Ernest Mandel: An Introduction to Marxist Economic Theory

# I. The Theory of Value and Surplus Value

In the last analysis, every step forward in the history of civilization has been brought about by an increase in the productivity of labor. As long as a given group of men barely produced enough to keep itself alive, as long as there was no surplus over and above this necessary product, it was impossible for a division of labor to take place and for artisans, artists or scholars to make their appearance. Under these conditions, the technical prerequisites for such specialization could not possibly be attained.

## Social Surplus Product

As long as the productivity of labor remains at a level where one man can only produce enough for his own subsistence, *social* division does not take place and any social differentiation within society is impossible. Under these conditions, all men are producers and they are all on the same economic level.

Every increase in the productivity of labor beyond this low point makes a small surplus possible, and once there is a surplus of products, once man's two hands can produce more than is needed for his own subsistence, then the conditions have been set for a struggle over how this surplus will be shared.

From this point on, the total output of a social group no longer consists solely of labor necessary for the subsistence of the producers. Some of this labor output may now be used to release a section of society from having to work for its own subsistence.

Whenever this situation arises, a section of society can become a ruling class, whose outstanding characteristic is its emancipation from the need of working for its own subsistence.

Thereafter, the labor of the producers can be divided into two parts. A part of this labor continues to be used for the subsistence of the producers themselves and we call this part *necessary labor*; the other part is used to maintain the ruling class and we give it the name *surplus labor*.

Let us illustrate this by the very clear example of plantation slavery, as it existed in certain regions and periods of the Roman Empire, or as we find it in the West Indies and the islands of Portuguese Africa starting with the seventeenth century, on the great plantations which were established there. In these tropical areas, even the slave's food was generally not provided by the master; the slave had to produce this himself by working a tiny plot of ground on Sundays and the products from this labor constituted his store of food. On six days of the week the slave worked on the plantation and received in return none of the products of his labor. This is the labor which creates a social surplus product, surrendered by the slave as soon as it is produced and belonging solely to the slavemaster.

The work week, which in this case is seven days, can be divided into two parts: the work of one day, Sunday, constitutes necessary labor, that labor which provides the products for the subsistence of the slave and his family; the work of the other six days is surplus labor and all of its products go to the master, are used for his sustenance and his enrichment as well.

The great domains of the early Middle Ages furnish us with another illustration. The land of these domains was divided into three parts: the communal lands consisting of forest, meadows, swamps, etc.; the land worked by the serf for his own and his family's subsistence; and finally, the land worked by the serf in order to maintain the feudal lord. The work week during this period was

usually six days, not seven. It was divided into two equal parts: the serf worked three days on the land from which the yield belonged to him; the other three days he worked on the feudal lord's land, without remuneration, supplying free labor to the ruling class.

The products of each of these two very different types of labor can be defined in different terms. When the producer is performing necessary labor, he is producing a *necessary product*. When he is performing surplus labor, he is producing a *social surplus product*.

Thus, social surplus product is that part of social production which is produced by the laboring class but appropriated by the ruling class, regardless of the form the social surplus product may assume, whether this be one of natural products, or commodities to be sold, or money.

*Surplus value* is simply the monetary form of the social surplus product. When the ruling class appropriates the part of society's production previously defined as "surplus product" exclusively in the monetary form, then we use the term "surplus value" instead of "surplus product."

As we shall see later on, however, the above only constitutes a preliminary approach to the definition of surplus value.

How does social surplus product come into existence? It arises as a consequence of a gratuitous appropriation, that is, an appropriation without compensation, by a ruling class of a part of the production of a producing class. When the slave worked six days a week on a plantation and the total product of his labor was taken by the master without any compensation to the slave, the origin of the social surplus product here is in the gratuitous labor, the uncompensated labor, supplied by the slave to the master. When the serf worked three days a week on the lord's land, the origin of this income, of this social surplus product, is also to be found in the uncompensated labor, the gratuitous labor, furnished by the serf.

We will see further on that the origin of capitalist surplus value, that is to say, the revenue of the bourgeois class in capitalist society, is exactly the same: it is uncompensated labor, gratuitous labor, which the proletarian, the wage worker, gives the capitalist without receiving any value in exchange.

Commodities, Use value and Exchange value

We have now developed several basic definitions which will be used throughout this exposition. A number of others must be added at this point.

Every product of human labor normally possesses utility; it must be able to satisfy a human need. We may therefore say that every product of human labor has a *use value*. The term "use value" will, however, be used in two different senses. We will speak of *the* use value of a commodity; we will also talk about use values, as when we refer, for example, to a society in which only use values are produced, that is to say, where products are created for direct consumption either by the producers themselves or by ruling classes which appropriate them.

Together with this use value, a product of human labor can also have another value, an *exchange value*. It may be produced for exchange on the market place, for the purpose of being sold, rather than for direct consumption by the producers or by wealthy classes. A mass of products which has been created for the purpose of being sold can no longer be considered as the production of simple use values; it is now a production of *commodities*.

The commodity, therefore, is a product created to be exchanged on the market, as opposed to one which has been made for direct consumption. *Every commodity must have both a use value and an exchange value*.

It must have a use value or else nobody would buy it, since a purchaser would be concerned with its ultimate consumption, with satisfying some want of his by this purchase. A commodity without a use value to anyone would consequently be unsaleable, would constitute useless production, would have no exchange value precisely because it had no use value.

On the other hand, every product which has use value does not necessarily have exchange value. It has an exchange value only to the extent that the society itself, in which the commodity is produced, is founded on exchange, is a society where exchange is common practice.

Are there societies where products do not have exchange value? The basis for exchange value, and *a fortiori* for trade and the market place, is constituted by a given degree of development of the division of labor. In order for products not to be directly consumed by their producers, it is essential that everybody should not be engaged in turning out the same thing. If a particular community has no division of labor, or only its most rudimentary form, then it is clear that no reason for exchange exists. Normally, a wheat farmer has nothing to exchange with another wheat farmer. But as soon as a division of labor exists, as soon as there is contact between social groups producing different use values, then exchange can come about, at first on an occasional basis, subsequently on a more permanent one. In this way, little by little, products which are made to be exchanged, *commodities*, make their appearance alongside those products which are simply made for the direct consumption of their producers.

In capitalist society, commodity production, the production of exchange values, has reached its greatest development. It is the first society in human history where the major part of production consists of commodities. It is not true, however, that all production under capitalism is commodity production. Two classes of products still remain simple use value.

The first group consists of all things produced by the peasantry for its own consumption, everything directly consumed on the farms where it is produced. Such production for self-consumption by the farmer exists even in advanced capitalist countries like the United States, although it constitutes only a small part of total agricultural production. In general, the more backward the agriculture of a country, the greater is the fraction of agricultural production going for self-consumption. This factor makes it extremely difficult to calculate the exact national income of such countries.

The second group of products in capitalist society which are not commodities but remain simple use value consists of all things produced in the home. Despite the fact that considerable human labor goes into this type of household production, it still remains a production of use values and not of commodities. Every time a soup is made or a button sewn on a garment, it constitutes production, but it is not production for the market.

The appearance of commodity production and its subsequent regularization and generalization have radically transformed the way men labor and how they organize society.

## The Marxist Theory of Alienation

You have no doubt already heard about the Marxist theory of alienation. The emergence, regularization and generalization of commodity production are directly related to the expanding character of this phenomenon of alienation.

We cannot dwell on this aspect of the question here but it is extremely important to call attention to it, since the history of trade covers far more than the capitalist era. It also includes *small-scale* commodity production, which we will discuss later. There is also a postcapitalist society based on commodities, a transitional society between capitalism and socialism, such as present-day Soviet society, for the latter still rests in very large measure on the foundations of exchange value production. Once we have grasped certain fundamental characteristics of a society based on commodities, we can readily see why it is impossible to surmount certain phenomena of alienation in the transitional period between capitalism and socialism, as in Soviet society, for example.

Obviously this phenomenon of alienation does not exist – at least in the same form – in a society where commodity production is unknown and where the life of the individual and his social activity are united in the most elementary way. Man works, but generally not by himself; most often he is part of a collective group having a more or less organic structure. His labor is a direct transformation of material things. All of this means that labor activity, the act of production, the act of consumption, and the relations between the individual and his society are ruled by a condition of equilibrium which has relative stability and permanence.
[….]
Another clarifying statement must be added here. Just what do we mean by a "quantity of labor"? Workers differ in their qualifications. Is there complete equality between one person's hour of work and everybody else's, regardless of such differences in skills? Once again the question is not a moral one but has to do with the internal logic of a society based on an equality between skills, an equality in the marketplace, and where any disruption of this equality would immediately destroy the social equilibrium.

What would happen, for example, if an hour's work by an unskilled laborer was worth as much as an hour's work by a skilled craftsman, who had spent four to six years as an apprentice in acquiring his skill? Obviously, no one would want to become skilled. The hours of work spent in learning a craft would be wasted hours since the craftsman Would not be compensated for them after becoming qualified.

In an economy founded on an accounting system of work-hours, the young will desire to become skilled only if the time lost during their training period is subsequently paid for. Our definition of the exchange value of a commodity must therefore be completed as follows: "An hour of labor by a skilled worker must be considered as complex labor, as compound labor, as a multiple of an hour of unskilled labor; the coefficient of multiplication obviously cannot be an arbitrary one but must be based on the cost of acquiring a given skill." It should be pointed out, in passing, that there was always a certain fuzziness in the prevailing explanation of compound labor in the Soviet Union under Stalin which has persisted to this very day. It is claimed that compensation for work should be based on the quantity *and quality* of the work, but the concept of quality is no longer understood in the Marxist sense of the term, that is to say, as a *quality measurable quantitatively* by means of a specific coefficient of multiplication. On the contrary, the idea of quality is used in the bourgeois ideological sense, according to which the quality of labor is supposed to be determined by its social usefulness, and this is used to justify the incomes of marshals, ballerinas and industrial managers, which are ten times higher than the incomes of unskilled laborers. Such a theory belongs in the domain of apologetics despite its widespread use to justify the enormous differences in income which existed under Stalin and continue to exist in the Soviet Union today, although to a lesser extent.

The exchange value of a commodity, then, is determined by the quantity of labor socially necessary for its production, with skilled labor being taken as a multiple of simple labor and the coefficient of multiplication being a reasonably measurable quantity.

This is the kernel of the Marxist theory of value and the basis for all Marxist economic theory in general. Similarly, the theory of social surplus product and surplus labor, which we discussed at the beginning of this work, constitutes the basis for all Marxist sociology and is the bridge connecting Marx's sociological and historical analysis, his theory of classes and the development of society generally, to Marxist economic theory, and more precisely, to the Marxist analysis of all commodity-producing societies of a precapitalist, capitalist and postcapitalist character.

What is Socially Necessary Labor?

A short while back I stated that the particular definition of the quantity of *socially* necessary labor for producing a commodity had a very special and extremely important application in the analysis of capitalist society. I think it will be more useful to deal with this point now although logically it might belong to a later section of this presentation.

The totality of all commodities produced in a country at a given time has been produced to satisfy the wants of the sum total of the members of this society. Any article which did not satisfy somebody's needs, which had no use- value for anyone, would be *a priori* unsaleable, would have no exchange value, would not constitute a commodity but simply a product of caprice or the idle jest of some producer. From another angle, the sum total of buying power which exists in this given society at a given moment and which is not to be hoarded but spent in the market, must be used to buy the sum total of commodities produced, if there is to be economic equilibrium. This equilibrium therefore implies that the sum total of social production, of the available productive forces in this society, of its available work-hours, has been distributed among the various sectors of industry in the same proportions as consumers distribute their buying power in satisfying their various wants. When the distribution of productive forces no longer corresponds to this division in wants, the economic equilibrium is destroyed and both overproduction and underproduction appear side by side.

Let us give a rather commonplace example: toward the end of the nineteenth and beginning of the twentieth century, a city like Paris had a coach-building industry, which together with associated harness trades employed thousands or even tens of thousands of workers.

In the same period the automobile industry was emerging and although still quite small it already numbered some scores of manufacturers employing several thousands of workers.

Now what is the process taking place during this period? On the one hand, the number of carriages begins to decline and on the other, the number of automobiles begins to increase. The production of carriages and carriage equipment therefore shows a trend toward *exceeding social needs*, as these are reflected in the manner in which the inhabitants of Paris are dividing their buying power; on the other side of the picture, the production of automobiles is *below social needs*, for from the time the industry was launched until the advent of mass production, a climate of scarcity existed in this industry. The supply of automobiles on the market was never equal to the demand.

How do we express these phenomena in terms of the labor theory of value? We can say that in the carriage industry *more labor is expended than is socially necessary*, that a part of the labor expended by the sum total of companies in the carriage industry is socially wasted labor, which no

longer finds an equivalent on the marketplace and is consequently producing unsaleable goods. In capitalist society, when goods are unsaleable it means that an investment of human labor has been made in a specific industrial branch *which turns out to be socially unnecessary labor*, that is to say, it is labor which finds no equivalent in buying power in the marketplace. Labor which is not socially necessary is wasted labor; it is labor which produces no value. We can see from this that the concept of socially necessary labor embraces a whole series of phenomena.

For the products of the carriage industry, supply exceeds demand, prices fall and goods remain unsaleable. The reverse is true in the automobile industry where demand exceeds supply, causing prices to rise and under- production to exist. To be satisfied with these commonplaces about supply and demand, however, means stopping at the psychological and individual aspects of the problem. On the other hand, if we probe into the deeper social and collective side of the problem, we begin to understand what lies below the surface in a society organized on the basis of an economy of labor-time.

The meaning of supply exceeding demand is that capitalist production, which is anarchistic, unplanned and unorganized, has anarchistically invested or expended more labor hours in an industrial branch than are socially necessary, so that a whole segment of labor-hours turns out to be pure loss, so much wasted human labor which remains unrequited by society. Conversely, an industrial sector where demand continues to be greater than supply can be considered as an underdeveloped sector in terms of social needs; it is therefore a sector expending fewer hours of labor than are socially necessary and it receives a bonus from society in order to stimulate an increase in production and achieve an equilibrium with social needs.

This is one aspect of the problem of socially necessary labor in the capitalist system. The other aspect of the problem is more directly related to changes in the productivity of labor. It is the same thing but makes an abstraction of social needs, of the “use value” aspect of production.

In capitalist society the productivity of labor is constantly changing. Generally speaking, there are always three types of enterprises (or industrial sectors): those which are technologically right at the social average; those which are backward, obsolete, on the downgrade, below the social average; and those which are technologically advanced and above average in productivity.

What do we mean when we say a sector or an enterprise is technologically backward and has a productivity of labor which is below the average? Such a branch or enterprise is analogous to our previously mentioned lazy shoemaker, that is, it is one which takes five hours to produce a specific quantity of goods in a period when the average social productivity demands that it be done in three hours. The two extra hours of expended labor are a total loss, a waste of social labor. A portion of the total amount of labor available to society having thus been wasted by an enterprise, it will receive nothing from society to compensate it. Concretely it means that the selling prices in this industry or enterprise, which is operating below average productivity, approach its production costs or even fall below them, that is to say, the enterprise is operating at a very low rate of profit or even at a loss.

On the other hand, an enterprise or industrial sector with an above average level of productivity (like the shoemaker who can produce two pairs of shoes in three hours when the social average is one pair per three hours) *economizes* in its expenditure of social labor and therefore makes a surplus profit, that is to say, the difference between its costs and selling prices will be greater than the average profit.

The pursuit of this surplus profit is, of course, the driving force behind the entire capitalist economy. Every capitalist enterprise is forced by competition to try to get greater profits, for this is the only way it can constantly improve its technology and labor productivity. Consequently all firms are forced to take this same direction, and this of course implies that what at one time was an above-average productivity winds up as the new average productivity, whereupon the surplus profit disappears. All the strategy of capitalist industry stems from this desire on the part of every enterprise to achieve a rate of productivity superior to the national average and thereby make a surplus profit, and this in turn provokes a movement which causes the surplus profit to disappear, by virtue of the trend for the *average* rate of labor productivity to rise continuously. This is the mechanism in the tendency for profit rates to become equalized.

The Origin and Nature of Surplus Value

And now, what is surplus value? When we consider it from the viewpoint of the Marxist theory of value, the answer is readily found. Surplus value is simply *the monetary form of the social surplus product*, that is to say, it is the monetary form of that part of the worker's production which he surrenders to the owner of the means of production without receiving anything in return.

How is this surrender accomplished in practice within capitalist society? It takes place through the process of exchange, like all important operations in capitalist society, which are always relations of exchange. The capitalist buys the labor-power of the worker, and in exchange for this wage, he appropriates the entire production of that worker, all the newly produced value which has been incorporated into the value of this production.

We can therefore say from here on that surplus value is the difference between the value produced by the worker and the value of his own labor-power. What is the value of labor-power? In capitalist society, labor-power is a commodity, and like the value of any other commodity, its value is the quantity of labor socially necessary to produce and reproduce it, that is to say, the living costs of the worker in the wide meaning of the term. The concept of a minimum living wage or of an average wage is not a physiologically rigid one but incorporates wants which change with advances in the productivity of labor. These wants tend to increase parallel with the progress in technique and they are consequently not comparable with any degree of accuracy, for different periods. The minimum living wage of 1830 cannot be compared quantitatively with that of 1960, as the theoreticians of the French Communist party have learned to their sorrow. There is no valid way of comparing the price of a motorcycle in 1960 with the price of a certain number of kilograms of meat in 1830 in order to come up with a conclusion that the first "is worth" less than the second.

Having made this reservation, we can now repeat that the living cost of labor-power constitutes its value and that surplus value is the difference between this living cost and the value created by this labor-power.

The value produced by labor-power can be measured in a simple way by the length of time it is used. If a worker works ten hours, he produces a value of ten hours of work. If the worker's living costs, that is to say, the equivalent of his wage, is also ten hours of work, then no surplus value would result. This is only a special case of the more general rule: when the sum total of labor product is equal to the product required to feed and maintain the producer, there is no social surplus product.

But in the capitalist system, the degree of labor productivity is such that the living costs of the worker are always less than the quantity of newly created value. This means that a worker who

labors for ten hours does not need the equivalent of ten hours of labor in order to support himself in accordance with the average needs of the times. His equivalent wage is always only a fraction of his day's labor; everything beyond this fraction is surplus value, free labor supplied by the worker and appropriated by the capitalist without an equivalent offset. If this difference did not exist, of course, then no employer would hire any worker, since such a purchase of labor-power would bring no profit to the buyer.

The Validity of the Labor Theory of Value

To conclude, we present three traditional proofs of the labor theory of value.

The first of these is the *analytical proof*, which proceeds by breaking down the price of a commodity into its constituent elements and demonstrating that if the process is extended far enough, only labor will be found.

The price of every commodity can be reduced to a certain number of components: the amortization of machinery and buildings, which we call the renewal of fixed capital; the price of raw materials and accessory products; wages; and finally, everything which is surplus value, such as profit, rent, taxes, etc.

So far as the last two components are concerned, wages and surplus value, it has already been shown that they are labor pure and simple. With regard to raw materials, most of their price is largely reducible to labor; for example, more than 60 per cent of the mining cost of coal consists of wages. If we start by breaking down the average manufacturing cost of commodities into 40% for wages, 20% surplus value, 30% for raw materials and 10% in fixed capital; and if we assume that 60% of the cost of raw materials can be reduced to labor, then we already have 78% of the total cost reduced to labor. The rest of the cost of raw materials breaks down into the cost of other raw materials – reducible in turn to 60% labor – plus the cost of amortizing machinery.

The price of machinery consists to a large degree of labor (for example, 40%) and raw materials (for example, 40% also). The share of labor in the average cost of all commodities thus passes successively to 83%, 87%, 89.5%, etc. It is obvious that the further this breakdown is carried, the more the entire cost tends to be reduced to labor, and to labor alone.

The second proof is the *logical proof*, and is the one presented in the beginning of Marx's **Capital**. It has perplexed quite a few readers, for it is certainly not the simplest pedagogical approach to the question.

Marx poses the question in the following way. The number of commodities is very great. They are interchangeable, which means that they must have a common quality, because everything which is interchangeable is comparable and everything which is comparable must have at least one quality in common. Things which have no quality in common are, by definition, not comparable with each other.

Let us inspect each of these commodities. What qualities do they possess? First of all, they have an infinite set of natural qualities: weight, length, density, color, size, molecular nature; in short, all their natural physical, chemical and other qualities. Is there any one of the physical qualities which can be the basis for comparing them as commodities, for serving as the common measure of their exchange value? Could it be weight? Obviously not, since a pound of butter does not have the same value as a pound of gold. Is it volume or length? Examples will immediately show that it is none of these. In short, all those things which make up the natural quality of a commodity, everything which

is a physical or chemical quality of this commodity, certainly determines its use value, its relative usefulness, but not its exchange value. Exchange value must consequently be abstracted from everything that consists of a natural physical quality in the commodity.

A common quality must be found in all of these commodities which is not physical. Marx's conclusion is that the only common quality in these commodities which is not physical is their quality of being the products of human labor, of *abstract* human labor.

Human labor can be thought of in two different ways. It can be considered as specific concrete labor, such as the labor of the baker, butcher, shoemaker, weaver, blacksmith, etc. But so long as it is thought of as specific concrete work, it is being viewed in its aspect of labor which produces only use values.

Under these conditions we are concerning ourselves only with the physical qualities of commodities and these are precisely the qualities which are not comparable. The only thing which commodities have in common from the viewpoint of exchanging them is that they are all produced by abstract human labor, that is to say, by producers who are related to each other on a basis of equivalence as a result of the fact that they are all producing goods for exchange. The common quality of commodities, consequently, resides in the fact that they are the products of abstract human labor and it is this which supplies the measure of their exchange value, of their exchangeability. It is, consequently, the quality of socially necessary labor in the production of commodities which determines their exchange value.

Let us immediately add that Marx's reasoning here is both abstract and difficult and is at least subject to questioning, a point which many opponents of Marxism have seized upon and sought to use, without any marked success, however.

Is the fact that all commodities are produced by abstract human labor really the *only* quality which they have in common, apart from their natural qualities? There are not a few writers who thought they had discovered others. In general, however, these have always been reducible either to physical qualities or to the fact that they are products of abstract labor.