding values and the rate of surplus value. The transformation of values into production-prices is just another way of saying that the human (or value) relations which constitute capitalist society must appear in terms of the physical (or price) relations between commodities as use-values.

68. *The Law of Average Profit*

In order for capital to produce all use-values that are socially wanted in appropriate quantities, it is necessary that individual units of capital should earn an average profit, regardless of what industry they are invested in, so long as they are invested at the margin of the industry (see 71). This fact is referred to as the law of average profit. In other words, this law provides the law of value with the concrete mode of its operation. Capitalists do not know what the law of value is. But if they simply pursue a maximum profit, the capitalist market automatically tends to an equilibrium in which an average profit can be earned at the margin of all industries. Since in equilibrium all use-values are produced in socially necessary (or desired) quantities, the law of value enforces itself by allocating to the production of each use-value the correct proportion of society's productive labour.

Another way of looking at the same thing is to say that surplus value produced in various industries with different value compositions and different turnover-time of capital is distributed to individual units of capital as average profit.

69. *The Imputed Production-price of Gold*

When gold is the monetary commodity, it possesses no production-price. Since a price is the money form of value, and since no commodity can express its value in its own use-value (see 16), gold cannot possess a meaningful price in terms of itself. The tautology that the gold-price of gold is always equal to one, even though its value changes from time to time, demonstrates this fact. However, if in the production of gold the value composition of capital differs from the social average of the value compositions of capital, what corresponds to the production-price of gold or the imputed production-price of gold, is lower than its value. Suppose, for example, that a commodity-A and gold are both produced with three hours of labour but that A is produced with the social average composition of capital and gold with the composition lower than the average. If, in this case the production-price of A is considered to be $1.00, the imputed production-price of gold is less, perhaps $0.75, per unit. That is to say, gold which actually embodies three hours of labour per unit acts as if it embodied only 2.25 hours of labour in the sphere of circulation.

70. *Market Prices*

The money prices of commodities which fluctuate from day to day reflecting the temporary conditions of demand and supply are called market prices. For example, a sudden change of weather may stimulate demand for some commodities and may cause their market prices to rise abnormally until more of these commodities can be supplied. In view of a delay on the part of the supply of commodities to respond to the ceaselessly changing demand for them, the market prices often diverge from and fluctuate around the production-prices.

71. *The Principle of (the Determination of) Market Values*

In general it cannot be expected that there should be only one technique or method of production for each commodity. In order to produce an identical commodity different firms may operate under different conditions of production so that the same commodity can be produced by one firm with one hour of labour and by another with two hours of labour, etc., even when that commodity is on the whole produced in the socially necessary quantity. In such a case the market value (or social value) of that commodity is determined at the margin of its supply. That is to say, if the demand for this commodity rises by one unit for whatever reason, and if two hours of labour is required to supply that additional unit, the market value is two hours per unit of that commodity. Even if 99 per cent of the currrent output of that commodity has in fact been produced with one hour of labour per unit and only one per cent with two hours per unit, it makes no difference. The *individual value* of the 99 per cent of this commodity (or one hour's worth of labour) does not participate in the determination of its *social value* which, in this case, is equal to the individual value of the mere one per cent of the output (i.e., two hours' worth of labour). Hence if 100 units of this commodity are being produced, the number of hours of labour actually spent to produce these 100 units would be 99 + 2 = 101. But society considers that these 100 units embody 200 hours of labour, giving rise to the *false social value* of 99 = 200 — 101. If the different conditions of production can be roughly classified into superior (more favourable), normal (average), and inferior (less favourable) conditions (although this may not always be possible), it cannot be said *a priori* that the marginal supply must necessarily depend on the inferior method of production. It is quite possible, for example, that mechanised (superior) techniques can more quickly respond to increased demand than handicraft (inferior) techniques. The principle of market values is an integral part of the working of the law of value. With this principle, as reformulated by Uno, it is easy to refute the false charges of inconsistency in the concept of value when an industry uses a multiplicity of techniques, or when there is joint production.

### 72. *Market Values and Market Production-prices*

The principle of the determination of market values just explained (see 71) applies to all forms of commodity production, capitalist or otherwise. Hence that principle is as such independent of the conversion of values into production-prices, although the same principle applies to the determination of production-prices as well. Here the *individual production-price* at the margin of each industry determines the market production-price of the commodity, and the false social value takes the form of *surplus profit* in excess of average profit. The reason why market values must be treated before market production-prices is that the former constitute a more general and abstract category than the latter. The reason why market values cannot be discussed prior to the conversion of values into production-prices is that non-capitalist markets do not normally possess sufficient flexibilities in adjusting supplies to the variation of demands, so that the principle of market values works only imperfectly in non-capitalist markets in which products of labour are not in general products of capital.

### 73. *Surplus Profit*

If a commodity is produced under different conditions of production those capitalists whose individual production-price is lower than the market production-price earn the difference as surplus profits over and above the average profit, whereas those whose individual production-price is above the market production-price earn less than the average profit by the extent of the difference. All capitalists, however, strive to operate with the best of available productive methods or techniques so that individual differences in the conditions of production tend to be eliminated, and surplus profits, positive or negative, also tend to disappear. There are two cases to which special attention must be called. One is the case in which the forces of competition can never eliminate individual differences in the natural conditions of production. In such a case surplus profit will be converted into rent (see 78). The other case is when surplus profit represents an extra surplus value (see 43). Capitalists who introduce an innovative method of production into an industry in which the conventional technique still largely determines the market production-price earn surplus profit commonly known as quasi-rent. Unlike the other types, this type of surplus profit cannot be said simply to reflect a false social value (see 71) but rather the social cost of propagating an improved technique. A false social value is a purely commodity-economic phenomenon and hence does not arise in all societies. But all societies must bear a certain real cost in the process of introducing a new technique because some existing capital which embodies the conventional technique must be scrapped before being fully used up, and also because the new technique often presupposes fixed capital of greater value. For example, the electrification of railways is a costly business to any society, not only because many steam-engine locomotives must be abandoned, but also because considerable investment must be made in installing new electrical equipment. In capitalist society the totality of surplus profits earned by innovating capitalists tends to be proportional to the social cost of switching the method of production.

### 74. *The Law of the Tendency for the Rate of Profit to Fall*

This law states that the general rate of profit tends to decline in the secular process of capital accumulation. The accumulation of capital, however, proceeds in two cyclical phases: an 'extensive' phase in which the organic composition of capital is kept constant and an 'intensive' phase in which it is raised (see 56). In its extensive phase the accumulation of capital eventually leads to a rise of wages and a fall in both the rate of surplus value and the rate of profit. Before this latter rate reaches zero, the state in which an additional investment produces no profit, i.e., the state of an excess of capital (see 58) develops, abruptly terminating this phase of accumulation (see 76). The following phase of accumulation must necessarily be intensive because the excess of capital cannot be overcome unless technical innovations are introduced such as to reduce production-prices below the market prices stagnating rigidly at low levels. Technical innovations mean a more roundabout process of production and hence in general a rise in the organic composition of capital.

It may be thought that the effect of a rise in the organic composition of capital can be easily offset by the counter-effect of a simultaneous rise in the rate of surplus value so that the rate of profit does not necessarily fall. However, the problem must not be discussed in a purely mechanical fashion referring to the abstract formula $r = {}^{e}/(k + 1)$ for the rate of profit (see 65). In particular, it must not be forgotten that the rate of surplus value e itself is a decreasing function of the level of capital accumulation K and an increasing function of the organic composition of capital k. If it is realised that for each pair $k_1$ and $k_2$ ($k_1 < k_2$) there exists a $K_o$ such that $r(K, k_1) > r(K, k_2)$ for $0 < K < K_o$ and $r(K, k_1) < r(K, k_2)$ for $K_o < K$ (for otherwise the $k_1$-technology would never be adopted) and $dK_o/dk > 0$, the rate of profit can be shown to decline asymptotically to zero as capital accumulates, raising the organic composition of capital.

The law of the falling rate of profit does not in any sense imply that capitalism is doomed to collapse of its own accord. On the contrary, this law, which can be regarded as the manifestation of the law of relative surplus population on the surface of the capitalist market, preserves capitalism from self-destruction. Just as the law of population supplements the law of value by guaranteeing the availability of labour-power as a commodity, the law of the falling rate of profit supplements the law of average profit by assuring that the capitalist market can achieve an equilibrium with some positive rate of profit however low.

## 75. *Business Cycles and Economic Crises*

The two phases of capital accumulation: an extensive phase and an intensive phase appear in the capitalist market as *a prosperity phase* and *a depression phase* respectively of business cycles. In a purely capitalist society one whole cycle may be considered to span roughly a decade since typical items of fixed capital such as heavy equipment and plant lasted for about ten years during the liberal stage of capitalism. At the end of a prosperity phase the state of an excess of capital arises which applies a sudden brake to the accelerated expansion of the reproduction-process causing its catastrophic contraction and disruption known as *an economic crisis*. The recurrence of economic crises with the decennial periodicity characterises a purely capitalist society. A crisis is followed by a depression phase in which the market prices of many important commodities sink well below their production-prices and remain rigid. Since the law of value does not work in this environment, capitalism would be doomed if it could not overcome a protracted depression. Resourceful capitalists, however, find this situation an ideal opportunity to introduce technical innovations which reduce their individual production-price below the rigidly stagnant market price, enabling them to earn an extra surplus value. As other capitalists follow suit, the method of production in many industries will be technically improved in the so-called process of *industrial rationalisation*. This undertaking amounts to rendering society's labour-process more roundabout; a consequent rise in the organic composition of capital generates relative surplus population, which will be absorbed as business recovers from the depression and vigorously expands through a new phase of prosperity.

### 76. *The Cause of Capitalist Crises*

In the tradition of Marxian political economy there are three major theories explaining the cause of capitalist crises. According to one, crises occur because of an inter-industry disequilibrium or disproportionality. This explanation is incorrect because the absence of a disproportionality does not exempt capitalism from periodic crises. Another theory claims that crises occur because of under-consumption, i.e., because consumption-goods or means of production capable of producing consumption-goods tend to be overproduced relative to capitalistically limited demand. This theory among other things fails to explain why crises in fact occur when wages rise. Both the disproportionality theory and the under-consumption (or overproduction) theory underestimate the power of the law of value which, working through the price mechanism, tends to correct a disequilibrium or an imbalance in the production of ordinary commodities. The only imbalance that the law of value cannot correct is an imbalance that develops between the whole of capitalistically producible commodities and labour-power, the special commodity which capital cannot directly produce. This imbalance is called the excess of capital. The third theory, which considers this excess of capital to be the fundamental cause of crises, is correct since without an excess of capital no crisis need occur. It is true that a serious disproportionality may remain uncorrected by the time an excess of capital develops and therefore may set off a crisis. It is also true that when a crisis actually breaks out a mass of commodities may remain unsold appearing to be either overproduced or underconsumed. These facts, however, only confirm the superficiality of the disproportionality theory and the under-consumption theory of crises.

To say that the excess of capital causes a crisis, though fundamentally correct, is not sufficient. The excess of capital means that the marginal investment of capital does not earn a positive profit; it does not mean that the *rate* of profit becomes zero or negative. Thus if a capitalist has so far advanced $1000 on which he earns a profit of $100, he faces an excess of capital when he increases his capital to $1100 with no increase in profit. In this case the rate of profit falls from 10 per cent to about 9 per cent, which is still positive. This fact alone cannot explain why he should necessarily cease to accumulate capital at this point. In the theory of rent and interest, however, it will be explained that the capitalist generally cannot retain all of the $100 that he earns as industrial profit in the first instance. For example, he may be contractually obligated to pay $10 to his landowner. Moreover, he may have borrowed $500 in his original advance of $1000 at the rate of interest of 15 per cent. In that case, he is only left with $15 after paying the interest of $75 as well as the rent of $10. Suppose now that of his new investment of $100 are borrowed at the interest rate of 20 per cent. Then the interest charge increases by $15 to the total of $90. In this case it is clear that nothing remains to the capitalist after the interest and the rent are both paid. The excess of capital together with a rise in the rate of interest can explain an abrupt halt to the accumulation of capital. A full account of capitalist crises must, therefore, take into consideration the condition of the money market (see 87).

## 77. *The Private Ownership of Land, Landed Property*

The production of use-values presupposes directly or indirectly an exploitation of natural powers which, if they exist in limited quantity and hence can be privately appropriated and monopolised, are generically called *land*. Being a means of production which labour and capital cannot reproduce, land must be treated separately from other means of production which are purchasable as commodities and are convertible into constant capital. Land possesses a permanent and indestructible use-value but no value (although a fictitious price can be attributed to it); for it is not a commodity in the ordinary sense of the term (see 83). In order to make use of this special means of production in a manner consistent with its commodity-economic principles, capital requires a peculiarly capitalistic form of private land-ownership.

Historically, capital arises from merchant activities which are not directly related to land; it can subsume the production-process as industrial capital when labour-power is converted into a commodity. The commoditisation of labour-power must, however, presuppose the severance of the feudal tie which binds direct producers (peasants) to their land. The workers-versus-capitalists production-relation is, therefore, formed quite independently of land to which capitalists do not have free access. Landowners, on their part, are now left with land unpopulated by direct producers and must find a new way of exploiting their property by establishing a commodity-economic relation with the production-process of capital. The capitalistic form of private land-ownership must satisfy the interest of both the capitalist and the land-owning class in a manner consistent with the working of the commodity-economy. The three forms of capitalistic rent establish the required relation between the world of capital and the outside world of landed property, the peculiar form of which justifies its continued existence under capitalism.

The dissociation of direct workers from their land through the process of primitive accumulation redefines the private ownership of land under capitalism and removes all ambiguities from the commodity-economic conception of private property. Workers own nothing but labour-power, land-owners nothing but land; hence capitalists own all reproducible commodities prior to sale. This clarity would be absent if direct workers had immediate access to land as means of production commonly or publicly owned. The so-called capitalist laws of appropriation (*Capital*, I, p. 579) would not have meaning if the system of private property remained vague.

### 78. *Differential Rent I or the First Form of Differential Rent*

Suppose that the socially necessary quantity of wheat $W = W_1 + W_2 + W_3$ is produced on lands, 1, 2, 3 such that $W_i = f_i T_i$ ($i = 1, 2, 3$), where $f_i$ ($f_1 > f_2 > f_3$) are fertilities per acre and $T_i$ are the areas actually cultivated. It can be supposed that capitalists operating on the least fertile land $T_3$ are earning an average profit. If their production-price per unit of wheat is p, capitalists operating on better lands $T_1$ and $T_2$ respectively earn surplus profits of $R_1 = pT_1 (f_1 - f_3)$ and $R_2 = pT_2 (f_2 - f_3)$. These surplus profits which are due to a natural cause (the differential fertility of lands) quite outside the control of capital will be converted into differential rent I accruing to the owners of lands $T_1$ and $T_2$. Capitalists therefore earn only the average profit wherever they produce.

In this form of rent, capital can accept the existence of private land-ownership in the least objectionable manner since land-ownership merely helps capital to enforce its law of average profit. Even in this case, however, rent does not arise from the natural inequalities of land as such but from the fact that capital has no free access to land. It is the private ownership of land that converts surplus profits into rent. Thus, if the social demand for wheat increases by $\Delta W$, there should be no general presumption that only $T_3$ can now expand, there being no $T_1$ and $T_2$ left to cultivate, or that even more inferior land $T_4$ must somehow be brought into cultivation, the land of grade $T_3$ being no longer available. The Ricardian assumption of the *descending order* does not in general apply because $\Delta W$ may now be produced on $\Delta T_1$, $\Delta T_2$, $\Delta T_3$ or $\Delta T_4$ depending on how the class of land-owners respond to the situation.

### 79. *Differential Rent II or the Second Form of Differential Rent*

When the demand for wheat or any such land-intensive commodity increases, the accumulation of capital does not always mean a more *extensive* cultivation of land. Often areas of land already rented are more *intensively* cultivated for greater output. Suppose that two capitalist-farmers have rented separate lands of identical size and quality, and that they both have invested x dollars already when the market price of wheat rises. If the first capitalist's tenancy agreement with his landlord lasts for several years, the capitalist may invest additional y dollars so as to raise the output. But if the second capitalist's tenancy contract expires soon, it may not be worthwhile for him to invest more than x in order to adapt land to the conditions of more intensive cultivation. (For example he may not cut trees or draw water or improve the soil since the cost of doing so may not be recovered within a short period of time.) Suppose the productivity of the original x dollars is $a_x$ and the productivity of the additional y dollars that the first farmer now invests is $a_y$. If $a_x > a_y$, then it must be supposed that the first farmer earns the average profit even in his investment of y dollars producing $a_y y$ bushels of wheat which he sells for $p_y$ per bushel. Therefore, both the first and the second farmer should be earning on their investment of x dollars the surplus profit of $p_y (a_x—a_y)x$, which must eventually be converted into rent. If $a_x < a_y$, then it must be supposed that the two farmers must be earning an average profit on the investment of x dollars producing wheat of $a_x x$ bushels, selling it for $p_x$ per bushel. Consequently the first farmer earns a surplus profit of $p_x (a_y—a_x)x$ which must eventually be converted into rent. The present illustration clearly shows that the so-called *law of diminishing returns* is irrelevant, since there is no general presumption that $a_x > a_y$ should necessarily be the case.

This second form of rent is more objectionable to capital than the first form. All surplus profits arising from the more intensive cultivation of land is converted into rent eventually, i.e., when the tenancy contract is renewed. Hence for the period covered by the existing contract capitalists can pocket whatever surplus profits they may earn over and above the contractual rent. This fact either encourages or discourages capitalist accumulation in land-intensive industries. In general, long-run investments are often discouraged because capitalists normally cannot enjoy the whole benefit of such investments.

## 80. *Absolute Rent*

In a purely capitalist society free land does not exist; for if it existed direct producers could always become independent peasants whose labour-power would not be available to capital as a commodity. The exclusion of the direct producers from land is the fundamental premise upon which capitalism rests. If every land is privately owned, however, landed property can exact rent from capital even for the least productive investment on the least fertile land. An absolute rent therefore arises which, unlike differential rents, has nothing to do with surplus profits. This form of rent is the most disagreeable one to capital inasmuch as it connotes direct interference in, and obstruction of, the production-process of capital by landed property; yet capital must tolerate it in order to be consistent with the capitalistic principle of the separation of the direct producers from land.

Exactly how much absolute rent is in fact charged cannot be theoretically determined, but the maximum amount that capitalism can tolerate is determined by the difference between the value and the production-price of land-intensive commodities. If it is supposed that the value and the production-price of commodities produced under a socially average composition of capital are equal, the value of land-intensively produced commodities is in general greater than their production-price. Since the labour-process in primary industries is by definition less roundabout than in secondary industries, the value composition of capital tends to be lower in land-intensive activities. Capital can cede the difference between the value and the production-price in these activities (where the production-price must be calculated exclusive of these activities) without violating the law of value. Suppose that the value composition of land-intensive commodities is 100c + 100v + 100s and that the value product of society exclusive of the land-intensive commodities is composed as 3000c + 1000v + 1000s. Then the rate of profit is 25 per cent in industries where land does not directly contribute to production, and the production-price of the land-intensive commodities may accordingly be regarded as 1.25 × (100c + 100v) = 250 which is smaller than their value of 300. If the difference 50 = 300 — 250 is ceded to landed property, capital can still allocate society's productive labour efficiently to all branches of production, although the 50 value units are no longer distributed to capital as profit. If more than 50 value units were expropriated from capital, the profit-rate in land-intensive industries would fall below 25 per cent and capital would move out of these industries. Capital would not return to these industries unless the market price of land-intensive commodities rises above their value, in which case landlords would collect a monopoly rent on top of the absolute rent of 50 value units.

### 81. *Monopoly Rent*

If the market price of a land-intensive commodity is raised beyond its value, the difference becomes a monopoly rent. For example, the owner of a vineyard from which a rare quality wine is produced may be able to charge such a rent. Since the wine is not producible elsewhere, its market price may be held permanently above its production-price or even above its value. The collection of a monopoly rent presupposes a monopoly power of the landlord who can dictate the market price of the commodity produced on his land so long as the commodity is in demand. This kind of situation, however, must be considered exceptional since it conflicts with the working of free competition, it must be excluded from the pure theory of capitalism and must be studied in the context of the stages-theory.

### 82. *The Nationalisation of Land*

As more and more absolute rent is collected, the market price of land-intensive commodities gravitates towards their value rather than to their production-price. Since food is land-intensively produced and constitutes a significant part of the basket of wage-goods, the reproduction cost of labour-power reflects the burden of absolute rent which all capitalists must bear. It is perhaps for this reason that the radical bourgeoisie (represented, for instance, by James Mill, Heinrich Gossen, and Léon Walras) called for a nationalisation of land, going a step further than the mere proposal for the single tax on land. However, capitalism cannot abolish the private ownership of land. Even if the state could collect differential rents adequately, it would be unable to determine the correct amount of absolute rent that it should charge the capitalist farmers. If the state charges less than the difference between the value and the production-price of land-intensive commodities, the tenants would sublease the land to collect the remainder of absolute rent becoming *de facto* private owners of the land themselves. If the state charges more than the difference, it will collect a monopoly rent and will obstruct the working of the law of value. In either case the radical bourgeoisie would remain dissatisfied. The private ownership of land is a 'necessary evil' which capitalist society cannot simply dispense with as purely parasitic.

### 83. *The Commoditisation of Land*

Land which is not a product of labour is not a commodity in the ordinary sense of the word. But even prior to the establishment of capitalism, whenever the feudal restrictions could be circumvented, merchant capital and money-lending capital were given a chance to purchase land. The ownership of land, however, has no capitalistic rationality; that is to say, the purchase of land cannot be capitalistically motivated unless it becomes an instrument of chrematistic. In order to convert land into an instrument of chrematistic, however, the form of capital must itself develop into an automatically interest-bearing force (see 97). When this is accomplished, purely capitalist society can commoditise land by imputing to it a fictitious price equal to the capitalised money value of its rental revenues. The actual trading of lands as commodities must, however, remain an ideal rather than the general practice in purely capitalist society; for the fusion of capital and landed property would adulterate the integrity of such a society.

### 84. *Commercial Credit or Trade Credit*

If an industrial capitalist sells his commodity to another on credit, i.e., for a promise to pay cash with some delay, the former capitalist is said to have extended a trade credit or a commercial credit to the latter capitalist. For example, a cotton spinner may sell his yarn to a weaver of cotton fabrics for the promise to pay $100 in three months' time. Such a credit enables the weaver (who does not possess sufficient money-capital to buy the yarn) to produce surplus value which he would otherwise not have been able to produce. In this example the cotton spinner on his part is supposed to possess enough money-capital to continue his own production on a desired scale without having to insist upon the immediate payment of, say, \$98 for the sale of the yarn. That is to say, this \$98, if he did receive it now, would have become idle funds for him. This trade credit, therefore, implies that the idle funds which the spinning capitalist could not himself use have been converted into the money-capital of the weaving capitalist and have been used for the production of surplus value. Capitalist society can in this manner arrange to activate 'idle money' for the purpose of an increased surplus-value production.

The extent to which capitalist society can by way of trade credits make use of idle money arising from the circulation-processes of individual capitals is, however, greatly limited. If in the present example the cotton spinner finds himself short of cash in less than three months, he may ask for a credit purchase only from someone who sells a commodity to him, e.g., a producer of raw cotton. If the latter happens to be in a position to extend a credit, he may take the bill of exchange which the cotton spinner already holds against the weaver. A trade bill can, therefore, circulate from the purchaser of a commodity to its seller, reflecting the fact that only the seller of a specific commodity can extend a specific credit to the purchaser. The capitalist-social utilisation of idle funds would be far more effective if someone who is not directly related with the cotton business, e.g., a shoemaker or a silversmith, could make his idle funds available to the spinner. This is accomplished by the banks.

## 85. *Bank-Credit*

Banks pool the idle funds of all industrial capitalists in the form of deposits and extend loans to whoever needs cash (provided of course that he is creditworthy) by discounting trade bills that he holds. In this case a cotton spinner may sell his yarn to a weaver of cotton fabric for \$100 payable in three months' time without himself having any idle funds potential or actual (compare with the example in 84) because the spinner may immediately have his bank discount the bill of exchange for, say, \$98. The bank can discount the bill if, for example, a shoemaker has just deposited his idle money of \$98 for three months. Through the intermediation of the bank, in other words, the shoemaker who does not sell anything at all to the spinner or the weaver in effect loans money to the weaver *via* the spinner to facilitate their transaction. By making use of the idle funds of the shoemaker through the bank, the cotton-spinner can sell his yarn to the weaver, a commodity which would otherwise not have been sold. Thus even apart from the issuing of banknotes (see 89), the discounting operation of the bank can already generalise commercial credits a great deal, thereby promoting the production of surplus value in capitalist society. Redundant cash anywhere in society may now be channelled through banks to where it can be most effectively utilised. Bank credits, in other words, expedite the circulation of commodities and reduce the proportion of unproductive circulation-capital which capitalist society must hold at the expense of real production.

86. *Loan-Capital M—M′*

In capitalist society money is not simply 'hoarded' for the love of it. The circulation-processes of individual capitals regularly generate idle funds, i.e., money which its owner cannot immediately spend. If idle funds of one capitalist are loaned to another capitalist for a definite period of time so that the latter capitalist can use them as supplementary money-capital with which to produce more surplus value, then the funds are converted into loan-capital. Just as the form of money-lending capital implicitly presupposed a merchant operation of others: M . . . [M—C—M′] . . . M′, the same form of loan-capital implicitly presupposes industrial production by others: M . . . [M—C . . . P . . . C′—M′] . . . M′. However, there is no loan capitalist (or money-capitalist, as Marx calls him) other than the industrial capitalist himself; indeed every industrial capitalist is a loan capitalist as soon as he has idle money which he cannot afford to keep to himself wastefully. Thus loan-capital differs from money-lending capital which may presuppose a professional (i.e., a specialised) money-lender other than the merchant. Loan-capital which is a subsidiary operation of industrial capital must, however, not be confused with interest-bearing capital although this latter is also represented by the form M . . . M′ (see 97).

87. *Bank-Capital*

Commercial banks are financial intermediaries; they do not lend their own money but money deposited with them by industrial capitalists. Thus, for example, a shoemaker may deposit \$98 for three months with his bank. Using this money the bank may discount the bill that a cotton-spinner holds requiring the weaver of cotton fabrics to pay \$100 in three months' time. After the three months the bank receives \$100 from the weaver and perhaps pay the interest of \$1 when the shoemaker withdraws his \$98. There is still the interest differential of \$1 left as the profit of the bank. If the general rate of profit is five per cent for three months, the bank must have tied up \$20 as capital for this operation. The circulation-form of bank-capital which is \$20—\$21 in this example must not be confused with the circulation-forms of loan-capital \$98—\$99 or \$98—\$100. The form \$20—\$21 earns the average profit of five per cent in three months; the form \$98—\$99 earns the depositor's interest of about 1.02 per cent, and the form \$98—\$100 earns the lending rate of about 2.04 per cent in the same period. In maximising its profit the bank here operates as a merchant capital trying to buy the special commodity called '\$98 for three months' as cheaply as possible and selling it as dearly as possible. This special commodity called funds (idle or loanable), however, will have two different prices even under perfect competition because there are two classes of buyers, the banks and the ultimate borrowers to whom the use-value of funds is different. The ultimate borrowers buy funds so as to produce more surplus value; the banks buy funds to profit from interest-differentials. They are, in other words, like the final consumers and the wholesalers of ordinary commodities.

88. *The Money Market; The Conversion of Funds into Commodities*

When a large number of profit-seeking commercial banks operate in capitalist society collecting idle funds of all sorts as cheaply as possible and lending them out as dearly as possible, the money market is formed in which funds are traded as commodities. That is to say, any industrial capitalist who does not use $98 for three months as his own capital can deposit them with a bank and is paid the deposit interest of 1.02 per cent. And any industrial capitalist who needs $98 to supplement his money-capital for three months (provided that he is creditworthy) can expect to borrow them from his bank by having it discount his bills at the rate of 2.04 per cent (see the example in 87). In other words the interest (or discount) rate becomes the price for the use of funds by industrial capitalists, and the depositor's rate the price for the profitable management of funds by the banks. A trade credit which one industrial capitalist extends to another on a personal basis only implicitly converts funds into commodities, since there cannot as yet be a general market for these commodities whose prices are systematically formed. Only with the system of bank credits does the money market develop, in which the rates of interest or the prices of funds are explicitly determined.

89. *The Issuing of Banknotes*

In 85 bank credit was explained in its simplest form without the typical banking operation of issuing notes or creating demand deposits. In other words, commercial banks develop from what is nowadays called non-bank financial intermediaries and remain so apart from their other characteristic function of issuing banknotes or creating demand deposits subject to chequing. Banks introduce this latter function for its extreme profitability on top of their original function of financial intermediation. Thus if a shoemaker deposits $98 for three months in hard cash (gold), the bank does not use this hard cash to discount the spinner's bill, but instead either creates a demand deposit of the same amount which the spinner can withdraw at any time or issues banknotes of that amount and places them at the disposal of the spinner. Although the notes are convertible on demand into gold, it is normally not the case that they must all be immediately so converted. Hence it is not necessary for the bank to maintain the 100 per cent cash reserve when discounting trade bills. If the bank knows by experience that only ten per cent of its total notes issued are at any time likely to be presented for conversion into gold, it can safely issue banknotes of $980 for the cash reserve of $98. In other words, once the shoemaker has deposited $98 in gold, and if after three months he does not withdraw it in hard cash, the bank is free to discount trade bills of almost ten times that amount provided that in an emergency a way is open to replenish the necessary cash to meet the obligation. Thus the bank does not merely intermediate credits but creates further credits as well, its banknotes now circulating as *credit money* in addition to gold coins and gold symbols (see 19).

## 90. *The Formation of the Central Bank*

The issuing of banknotes is a very profitable operation to any bank; by discounting more trade bills than otherwise possible and by paying interest only on term deposits, the bank profits enormously from the interest differential. However, as the ratio of cash reserve to note issues is depressed perilously close to the safety limit, emergencies can arise when banks are caught short of cash. In such a case a way must be open for them to rediscount some of the trade bills that they hold as assets so as to obtain cash to honour their own notes which are just as much promissory notes as trade bills. A bigger bank which can rediscount bills for ordinary banks must therefore be present. But the bigger bank, which may be a local leading institution, may also fall into a similar plight, in which case an even bigger bank is called for. Thus in the end a central bank, or the bank of all banks, must come into existence.

In a purely capitalist society the central bank is the largest of all banks which can act as the lender of last resort rather than the bank which handles the government finances. But the quasi-public nature of the central bank must not be overlooked. This is evident in the tendency for the central bank to monopolise the power of issuing banknotes. Since the central bank issues its own notes to rediscount bills, ordinary banks can hold central-bank notes rather than gold as their cash reserve against demand deposits. This practice simplifies the operation of ordinary banks without diminishing its profitability. Thus in capitalist society notes issued by individual banks tend to be displaced by central-bank notes.

Even when the issuing power is monopolised by the central bank, the latter cannot issue convertible notes beyond a certain multiple of its gold reserve. But gold in the vault of the central bank is no more than a pool of idle money adjunct to the reproduction-process of capital. Thus if the reproduction-process of capital demands credit money faster than it physically adds to the reservoir of idle gold, the increasing reluctance of the central bank to issue further notes will be reflected in a sharp rise of the bank rate.

## 91. *Commercial Capital*

Commercial capital takes over the process of selling commodities C′—M′ from industrial capital for the purpose of standardising and shortening the period of time required for this process. An industrial capitalist who regularly produces, say, 1000 rifles of a special design may take a long time to sell them to the final consumers. He may also take either a longer or a shorter time in doing so than another industrial capitalist who produces exactly the same output, but the difference may not be accounted for by technical reasons. A chain of firearm stores can perhaps sell ten times as many rifles in a relatively shorter time because of its established network of distribution. Such stores can handle closely allied products as well such as shotguns, revolvers, bullets, etc., by purchasing them from many different manufacturers and selling efficiently in an organised, or at least carefully studied, market. Commercial capital, in other words, sells commodities faster than industrial capital thereby saving society circulation-capital which must be held unproductively. Of course, commerce is not a directly productive activity, but it contributes to the efficiency of capitalist production by enabling the same magnitude of surplus value to be produced with a lesser advance of circulation-capital. For this reason an average profit must accrue to commercial capital. If it is paid less, there will not be enough commercial investment to relieve industrial capital of the selling operation so that society would have to hold more unproductive circulation-capital; if paid more than an average profit, however, too much commercial capital will be invested at the expense of production so that some goods would fail to be produced in socially necessary quantities. Capitalist society, therefore, has no choice but to pay an average profit to commercial capital in order to let it shorten the period of selling commodities as far as is technically feasible, and maximise the efficiency of surplus value production.

92. *The Conversion of Circulation-costs into Capital*

Commercial capital does not produce surplus value directly; it buys commodities at less than their production-price and sells them at their production-price, profiting from the difference. Commercial capital mainly invests in commodities for resale, but it also 'advances' pure circulation-costs which include all resources human and non-human for the buying and selling of commodities. Industrial capital, if it sold its own commodity, would have deducted such costs from surplus value. For example, it would have paid the salesman a commission after he had sold the commodity. This, in effect, would amount to the sharing of the surplus value between the industrial producer and the salesman. But since the salesman does not possess any capital of his own, there could not in this case be a capitalistically rational division of the surplus value between the two parties. If the salesman becomes a commercial capitalist himself, he buys the commodity from its producer at a price less than the production-price and sells to the final consumer (different stages of commerce such as the stages of wholesale and retail trade are not considered here) at the production-price. In this case, even if the commercial capitalist also hires a salesman-worker, they cannot share the commercial profit in the same way as the industrial capitalist and his commissioned salesman shared the surplus value; for why could this latter salesman become a commercial capitalist and the salesman hired by the commercial capitalist could not? Once commercial capital is introduced, it must be supposed that whoever has funds to buy commodities at less than production-prices becomes a commercial capitalist, and that a salesman who does not possess such funds has no share in surplus value. The conversion of surplus value into profit, in other words, requires that the salesman-worker whom the commercial capitalist hires can no longer receive a commission but wages commensurate to the value of his labour-power. The same consideration requires that commercial capital must 'advance' all pure circulation-costs as capital unable to deduct any part of these costs from its share of surplus value which now takes the form of commercial profit. The pure circulation-costs thus converted into capital can, of course, be saved considerably by the efficiency of specialised commerce.

93. *The Cause of Commercial Profit*

Suppose that two industrial capitalists invest 20c + 5v each and equally produce 5s as surplus value. But capitalist-A who spends a longer time to sell his commodity advances an additional 30z in circulation-capital, and capitalist-B who spends a shorter time to sell his commodity advances only 20z in the same form. Then A's rate of profit is nine per cent and B's 11 per cent approximately. If the difference in the lengths of the circulation-period is caused by non-technical reasons, it is not possible to distribute the total surplus value of 10s into 5.5p and 4.5p to let each capitalist earn the general rate of profit of 10 per cent, nor is it possible to rely upon the law of market value to determine which capitalist operates at the margin earning no surplus profit. In fact, so long as the magnitude of circulation-capital held by different capitalists remains arbitrary, it is not certain how much of the produced surplus value should accrue to the holder of circulation-capital. A capitalist who holds an unnecessarily large stock of circulation-capital only because he is an incompetent seller must, of course, not be rewarded in the same way as other more competent capitalists. This difficulty is overcome when a commercial capitalist buys the products of A and B and sells them together in a period of time shorter than the average of the selling periods of A and B. In that case, for example, the circulation-capital that the commercial capitalist advances may be 40z instead of 50z (30z by A and 20z by B), so that in society as a whole productive capital of 40c + 10v and circulation-capital of 40z produce and realise 10s in the shortest possible time. The rate of profit can then be determined unambiguously as 11.1 per cent (10/90 = 0.111). Since the circulation-capital of 40z is here 'socially necessary,' it should earn the average profit of 4.44p quite as definitely as the productive capital of 50 (c

+ v) should earn the average profit of 5.56p sharing the social surplus value of 10s. In this case, the commercial capitalist buys from the two industrial capitalists their output for the price of 40c + 10v + 5.56p = 55.56 and sells it for the production price of 40c + 10v + 10s = 60, earning the difference 4.44p as commercial profit of 11.1 per cent of the circulation-capital of 40z.

The saving of circulation-capital from the original 50z (when the industrial capitalists A and B did their own selling) to 40z (when the commercial capitalist intervenes) releases funds of 10. If these funds are converted into productive capital through the money market, so that A and B together now produce 48c + 12v + 12s, an additional surplus value of 2s can be produced. But this is in consequence of the conversion of the idle funds of 10 into loan-capital, and must not be considered to explain the cause of commercial profit.

### 94. *Commercial Profit and Pure Circulation-costs*

In the example of 93, when the two industrial capitalists sold their own commodities, it may be supposed that they had to deduct pure circulation-costs of 2d from the surplus value 10s. When the commercial capitalist takes over the entire selling-process, the pure circulation-costs must be converted into commercial capital (see 92). At the same time the magnitude of such costs can be reduced by the efficiency of specialised commerce. Thus if the commercial capitalist needs only 1d instead of 2d for the pure circulation-costs, the total advance of capital is now 91 instead of 90 (50 industrial capital and 40 + 1 commercial capital). This reduces the rate of profit from 11.1 per cent to 11.0 per cent, so that the division of the surplus value of 10s is now into 5.5p for the industrial capitalist and 4.5p for the commercial capitalist. Consequently the latter buys the commodities at 55.5 and sells them for the production-price of 60 realising the commercial profit of 4.5p which is 11.0 per cent of 41 (z + d).

One must not wonder how commercial capital of 41 can purchase the commodities for resale at the price of 55.5. A commercial capitalist is always selling and buying; hence it is only necessary to suppose that he synchronises the purchase of 55.5 with the sale of 14.5 so that the capital of 41 is permanently tied up with the form of commodities in the warehouse or of unrecovered pure circulation-costs.

### 95. *Commercial Capital and Merchant Capital*

Commercial capital must not be confused with merchant capital although both share the same formula M—C—M′. Merchant capital is a general form of capital which can contain industrial capital M—C . . . P . . . C′—M′ as a special case. Commercial capital issues from the C′—M′ phase of industrial capital as a further specialised activity. Both merchant capital and commercial capital profit from buying commodities cheap and selling them dear without directly involving the process of production. But merchant capital buys cheap and sells dear by taking advantage of market imperfections, realising *profits upon alienation* which have nothing to do with the production of surplus value. Commercial capital sells commodities at their production-prices while buying them cheaper in such a way as to earn an average profit which is a share of society's surplus value. Despite this fundamental difference, however, commercial capital may be considered a rehabilitation of merchant capital in the world of industrial capital. Commercial capital and bank-capital alone earn average profits without directly producing surplus value. Whereas bank-capital at least promotes indirectly an additional production of surplus value by intermediating the conversion of funds into capital, commercial capital by itself does not even indirectly contribute to the production of surplus value, i.e., by making more capital available for the production of surplus value (see 93). It rather makes the same quantity of surplus value producible with a lesser advance of capital. In other words, the activity of commercial capital occurs altogether outside the production of surplus value. Precisely for this reason commercial capital represents the capitalist *par excellence* whose activity seems to imply no more than just 'buying cheap and selling dear.' All capitalists are originally merchants rather than producers; they are arbitrageurs and speculators who have been lured into the production of commodities. In their view, therefore, it is perfectly proper and befitting to make money only by circulating commodities without being involved in the ugly and noisy production-process. Freedom from industrial technology appears to promise more room for personal discretion and imagination to commercial capital than to others. Indeed commercial capitalists are the ones most prone to speculative over-trading. Industrial capitalists too speculate and overproduce but they do not gamble on the market as freely and as habitually as commercial capitalists. This propensity to gamble is explained by the form of capital M—C—M′ in which the use-value of C is purely instrumental. This form is closely akin to that of loan-capital M . . . M′ which does not even involve a commodity and therefore earns only interest. The comparison of the two forms explains the source of entrepreneurial profit.

96. *Entrepreneurial Profit*

The excess of commercial profit over interest apparently originates from the entrepreneurial activity of commercial capital; this fact gives rise to the concept of entrepreneurial profit. A producer who has a commodity worth \$100 can do two things: either to sell it himself to a customer, or to sell it to a commercial capitalist. In the first case he may sell it on credit for three months and have the bill discounted by the bank for \$99. (It is assumed that there is virtually no credit risk.) In the second case he may sell the commodity for \$99 cash. It is assumed that the producer is indifferent to either alternative. Suppose that the commercial capitalist can sell the commodity for \$100 in two months, and that the bill payable in three months can be rediscounted after two months for \$99.80. The difference of \$0.20 can then be accounted for as the entrepreneurial profit due to the commercial capitalist for his strictly 'capitalist' effort of selling the commodity. If the funds of \$99 were used as loan-capital for two months the interest of \$0.80 would have been earned in any case, but they have been tied up as commercial capital to earn \$1.00 instead in the same period of time. Now commercial profit is an average profit; so if the average profit is divided into an interest and an entrepreneurial profit, this division applies to industrial profit as well. Thus in general every profit can now be regarded as consisting of an interest component which would have been earned in the money market without any capitalist activity at all, and the remainder which specifically rewards 'capitalists' labour' or 'risk-taking entrepreneurship' whether in industry, in commerce, or in banking.

97. *Interest-bearing Capital, Capital as an Automatically Interest-bearing Force*

The division of average profit into interest and entrepreneurial profit in effect amounts to the assertion that capitalists play two distinct roles: as risk-bearing entrepreneurs, capitalists receive special wages called entrepreneurial profit, and as the owners of capital, capitalists receive an interest just as landowners receive a rent. In this view capital is converted into an asset, which yields for some mysterious reason a series of periodic revenues. Capital viewed as an asset is called interest-bearing capital, meaning capital which has an automatically interest-bearing power. This is the most reified or, as Marx calls it, 'externalised' and 'fetishistic' form of capital, the form in which 'the relations of capital,' i.e., the social relations that the activity of capital implies are most completely effaced. An asset is a thing of 'value' A such that, given the rate of interest i, its owner is automatically entitled to a revenue-flow of $R = iA$. If the regular flow of periodic revenues R is known, it can always be 'capitalised' to determine a 'fictitious' value of the asset as $A = R/i$. Thus if $R = 50$ is an annual rent and $i = 0.02$, then $A = 2500$ is the price of the land yielding the annual rent of 50. The land which is not a product of labour has no value, but the fictitious value of 2500 can be imputed to it. With the imputation of value land becomes a commodity. Capital too, as an interest-bearing force, is regarded as an asset and becomes a fictitious capital whose value may be calculated by the capitalisation of a dividend (profit minus retained earning). But the development of fictitious capital or the conversion of capital into a commodity is not as simple as the conversion of land into a commodity.

98. *The Conversion of Capital into a Commodity, Fictitious Capital*

When land is converted into a commodity it obtains a fictitious value, but land is itself a thing or a 'real asset.' But capital is not a thing but a chrematistic operation which is reified and becomes a commodity only by taking the form of a 'financial asset' distinct from the real operation of capital itself. Capital in this form of a financial asset is called fictitious capital. For example, if a capitalist advances \$50 in the chrematistic operation, he recovers this amount of money together with a profit when the operation completes its turnover. But an investor of \$50 in an equity of an incorporated firm never recovers the money unless the firm is dissolved. If the rate of profit (r) is 20 per cent, the retained earning (E) is \$4, and the rate of interest (i) is three per cent, the original investment (Q) of \$50 becomes a fictitious capital $K = (rQ - E)/i$ of \$200, and the equity of face value \$50 can be bought and sold at the price of about \$200. The original investor thus earns the founder's profit (*Gründergewinn*) of \$150 = \$200 — \$50. The market value of the equity, of course, constantly fluctuates reflecting all changes in the variables i, E, and r. The conversion of capital into a commodity in reality requires the formation of joint-stock companies or corporations whose equities should be traded in the capital market.

### 99. *The Capital Market, Joint-stock Companies and Finance-Capital*

The form of interest-bearing capital theoretically implies the possibility of the conversion of capital itself into a commodity. Interest-bearing capital must not be confused with loan-capital. Loan-capital implies only the conversion of funds or idle money into capital; it is not yet a fully fetishistic form of capital because the price of funds or the rate of interest is clearly formed in the money market by the demand and supply of loanable funds. The rate of interest that loan-capital determines cannot be explained without reference to the production of surplus value. Interest-bearing capital, on the other hand, does not determine the rate of interest which capitalises the flow of periodic incomes. That rate must come from outside of the capital market in which interest-bearing capital is supposed to be traded. In the determination of the value of fictitious capital the production of surplus value appears to be totally irrelevant. It is in this sense that interest-bearing capital is the most 'external' and 'fetishistic' form of capital.

But the concealment of the substantive ground upon which it stands is in the nature of capital as a commodity-economic form of circulation. For capital to return to its circulatory origin (commodity) oblivious of its productive foundation (surplus value production) means that it has completed its own dialectic. In other words, the form of interest-bearing capital is the complete self-rationalisation or the absolute *idea* (to use Hegel's vocabulary) of capital; capital cannot explain itself any further in theoretical terms, i.e., in the context of a purely capitalist society. It is important to emphasise that only the form, not the content, of interest-bearing capital can be explained in a purely capitalist society; that is to say, the commoditisation of capital is, in this context, no more than a possibility. This is apparent from the fact that the development of the capital market in its full scope belongs to the stage of imperialism in which the working of the laws of capitalism is in one way or another obstructed by the historical conditions. Indeed the development of the capital market requires the class of investors known as *rentiers* who do not belong to a purely capitalist society. Capitalists may earn interest by converting their idle funds into loan-capital, but this is only supplementary to their main capital operation of pursuing average profits; no capitalist is content with earning only an interest. Rentiers who merely invest in equities or other financial assets but who do not themselves operate the chrematistic of capital are not capitalists, nor are they wage-earners nor landlords. Their concrete mode of existence cannot be explained by the logic of pure capitalism alone but by that *and* the historical evolution of the joint-stock company system in the epoch of finance-capital. Finance-capital, the dominant form of capital in the stage of imperialism, has its theoretical rationality in the form of interest-bearing capital, but only as finance-capital does interest-bearing capital become an historical reality. It should be remembered that merchant capital and industrial capital as the dominant forms of capital in the epochs of mercantilism and liberalism cannot be explained in their historical concreteness by the theoretical forms of merchant and industrial capital alone. The same consideration applies to finance-capital. It cannot be understood without the form of interest-bearing capital, though that alone is not sufficient to explain its historical development.

100. *The Trinity Formula of Bourgeois Society, the Class Structure of a Purely Capitalist Society*

Political economy demonstrates that a purely capitalist society consists of three classes, the classes of capitalists, wage-earners, and land-owners. These classes have different roles to play in the productive organisation of capitalist society, despite its open espousal of 'freedom and equality', consistent with the working of the commodity-economy. Even though the classless harmony of interests in the freely competitive market is the ideological aspiration of capitalism, the formation and perpetuation of the three classes with conflicting interests cannot be avoided in the productive organisation of capitalist society. The apparent contradiction between the two aspects of capitalism demands scientific political economy to clarify their mutual relation exposing the totality of the working of capitalist society. This task has not been accomplished by *vulgar economy* whose observation of capitalist society does not go any deeper than the superficial association of 'interest, wages, and rent' with 'capital, labour, and land' or what Marx calls the *trinity formula of bourgeois society*. The sources of incomes are here attributed to things (or the factors of production) rather than to social classes. *Classical political economy* had much more acute awareness of the class relations that constitute capitalist society. But it also failed to surmount the trinity formula in which it only substituted 'profit' for 'interest.' The limitation of the classical political economy is epitomised by its association of 'profit' with 'capital' which it took to mean the material instruments of production rather than the commodity-economic operation of chrematistic. Only Marx's political economy broke through the trinity formula and saw the inner reality of the capitalist mode of production in which wages are nothing other than the price of labour-power. From this insight follows the corollary that rent and profit, which are the distributive forms of surplus value, cannot be treated on the same level as wages. Labour-power becomes a commodity under a very specific social arrangement; rent is not the fruit of land but the consequence of private landed property. Capitalists share, in the form of profit, surplus value produced in the chrematistic operation of capital. Only when the material constitution of capitalist society is thus totally comprehended, is it possible at all to appraise the real economic life of other societies and, in particular, to grasp the economic significance of socialism as a human society free from the inimical conflict of class-interests.

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