

A REAPPRAISAL OF MARXIAN  
LABOUR THEORY OF VALUE

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## INTRODUCTION

The theory of value has been of crucial importance since the time of Petty and Boisguillebert. Even in the very ancient past the Greek philosophers dealt with a very rudimentary form of the concept of value. However, with the advent of capitalism, the issue of value assumed a serious significance. It is the unifying principle which sustains the science of political economy as an entity and as a living force. It is quite obvious that in any scientific system, there will be unknown quantities which can be determined on the basis of certain principles and the formulation of such principles must involve a certain amount of abstraction. In political economy, one such abstraction is the theory of value.

Even if, political economy is regarded as an equational system, and according to Maurice Dobb, it means that, "certain relationships are defined which govern or connect, all the variables within the system,"<sup>1</sup> the role of value is not at all insignificant, in spite of its problem of measurement in a unique way. But an equational system does not always rest on arithmometrically defined variables all the time. In the process of abstraction, the requirement of measurement from the commonsense point of view is sometimes assumed away to probe deeper into the reality of an economic system that is

true but which could not be always conveniently laid bare before the naked eye. The theory of value in the history of development of political economy has been the tool for such an investigation.

The Marxian theory of value which is the main concern of this study is found in Karl Marx's "An Introduction to the Critique of Political Economy" (1859) and in "Das Kapital", the first volume of which was published in 1867. The second and third volumes edited by Friedrich Engels were published after the death of Marx in 1885 and 1894 respectively. The theory of value developed in Volume I of Capital is an expansion of that set forth in the "A Critique of Political Economy", "but does not depart in essentials from the earlier work."<sup>2</sup>

A shorter and more popular presentation of the theory is also found in, "Value, Price and Profit", a paper written for the progress of the International Working Men's Association in 1865. The same applies to his treatment in Grundrisse.

The purpose of this dissertation is to lay bare Marx's views of the labour theory of value. In this study an attempt will be made to depict Marx's views through his own writings. To explain Marx's position as faithfully as possible, quotations from his works at length may be necessary. As well, the views of such Marxist economists as Prof. Maurice Dobb, Dr. Sweezy, Prof. Meek, Prof. Howard, Prof. King and Prof. Dasgupta are included to explain the theory more convincingly.

For convenience, the dissertation is divided into five chapters. Chapter I deals with pre-Marxian labour theory of value. The economists discussed in this section are Adam Smith and Ricardo, because as Prof. Junankar rightly observes "on the economic side, to really understand Marx, one must read Smith's 'Wealth of Nations' and Ricardo's 'Principles of Political Economy.'<sup>3</sup> Hence the purpose of discussing Smith and Ricardo's value theory is to provide a proper background for the development of Marxian value theory.

The second chapter is confined to the labour theory of value of Marx and related issues like surplus value and exploitation. The origin of the Marxian notion of surplus value which is quite different from his predecessors is traced and that paves the way for the explanation of the nature of exploitation in a capitalist economy.

Chapter III is concerned with one of the hotly debated issues of Marx i.e. the "so-called" transformation problem. A summarised version of the problem is given and it is shown how Marx has failed to provide a logically consistent solution. But that should not imply the ultimate failure of the Marxian labour theory of value, as logically sound alternate solutions have been given by different authors to make up adequately the lacunae found in Marx. The mathematical presentation of the problem is avoided, because, it is believed that the analysis is in no way affected by the absence of mathematical tools.

Chapter IV contains the critique of the labour theory of value. The criticisms of the transformation problem are deliberately omitted since they have already been considered in the previous chapter. The arguments of eminent critiques of Marx like Bohm-Bawerk, Pareto, Bernstein, Lindsay, Croce, Knight, Lange, Schumpeter, Schlesinger and Mrs. Robinson are discussed. An assessment of their argument is attempted with the help of economists like Louis Boudin, Hilferding, Sweezy, Meek and others.

The concluding chapter deals with the author's own observation of the labour theory of value.

#### Notes and References

1. Maurice Dobb. Political Economy and Capitalism, George Routledge and Sons Ltd., London, 1944, p. 6.
2. G. V. Portus. Marx and Modern Thought, W.E.A. Series, Students Edition, Sydney, 1921, p. 69.
3. P. N. Junankar. Marx's Economics, Philip Allan Publishers Ltd., Oxford, 1982, p. 4.

## CHAPTER I

### PRE-MARXIAN LABOUR THEORY OF VALUE

#### Labour Theory of Value before Smith

The origin of the labour theory of value can be traced back to the writings of the Greek philosophers, particularly Plato.<sup>1</sup> And this concept is developed in the succeeding centuries by Albertus Magnus, Thomas Aquinas,<sup>2</sup> Don Scouts, Abd-al-Rahman-Ibn Khaldun, William Petty, Boisguillebert, John Locke, and many others.<sup>3</sup> William Petty and Boisguillebert need our special attention for they examined most systematically the problem of exchange value and offered two solutions which in the 18th century were to define the two streams in political economy, namely the British classical school and the French Physiocratic school. For Boisguillebert it is agricultural labour that constitutes the soul source of value, whereas according to Petty, it is labour as such that is the source of exchangeable value.

"Suppose a man", writes Petty, "could with his own hands plant a certain scope of land with corn. ... Let another go travel into a country where there is silver, there dig it, bring it to the same place where the man planted his corn ... I say that the silver of one must be esteemed of equal value with the corn of the other" (if the same time be spent on

producing each): "let a hundred men work ten years upon corn, and the same number of men, the same time upon silver; I say, that the neat proceed of the silver is the price of the whole neat proceed of the corn."<sup>4</sup>

However, there seems a certain lack of clarity in Petty's mind concerning the role of labour in the process of value creation. He says:

"All things ought to be valued by two natural denominations, which is Land and Labour, that is we ought to say, a ship or garment is worth such a measure of Land, with such another measure of Labour : for as much as both ships and garments were the creatures of Lands and mens Labours thereupon : This being true, we should be glad to finde out a natural par between Land and Labour, so as we might express the value by either of the alone as well or better than by both and reduce one into the other as easily and certainly as we reduce pence into pounds."<sup>5</sup> Here Petty seems to consider the role of labour in rather a different light as land comes into the picture as a measure of value as well.

One of the successors of Petty, Richard Cantillon was also troubled by the dual source of value. While defining what he called the, "price or intrinsic (normal) value", he stated that, it is "the measure of the quantity of Land and Labour which enter into its production."<sup>6</sup> The meaning of the subsequent analysis amounts to this : if two goods are produced by the same amount of land and labour of the same

quality, they will have equal value. But the proportion in which land and labour will determine the value of particular goods will vary. In some cases a watch-spring for example - "Labour makes up nearly all the value". In others for example, the price of "a wood which it is proposed to cut down" - land is the chief determinant.<sup>7</sup>

Thus Petty and his successors did not discover a true common measure of value. They thought that both labour and land were sources of value and equally important. This position led to an irreconcilable contradiction in their conceptual framework. According to Mandel, it "reflects the actual situation of capitalist economy in this period, (which was) in a state of transition between a predominantly agricultural economy and one based on industrial production."<sup>8</sup>

#### Adam Smith

Smith begins his analysis of value by distinguishing between two uses of the word. One, he points out, signifies the utility of some particular object, and this he calls value-in-use, the other refers to the power possessed by an object of purchasing other goods : this he calls value-in-exchange. He mentions a paradox of terms which have become famous. "Nothing is more useful than water : but it will purchase scarce anything. Scarce anything can be had in exchange for it. A diamond on the contrary has scarce any value in use, but a great quantity of other goods may frequently be had in exchange for it."<sup>9</sup>

It was this paradox which provided the starting point for further development in economic theory in the late 19th century. This finally led to the emergence of marginal utility doctrine. Smith was not interested in elucidating the intricacies of use value.

The analysis of exchange value - "the power of purchasing other goods which the possession of that object conveys",<sup>10</sup> which according to Schumpeter is the "centrepiece of a primitive system of equilibrium", resolves itself into three parts : what is measure of exchangeable value of commodities or as Smith also calls it their natural or real price? what are the constituent parts of this natural price? and finally how do variations of the market price of the commodities from their natural value arise?

Labour according to Smith, is both the source as well as the measure of value. All items of wealth originate from labour. "The annual labour of every nation" writes Smith, "is the fund which originally supplies it with all the necessaries and conveniences of life, which it annually consumes, and which consists always either in the immediate produce of that labour or in what is produced with that produce from other nations."<sup>11</sup>

As regards the measure of value Smith has the following to say :

"The value of any commodity, therefore, to the person who possesses it and who means not to use or consume it

himself, but to exchange it for other commodities is equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of exchangeable value of commodities."<sup>12</sup> But why labour is chosen as the yardstick to measure value? Smith stipulates the criterion that the standard of measurement should be invariable. He dismisses gold and silver, the most widely used money commodities, as standards of measurement because they are subject to fluctuations in value. He therefore returns to labour whose own value never varies and which remains, "alone the ultimate and real standard by which the value of all commodities can at all times and places be estimated and compared."<sup>13</sup> Again :

"Equal quantities of labour, at all times and places, may be said to be of equal value to the labourer. In his ordinary state of health, strength and spirits : in the ordinary degree of his skill and dexterity, he must always lay down the same portion of his ease, his liberty and his happiness. The price which he pays (in terms of disutility of labour) must always be the same, whatever may be the quantity of goods which he receives in return for it."<sup>14</sup> In other words as Schumpeter remarks, labour serves as a numeraire in Smith's system.<sup>15</sup>

Smith starts discussing the second question involved in case of the exchangeable value of commodities i.e. component parts of the price of commodities taking into consideration, in the beginning, a pre-capitalist, "labour only economy".<sup>16</sup>

"In that early and rude state of society which precedes

both the accumulation of stock and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another. If among a nation of hunters, for example, it usually costs twice the labour to kill a beaver than to kill a deer, one beaver should naturally exchange for or be worth of two deer. It is natural that what is usually the produce of two days or two hours labour, should be worth what is usually the produce of one day's or one hour's labour."<sup>17</sup>

Smith recognises that allowance has to be made for the hardship of different kinds of labour and for particular skill and ingenuity, in comparing different quantities of labour. The problem, no doubt is a difficult one. Smith writes :

" ... it is not easy to find out any accurate measure either of hardship or ingenuity. In exchanging indeed the different productions of different sorts of labour for one another, some allowance is commonly made for both. It is adjusted, however, not by any accurate measure but by the higgling and bargaining of the market, according to that sort of rough equality, though, not exact is sufficient for carrying on the business of common life."<sup>18</sup> Thus value is determined, according to this interpretation, on the basis of embodied labour.

However, Smith's analysis in search of determinant of value does not end here. The situation envisaged by Smith according to one author only relates to "a hypothetical

Robinson Crusoe type of economy".<sup>19</sup> In reality there are three inputs to be rewarded. After capital has been accumulated some of the price of a good is made up of amortization and of profit. When land has all become private property rent constitutes a third component of price. "In every society the price of every commodity finally resolves itself into some one or other, or all of those three parts; and in every improved society all the three enter more or less, as component parts, into the price of the far greater part of commodities."<sup>20</sup> From this it is evident that Smith looks at value from two angles of vision : One relates to identifying determinants of value, the other deals with the mechanism of factor shares in production.

In this context he brings in his idea of natural price which may loosely be equated with Marshall's "long run normal price". This price in a sense is special because what we have here is supply determined price in the long run. In every society there is an average rate of wages, profits and rent, to pay which a commodity is sold at its natural price or at its cost of production.

"When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price."<sup>21</sup> Here Smith is looking at

value from the point of view of an entrepreneur. The entrepreneur's supply price comprises of three elements of cost, viz. wages, rent and profit. There will be an inducement to market a good only when all the cost elements are covered. "The commodity is then sold precisely for what it is worth, or for what it really costs the person who brings it to market ..."<sup>22</sup>

Smith takes great care to distinguish between market price and natural price. The market price is the price at which any commodity is sold, which may be above or below or equal to the natural price. It is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity. When the quantity fell short of the effectual demand i.e. demand of those willing to pay the natural price, competition between buyers would cause price to rise. When the quantity brought to market is just sufficient to supply the effectual demand, the market price becomes equal to natural price. And when the quantity brought to the market exceeds the effectual demand, the market price will sink below the natural price because of competition between the sellers.

As we have seen, Smith begins by analysing a model akin to Marx's "simple commodity production" in which capitalist class relations are absent and in which production takes place for exchange rather than to satisfy the personal needs of the producers. Smith's 'early and rude state of society' where

beaver and deer hunting is resorted to amply demonstrates this. In this society profit and rent do not exist, the labour theory of value applies without modifications. He then considers the consequences of the accumulation of capital and the appropriation of land and is driven to reject the labour theory of value as inapplicable to capitalism. According to him the very existence of property income invalidates the labour theory of value. The value of labour embodied in a commodity is now less than the value of the labour which it can command. He replaces it with what is in essence a 'naive' cost of production theory. Rent and profit are now regarded as costs of production, on a par with wages and form part of the value of commodities. Commodities can thus be sold at their values and yield profit to the capitalist and rent to the landlord, but these values no longer depend solely on the quantity of labour required to produce them. Sraffa aptly describes Smith's conclusion as an "adding up"<sup>23</sup> theory of value.

#### David Ricardo

Like Smith, Ricardo distinguishes between "value in use" and "value in exchange". Nothing has exchange value unless it is useful, but exchange value is not necessarily in proportion to utility. "Utility then is not the measure of exchange value, although it is absolutely essential to it."<sup>24</sup>

Exchange value is derived from scarcity or labour. Rare statues or pictures, scarce books and coins have a value which "varies with the varying wealth and inclinations of those who

are desirous to possess them."<sup>25</sup> However, these commodities form a very small proportion of commodities "daily exchanged in the market". Ricardo is concerned only with commodities which "can be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint."<sup>26</sup>

As we have already discussed, Smith held that prior to the accumulation of capital and appropriation of land, "the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstances which can afford any rule for exchanging them."<sup>27</sup> Ricardo agrees that "this is really the foundation of the exchangeable value of all things, excepting those which cannot be increased by human industry."<sup>28</sup>

"The value of a commodity, or the quantity of any other commodity for which it will exchange depends on the relative quantity of labour which is necessary for its production ..."<sup>29</sup> Thus as a first approximation Smith's labour embodied theory is accepted.

Ricardo also takes into consideration the different qualities of labour and the difficulty of comparing an hour's or a day's labour, in one employment with the same duration of labour in another. But in a manner reminiscent of Smith and presaging Marx the problem is easily dismissed. "The estimation in which different qualities of labour are held," writes Ricardo, "comes soon to be adjusted in the market with

sufficient precision for all practical purposes, and depends much on the comparative skill of the labourer, and intensity of the labour performed. The scale, when once performed, is liable to little variation."<sup>30</sup>

So far Ricardo agrees with Smith. But he criticises Smith for limiting the rule that commodities exchange according to the amount of labour required for their production to that early and rude state of society, where there is neither the accumulation of capital nor the appropriation of land; "as if when profits and rent were to be paid, they would have some influence on the relative value of commodities, independent of the mere quantity of labour that was necessary for their production."<sup>31</sup> He tries to apply the labour theory of value to explain the relative value of commodities in the pre-capitalist society with labour alone as the factor of production and in capitalistic society where in addition to labour, capital and land have become means of production in the private hands. In other words, "Ricardo's aim was to reconcile the existence of property income in a capitalist society with a logically valid labour theory of value."<sup>32</sup> Ricardo is in advance of Smith because of his greater consistency.

The effect of appropriation of land is left by Ricardo for later consideration in the chapter on rent which begins with a very significant statement of intent.

"It remains, however, to be considered, whether the appropriation of land and the consequent creation of rent,

will occasion any variation in the relative value of commodities, independently of the quantity of labour necessary for their production."<sup>33</sup>

His theory of rent provided him with the necessary means for giving a negative answer to this highly important question. Ricardo takes corn as the representative agricultural output. The value of corn is determined by the amount of labour needed to produce it under the least favourable conditions, where no rent is paid. Rent, says, Ricardo "is always the difference between the produce obtained by the employment of two equal quantities of capital and labour."<sup>34</sup> As such it is a pure surplus and does not form a component part of the value of corn. Ricardo writes:

"If the high price of corn were the effect, and not the cause of rent, price would be proportionally influenced as rents were high or low and rent would be a component part of price. But that corn which is produced by the greatest quantity of labour is the regulator of the price of corn, and rent does not and cannot enter in the least degree as a component part of its price."<sup>35</sup>

In modern terminology, rent is price determined not price determining. Adam Smith was, in Ricardo's view, quite wrong to contend otherwise.

The introduction of capital would not pose a serious problem. For, "still the same principle would hold true that the exchangeable value of the commodities produced would be

in proportion to the labour bestowed on their production, not on their immediate production only, but on all those implements or machines required to give effect to the particular labour to which they were applied."<sup>36</sup> Let us consider two occupations employing the same number of workers. If the capitals used require equal amounts of labour to produce i.e. the ratios of fixed capital to labour are the same, and the capitals are equal in durability, changes in the wage rate (which would change equally on both the occupations) would not affect relative values - although profits would vary inversely with wages.

However, the ratio of fixed capital to circulating capital paid to labour may differ among different occupations, fixed capital may differ in durability and the rates of turnover of circulating capital may differ. Ricardo was well aware of these practical aspects. He too like Smith was worried that labour theory of value might no longer apply under conditions of advanced capitalism. In section IV and V of the chapter on value he concedes certain modifications to his labour theory of value. Let us now discuss those modifications one by one.

1. Quantity of labour remaining the same, the employment of different quantities of fixed capital affects the relative value of commodities.

Let us suppose that two men employ 100 labourers each for a year, but with one in the second year using machines produced in the first year. In the second year, the machine user

must make not only the regular return on the capital used to employ labour but a further sum for the profit on the money invested in machinery and consequently the goods must sell at a higher price.

Year I :- One man employs 100 labourers at the rate of £ 50 = £ 5,000 to construct a machine. The other capitalist employs same 100 labourers paying them £ 50 each to grow corn. If we assume a rate of profit of 10%, at the end of the year, the value of the machine = the value of the corn = £ 5000 + 10% profit = £ 5500.

Year II :- One employs 100 labourers =  $100 \times £ 50 = £ 5000$  to grow corn as before; the value of the corn = £ 5000 + £ 500 = £ 5500. The other employs 100 labourers at the rate of £ 50 = £ 5000 plus capital worth £ 5500 produced in the year I to produce cloth : the value of the cloth = £ 5000 + £ 500 + 10% of £ 5500 = £ 6050.

"Here then", writes Ricardo "are capitalists employing precisely the same quantity of labour annually on the production of their commodities, and yet the goods they produce differ in value on account of the different quantities of fixed capital or accumulated labour, employed by each respectively."<sup>37</sup>

#### Effect of Change in Wages on Relative Value

The modification to be considered now relates to the statement that the rate of wages i.e. the greater or less compensation paid to the labourers has no influence on the

relative values. By this Ricardo does not mean, of course, that if one capitalist employs ten men at £ 1 a week each, while another employs the same number at 25 s each for a week, the cost of what is produced will be the same in both the cases. According to him the difference in wages might occur in two different countries, but it cannot occur in the same country, because competition will make the rate same for all labourers. However this rate may alter in the course of time. What the proposition really means is that if articles A and B are of the same value when both employers pay 20 s. a week, their values will still be equal when both employers pay 25 s. a week.

Ricardo, now, modifies this proposition without abandoning the assumption that all labourers are paid at the same rate. He admits that even under these circumstances a rise or fall in the general rate of wages will alter the ratio in which some goods exchange for others, owing to the different proportions in which labour is combined with capital. Referring to the example given above Ricardo writes:

"There can be no rise of wages without a fall of profits. If the corn is to be divided between the farmer and the labourer, the larger the proportion that is given to the latter, the less will remain for the former. So if cloth or cotton goods be divided between the workman and his employer, the larger the proportion given to the former the less remains for the latter. Suppose then, that owing to a rise of wages,

profits fall from 10 to 9 per cent, instead of adding £ 500 to the common price of their goods (to £ 5500) for the profits of their fixed capital, the manufacturer would add only 9 per cent on that sum, or £ 495, consequently the price would be £ 5995 instead of £ 6050. As the corn would continue to sell for £ 5500 the manufactured goods in which more fixed capital was employed would fall relatively to the corn or to any other goods in which a less portion of fixed capital entered."<sup>38</sup>

These figures can be shown by the help of a table.

Table 1.1 :<sup>39</sup>

	Before wages rise profit 10% (£)	After wages rise profit 9% (£)
Wages	5,000	5,050
Profit on wages	500	450 <sup>40</sup>
Price of produce No.1	5,500	5,500
Add profit on fixed capital	550	495
Price of product No.2	6,050	5,995

Here a rise in wages lowers, absolutely as well as relatively, the value of cloth.

While Ricardo never hesitates to admit modifications, he seldom gives them much weight. He writes, "although it would be wrong wholly to omit the consideration of the effect

produced by a rise or fall of labour, it would be equally incorrect to attach more importance to it; and consequently ... I shall consider all the great variations which take place in the relative value of commodities to be produced by the greater or less quantity of labour which may be required from time to time to produce them."<sup>41</sup> Indeed, "the greatest effects which could be produced on the relative prices of these goods from a rise of wages, could not exceed 6 or 7 per cent, for profits could not, probably under any circumstances, admit of a greater general and permanent depression than to that amount."<sup>42</sup>

2. The difference in time involved in bringing commodities to the market also affect the relative value.

If one manufacturer employs 40 labourers at an expense of £ 2,000 for one year and assuming rate of profit of 10% on the capital the product will sell for £ 2,200. Another manufacturer employs 20 labourers at an expense of £ 1,000 for one year and also employs 20 labourers again for another year at the same expense of £ 1,000 in finishing or perfecting the same commodity. This product will sell for £ 2,310 at the end of the second year. In this case as well as the case considered before it, "the difference in value arises from the profits being accumulated as capital, and only a just compensation for the times that profits were withheld."<sup>43</sup>

3. The relative value of commodities is affected by the unequal durability of capital.

Ricardo has considered this modification at the end of the Section V in his chapter on value. In his words, "It appears too, that in proportion to the durability of capital employed in any kind of production, the relative prices of those commodities on which such durable capital is employed, will vary inversely as wages : they will fall as wages rise, and rise as wages fall, and on the contrary, those which are produced chiefly by labour with less fixed capital or with fixed capital of a less durable character than the medium in which price is estimated, will rise as wages rise and fall as wages fall."<sup>44</sup>

Ricardo, as we have seen begins his analysis on value in the first chapter of his book upholding the labour theory and asserting that changes in wages and hence changes in profits can have no influence whatever on the exchangeable value of commodities. This position is much weakened as the reader goes through the sections IV and V of the same chapter. But it is not true as suggested by some that, Ricardo abandoned the labour theory of value in the last resort. Piero Sraffa attempts to combat this suggestion. To substantiate his claim, he quotes a letter Ricardo wrote to James Mill dated 28th December, 1818 : "In opposition to him, (Torrens) I maintain that it is not because of this division into wages and profits - it is not because capital accumulates, that exchangeable value varies, but it is, in all stages of society. Owing only to two causes : one the more or less quantity required, the other

the greater or less durability of capital - that the former is never superseded by the latter, but is only modified."<sup>45</sup>

But despite Ricardo's claim that different "capital intensities" merely modify the labour theory of value and do not destroy it, it is clear that the argument is left in a very unsatisfactory state.

### Notes and References

1. Plato came close to spell a labour theory of value in a famous passage in the Republic, "Is each one of them (the minimum of four or five of men of different trades needed for a state) to bring the product of his work into a common stock? Should our own farmer for example, provide food enough for four people and spend the whole of his working time in producing corn, so as to share with the rest, or should he take no notice of them and spend only a quarter of his time on growing just enough corn for himself and divide the other three quarters between building his house, wearing his clothes and making his shoes so as to save the trouble of sharing with others and attend himself to all his own concerns." The Republic, p. 21.
2. While presenting Aristotle's quadrilateral of 'Proportions of exchange', Thomas Aquinas came to the brink of a labour theory of value formulated in a modern way. He wrote : "Let us assume that at one corner A, there are two books and at another B, there is one book, and that at C there is a person, sortis for example, who has worked for two days and at D there is plato who has worked for one day. Then the ratio of A to B should be the same at that of C to D (that is A should have twice the value of B)" Quoted by E. Mandel, Marxist Economic Theory, Vol. II, Merlin Press, London, 1968, p. 696.
3. For a lucid and excellent discussion of the development of the Labour Theory of Value see Mandel's Marxist Economic Theory, Vol. II, 1968, pp. 693-707.
4. William Petty. The Economic Writings, Vol. I, Ed. C.H. Hull, Augustus M. Kelley, Book Seller, New York, 1963, p. 43.

5. Ibid., pp. 44-45.
6. Quoted by Eric Roll, A History of Economic Thought, Faber and Faber Ltd., London, 1973, p. 123.
7. Ibid., p. 123.
8. Mandel. op.cit., p. 701.
9. Adam Smith. Wealth of Nations, Penguin Books Ltd., Harmondsworth, 1977, p. 132.
10. Ibid., p. 131.
11. Ibid., p. 104.
12. Ibid., p. 133.
13. Ibid., p. 136.
14. Ibid., p. 136. Smith in this context notes that labour may from time to time command a greater or smaller volume of other goods. But this implies that the value of only those goods varies and not that of labour.
15. J. S. Schumpeter. History of Economic Analysis, George Allen and Unwin Ltd., London, 1954, p. 188.
16. D. P. O'Brien. The Classical Economists, Clarendon Press, Oxford, 1975, p. 79.
17. Smith. op.cit., p. 150.
18. Ibid., p. 134.
19. O'Brien. op.cit., p. 79.
20. Smith. op.cit., p. 153.
21. Ibid., p. 158.
22. Ibid., p. 158.
23. P. Sraffa. Ed. The works and correspondence of David Ricardo, Vol.I, Cambridge University Press, London, 1951, p. XXXV.
24. David Ricardo in the Works and correspondence of David Ricardo, Ed. P. Sraffa, 1951, p. 11.

25. Ibid., p. 12.
26. Ibid., p. 12.
27. Smith. op.cit., p. 150.
28. Ricardo. op.cit., p. 13.
29. Ibid., p. 11.
30. Ibid., p. 20.
31. Ibid., p. 23 (Note).
32. M. C. Howard and J. E. King. The Political Economy of Karl Marx, Longman, Great Britain, 1977, p. 76.
33. Ricardo. op.cit., p. 67.
34. Ibid., p. 71.
35. Ibid., p. 77.
36. Ibid., p. 24.
37. Ibid., p. 34.
38. Ibid., p. 35.
39. This table is given by St. Clair Oswald in "A Key to Ricardo", Routledge and Kegan Paul, London, 1957, p. 34.
40. Profits should be based upon £ 5,050 not £ 5,000. On page 117 of his book Ricardo mentions the need for adjustment. But he neglects it for the sake of simplicity.
41. Ricardo. op.cit., pp. 36-37.
42. Ibid., p. 36. It is this passage that inspired Stigler to dub Ricardo's theory as a "93 per cent labour theory of value". But it is "of course a cost of production theory". There appears "no basis for the belief that Ricardo had an analytical labour theory of value, for the quantities of labour are not the only determinants of relative values ... there is no doubt he held what may be called an empirical labour theory of value, that is, a theory that the relevant quantities of labour required in

production are the dominant determinants of relative values ..." G. J. Stigler. "Ricardo and the 93 per cent labour theory of value" in "Essays in the History of Economics", University of Chicago Press, Chicago, 1965, p. 333.

43. Ricardo. op.cit., p. 37.
44. Ibid., p. 43.
45. Quoted by P. Sraffa, op.cit., p. XXXVII.

## CHAPTER II

### MARX'S LABOUR THEORY OF VALUE

#### Introduction

It was shown in the last chapter that according to Adam Smith, labour theory of value held only in, 'early and rude' society which precedes both the accumulation of stock and the appropriation of land. However, as soon as private property in the means of production developed it ceased to be a valid principle governing relative values. In this context he developed an 'adding up' theory of value, where the equilibrium price of a commodity became equal to the sum of the remunerations paid to the factors that produced it, i.e. wages, rent and profit.

On the other hand, Ricardo attempted to show that, provided that the different forms of capital were used in the same proportions in all productive processes, the existence of profit when allocated on the basis of a uniform rate, was not incompatible with labour theory. Moreover, the existence of rent whatever be the circumstances, did not contradict the theory because rent was price determined, not price determining.

In defending the labour theory of value in this way, Ricardo explicitly recognised its limitations. Where the constitutions of capital were different between industries, the competitive requirement of a uniform rate of profit

ensured that relative equilibrium prices no longer exactly equalled embodied labour ratios. However, he argued that the deviations were unimportant.

In the hands of Marx, labour theory of value reached perfection in the sense that he does not require any modification to his principle as Ricardo had to do and Marx asserts that relative quantity of socially necessary labour time alone determines the exchangeable value of commodities.

Marx used Smith's conceptual framework of value in use and value in exchange but he was highly critical of Smith's cost of production theory as it was based on a superficial and illusory analysis of the prevailing capitalist system. He therefore proposes to uncover the more profound and essentially exploitative productive structure of capitalism to explain its self contradictory nature and predict its final dissolution. As Ira Gerstein puts it, "one of the purposes of Marx's analysis was to lay bare the ideological basis of this factor theory (cost of production theory) to which he referred sarcastically as the 'trinity formula'."<sup>1</sup>

Schumpeter designated Marx as "Ricardo's only great follower".<sup>2</sup>

However, Marx on the one hand was a critical follower and used Ricardian analysis for his own distinctive purpose. On the other, starting from Ricardo's system he developed a framework which was a break from the classical system. Otherwise Marx would have been unable to explain exploitation

theory. He considered Ricardo's work to be flawed in both method and substantive propositions, believing the root of this to lie in Ricardo's failure to specify a conceptual structure allowing a precise linking of labour values, equilibrium prices, capital and profit. Marx sought to fill this vacuum in Ricardian theory by providing a theory of exploitation through which he attempted to show that equilibrium prices were the 'phenomenal form' of labour value and profit the 'phenomenal form' of exploited labour. Marx argued that reality as it appears to social actors and theorists in capitalism is deceptive. He refers to reality as hidden or concealed by appearance or content by form or the 'hidden stratum' by the 'phenomenal form'. It is the role of science to penetrate through the former to the latter and explain appearances in terms of the reality. He further argued that political economy had so far failed to do this adequately.

Marx was convinced as a result of scientific investigation not of capitalist production alone but also of the previous modes of production that a non-exploitative mode based on cooperation would replace capitalism. He called some of the economists of his time like, Bastiat, Senior, Mcculloch etc. as vulgar economists. He made it clear in Capital why he designated them as vulgar. In the words of Prof. Dasgupta, "To be blind to the direction that a scientific law is leading the society is ignorance but to deny the existence of such a law is a manifestation of deliberate

distortion of scientific premise. Hence it is vulgarity from a scientific point of view."<sup>3</sup> Ricardo was rated much better than "vulgar" economists but he too while laying the foundation had failed to perceive comprehensively, the real structure of determination.

As the point of departure for an analysis, Marxian theory of value should be dealt under two heads - the labour theory of value and the doctrine of surplus value. The latter is built upon the former and depends for its validity upon the conclusions reached in the earlier analysis. In this sense both aspects of the doctrine must be considered as an economic whole. For the sake of convenience let us first set forth the labour theory of value as propounded by Marx.

#### Importance of Commodities

Marx sees the modern world as an immense accumulation of commodities, which are "the economic cell-form of the bourgeois society", and proceeds to find out what it is, in the first chapter of Capital. According to him, the commodity has definite historical dimensions which are based on the institution of social exchange. An article produced for immediate consumption is defined by Marx as a product. Produced for exchange however the article becomes a commodity. The world of commodities is therefore a world of exchange and exchange Marx explains is a definite social relation among men. Thus, Marx begins his study with an analysis of the

commodities because in studying them one studies the economic relations of exchange. And for Marx, "the task of showing how the law of value operates, was virtually identical with the task of showing how the relation of production determined relations of exchange."<sup>4</sup>

### Two Fold Aspect of Commodities

The analysis begins with a reformulation of the passages in the Critique concerning two-fold aspect of commodities - the use value and the exchange value. This distinction between use value and exchange value as we have already noticed originates from the classical school,<sup>5</sup> what is unique is his differentiation of the concept of value itself into the form and substance of value. According to Marx, "A commodity is in the first place, an object outside us, a thing that by its properties satisfies human wants of some or another."<sup>6</sup> Use values depend on the utility of a good has for the consumer and "constitute the substance of all wealth, whatever may be the social form of that wealth."<sup>7</sup> Every producer tries to make things which somebody wants otherwise no one pays him for them. But this value is absorbed in consumption and disappears. It was made to be used and having been used it vanishes, sometimes after one using like bread or tobacco or, sometimes only after many usings, like machines. But while the producer of ancient times might justly be said to have been making things for present or instant use, the modern

producer is making things which, though ultimately they are to be used, will only come to the consumer after a long series of exchanges through markets. Marx acknowledges the importance of use value by saying "nothing can have value without being an object of utility. If the thing is useless so is the labour contained in it. The labour does not count as labour and therefore creates no value."<sup>8</sup> He excludes it from the field of investigation of political economy on the ground that it does not embody a social relation directly. For Marx, political economy is a social science of relations between people.

He then proceeds to discuss exchange value which, "at first sight presents itself as a quantitative relation as the proportion in which values in use of one sort are exchanged for those of another sort, a relation constantly changing with time and place."<sup>9</sup>

In other words, exchange value of a commodity means definite amounts of other commodities that can be had in exchange for it, which is subject to change with time and place. According to Marx, exchange value is not an intrinsic quality of things. But how does he justify exchange value as a social relation and hence a proper subject for the investigation of the economist? According to Dr. Sweezy Marx's answer to this question is the key to his value theory. Dr. Sweezy explains:

The exchange value which appears to be a quantitative relation between things, is in reality only an outward form of the social relation between the commodity owners. It means

the same thing in simple commodity production, between the producers themselves. The exchange relation as such, apart from any other consideration of the quantities involved is an expression of the fact that individual producers working in isolation, are in fact working for each other. Their labour, has a social character which is impressed upon it by the act of exchange. In other words, the exchange of commodities is an exchange of the products of the labour of individual producers. What finds expression in the form of exchange value is therefore the fact that the commodities involved are the products of human labour in a society based on division of labour in which producers work privately and independently.<sup>10</sup>

As a use value, a commodity is a universal feature of human existence present in all forms of society. As exchange value, a commodity corresponds to a particular specific form of society which is characterised by developed division of labour and private production.

We are so used to exchanging thousands of wholly different things for each other that we never stop to ask how the rates at which they are exchanged are established. The passages in which Marx goes on to explain this have not been quoted at length in studies as it was believed that they were self-explanatory. Hence it is advisable to reproduce those passages in full.

"A given commodity e.g. a quarter of wheat is exchanged for x blacking, y silk or z gold etc. - in short for other

commodities in the most different proportions. Instead of one exchange value the wheat has therefore, a great many. But since x blacking, y silk or z gold etc. each represent the exchange value of one quarter of wheat, x blacking, y silk, z gold etc. must as exchange-values be replaceable by each other or equal to each other. Therefore, first : the valid exchange values of a given commodity express something equal; secondly, exchange value generally is only the mode of expression, the phenomenal form of something contained in it, yet distinguished from it.

Let us take two commodities e.g. corn and iron. The proportions in which they are exchangeable, whatever, these proportions may be, can always be represented by an equation in which a given quantity of corn is equated to some quantity of iron : e.g. 1 quarter of corn = x cwt iron. What does this equation tell us? It tells us that in two different things in 1 quarter of corn and x cwt. of iron there exists in equal quantities something common to both. These two things must equal to a third, which in itself is neither the one nor the other. Each of them so far as it is exchange-value must therefore be reducible to this third.

A simple geometrical illustration will make this clear. In order to calculate and compare the area of rectilinear figures, we decompose them into triangles. But the area of a triangle itself is expressed by something totally different, from its visible figure, namely by half the product of the base

into the altitude. In the same way, the exchange value of commodities must be capable of being expressed in terms of something common to them all, of which thing they represent a greater or less quantity.

This common something cannot be either a geometrical, a chemical or any other natural property of commodities. Such properties claim our attention only in so far as they affect the utility of those commodities, make them use values ... If we then leave out of consideration the use-value of commodities, they have only one common property left, that of being products of labour ..."<sup>11</sup>

Thus according to Marx, exchange value presents itself in a purely relative form and it is rather difficult to arrive at an adequate theory of value unless one assumes that changes in the relative values are the result of changes in the individual values of one or more of the commodities concerned each taken in isolation. But what is the substance of value? Marx suggests that this quality must be something which can be expressed quantitatively and which though contained in the commodity must be easily distinguishable from it. Marx is merely expressing the requisites of a theory of value which according to Maurice Dobb, "... a principle of value is not adequate which merely expresses value in terms of some one or other particular value : the determining constants must express a relationship with some quantity which is not itself a value."<sup>12</sup>

Marx also points out that the common thing cannot be "either a geographical, chemical or any other natural property of commodities". Such properties only make the commodities use value but the exchange of commodities is characterised by "total abstraction from use value". This means that we can no longer consider the bodily qualities of commodities. We must leave out of sight their shape, texture, appearance, fitness, smell, taste etc. We must forget that they have useful qualities. We must forget that they are the products of different kinds of labour, like the joiner, the mason, the weaver and the spinner. We must no longer consider them as wardrobes, books, typewriters, boots, lamps and tram-cars. We must consider them as possessing something which gives them exchange value. But when we thus abstract all the material qualities of commodities what is there left which is common to them all? There must be some common remainder which gives them exchange value. What is that is left? Let Marx speak.

"Let us now consider the residue of each of these products : it consists of the same unsubstantial reality in each, a mere congelation of homogeneous human labour, of labour power expended without regard to the mode of its expenditure. All that these things now tell us is, that human labour power has been expended in their production, that human labour is embodied in them. When looked at as crystals of this social substance, common to them all they are values."<sup>13</sup>

We note that according to Marx, the only common

constituent left is (certain qualities of) labour power. Having isolated this common constituent, let us examine it. What kind of labour is it which constitutes the exchange value of commodities? First, note that it is measured by time. We compare articles according to the number of hours, weeks, days or years of labour that is in them. This however, does not mean that value of an article depends merely upon the time taken to produce it. It is a common but very short sighted criticism of this theory that, according to it, a commodity produced in eight days by a slow worker is twice as valuable as one produced in four days by a fast worker. For Marx allows for this. The labour power which gives value to commodities is average labour power. By average labour power he means the amount of labour which an ordinarily skilled person working under normal conditions of production would require to produce any commodity.

Moreover, the magnitude of value is measured in terms of current costs not historical costs. As Marx writes, "We see then that which determines the magnitude of the value of any article is the amount of labour socially necessary, or the labour time socially necessary for its production. Each individual commodity in this connection, is to be considered as an average sample of its class. Commodities, therefore, in which equal quantities of labour are embodied, or which can be produced in the same time, have the same value."<sup>14</sup>

"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."<sup>15</sup>

"The value of a commodity, therefore, varies directly as the quantity and inversely as the productiveness of the labour incorporated in it."<sup>16</sup>

The Smithian value-paradox is resolved in the simple Marxian solution. Air and water possess use values, that is, they satisfy some definite social wants. However, due to their unique accessibility, they demand no expenditure of labour time in their production and consequently bear no value. Diamonds, on the other hand, as commodities not only satisfy the use value criterion but bear a relatively high value because of their very rare occurrence on the earth's surface, and hence their discovery costs, on the average a great deal of labour time. Consequently, much labour is represented in a small compass. Marx speculates that if we could succeed at a small expenditure of labour in converting carbon into diamonds, their value might fall below that of bricks.

#### Two-fold Character of Labour

In capitalist production, like commodities, labour too has a double character. It is productive of both use value and exchange value. As the former it is concrete, special labour like that of the baker, the miner, the artist. The latter drops its special qualities and is seen only as abstract, general or homogeneous labour. It is the creator of

use values and substance of value. As the creator of use values, labour presents some characteristics not to be found in labour as substance of value. Marx was the first to discover this twofold nature of labour embodied in commodities.

Let us take two commodities such as knife and cloth. Suppose that two knives are exchanged for 5 yards of cloth. The knife is a use-value and so is the cloth. Each satisfies a particular want and is useful to man. Now the labour that makes the knife useful must be useful labour and so is the labour that produces the cloth. Thus the labour whose utility is represented by the use value of its product is useful labour.

As use values knife and cloth are qualitatively different and so are the two forms of labour that produce them cutlery and weaving. Exchange takes place only between things which are qualitatively different use values and so between things which are products of different kinds of labour.

#### Importance of Abstract Labour

Let us now pass on to the more important aspects of labour, that of abstract labour. In our example, two knives are exchanged for 5 yards of cloth. Should we say that this rate of exchange is the result of a pure accident? Not at all. We exchange two knives for five yards of cloth because two knives are worth five yards of cloth. They have that is to say, same value so far as they are values, knife and cloth are, "things of a like substance, objective expressions of essentially identical labour."<sup>17</sup> Though cutlery and weaving are

qualitatively different kinds of labour, they are each a productive expenditure of human brains, nerves and muscles, and in that sense are human labour. As Marx puts it, "they are but two different modes of expending human labour power."<sup>18</sup> As values, commodities represent human labour in the abstract, the expenditure of human labour in general. When Marx says that labour is the substance of value, he always means labour as abstract labour.

As use values commodities are the products of special, concrete labour and as values they are the crystals of identical abstract labour. Knife and cloth are not merely values but values of a definite magnitude. In our example, two knives are worth 5 yards of cloth. The equation tells us that 2 knives contain as much labour as 5 yards of cloth. "While, therefore, with reference to use value the labour contained in a commodity counts only qualitatively, with reference to value, it counts only quantitatively and must be first reduced to human labour pure and simple."<sup>19</sup>

In its character of identical abstract labour, labour-power forms the value of commodities and in the useful character of labour, it produces use-values. In the words of Dr. Sweezy, "what use-value is to value in the case of commodity, useful labour is to abstract labour in the case of a productive activity."<sup>20</sup>

It must be mentioned, in this context, that there is nothing mysterious about abstract labour, it only ignores all

the special characteristics which differentiate one kind of labour from another. But why this emphasis on abstract labour in the study of political economy? Relatively easy mobility of labour is a distinguishing feature of capitalist development. If this is so, then what is important for analysis is not so much this or that specific kind of labour, as the total social labour force, for on it depends the productive potentialities of a given society. And for aggregating of labour force of varied qualities abstraction becomes necessary. And since a stage has been reached where individuals keep moving from one kind of labour to another dwelling on a specified kind of labour will not be of great use.

#### Skilled and Unskilled Labour

The values of commodities are expressed in terms of units of embodied labour time and that labour is abstract labour. So long as labour is homogeneous, this is an entirely unambiguous measure. An hour of one man's labour is exactly the same as an hour of every one else's. But the problem arises when some men are more skilled than others. In other words the problem is how to reduce skilled labour to unskilled labour. This is an important problem for the "average degree of skill" existing at a particular time may vary from industry to industry and the price of a commodity produced by skilled labour will be higher than the price of a commodity produced by a relatively unskilled labour, even though both may have

expended the same number of hours. Therefore the values of commodities can be said to be determined by the quantity of labour required on the average to produce them only if proper account is taken of the different degrees of labour skill which are required in the case of different commodities. This calls for determining different weights to be attached to different kinds of labour. We cannot use the wages which the skilled and unskilled labourers actually receive nor can we resort to the ratios at which their products actually exchange on the market. "This would be moving in a vicious circle ..." as Marx once described, "determin(ing) relative value by a relative value which needs itself to be determined."<sup>21</sup>

Marx's response to this problem is as follows: "The value of a commodity represents human labour in the abstract, the expenditure of human labour in general. And just as in society, a general or banker plays a great part, but mere man, on the other hand, a very shabby part, so here with mere human labour. It is the expenditure of simple labour power i.e. of labour power which, on an average, apart from any special development exists in the organism of every ordinary individual. Simple average labour, it is true, varies in character in different countries and at different times, but in a particular society it is given. Skilled labour counts only as simple labour intensified or rather, as multiplied simple labour, a given quantity of skilled (labour) being considered equal to a greater quantity of simple labour. Experience shows that

this reduction is constantly being made. A community 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 latter labour<sup>22</sup> 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. For simplicity's sake we shall henceforth account every kind of labour to be unskilled, simple labour, by this we do no more than save ourselves the trouble of making the reduction."<sup>23</sup>

Thus according to Marx, the different kinds of skilled labour are reduced to unskilled labour in the proportions which are established by a social process. However the producers are not aware of this.<sup>24</sup>

The question of the actual laws according to which the skilled labour is reduced to unskilled labour is introduced again in the chapter on "The Buying and Selling of Labour Power" where Marx continues to say :

"In order to modify the human organism so that it may acquire skill and handiness in a given branch of industry, and become labour power of a special kind, a special education or training is requisite, and this, on its part, costs an equivalent in commodities of a greater or less amount. This amount varies according to the more or less complicated character of the labour power. The expenses of this education (excessively

small in the case of ordinary labour power) enter protanto into the total value spent in its production."<sup>25</sup>

So according to Marx, training costs constitute a part of the value of labour power and the value of the trained labour power is relatively more. He then goes on to explain that not only trained labour power is of a higher value but also it creates proportionately more values than the untrained or unskilled labour power. He writes :

"In the creation of surplus value, it does not in the least matter, whether the labour appropriated by the capitalist be simple unskilled labour of average quality or more complicated skilled labour. All labour of a higher or more complicated character than average labour is expenditure of labour power of a more costly kind, labour power whose production has cost more time and labour, and which therefore has a higher value, than unskilled or simple labour power. This power being of higher value, its consumption is labour of a higher class, labour that creates in equal times proportionately higher values than unskilled labour does. Whatever difference in skill there may be between the labour of a spinner and that of a jeweller, the portion of his labour by which the jeweller merely replaces the value of his own labour power, does not in any way differ in quality from the additional portion by which he creates surplus value. In the making of jewellery, just as in spinning the surplus value results only from a quantitative excess of labour, from a lengthening out of one and the same

labour process, in the one case, of the process of making jewels, in the other of the process of making yarn.

But on the other hand, in every process of creating value, the reduction of skilled labour to average social labour e.g. one day of skilled to six days of unskilled labour, is unavoidable. We, therefore, save ourselves a superfluous operation and simplify our analysis, by the assumption, that the labour of the workman employed by the capitalist is unskilled average labour."<sup>26</sup>

Some critics like Bohm-Bawerk and others smell a 'circularity' in this argument. They argue that for Marx higher value of the product of skilled labour depends on the higher wages paid to the labourer. But "there is no circularity in this argument,"<sup>27</sup> for Marx, "was simply saying (a) that the value of the skilled labour power was higher because it had cost more labour to produce, and (b) that because it had cost more labour to produce, it was able to create a product of higher value. Marx evidently regarded the labour expended on training the skilled labour as being stored up, as it were, in his person, to be manifested when he actually begins to work."<sup>28</sup>

All this is perfectly consistent with labour theory of value. But what about the skill due to the uncommon natural abilities? How can it be converted into unskilled labour?

Dr. Sweezy denies the existence of any such problem. "If the difference between two workers is a question of natural ability", writes Sweezy, "as a rule the superiority

of the more skilled will manifest itself regardless of the line of production in which he may be engaged. In order, therefore, to establish a quantitative relation of equivalence between workers, it is only necessary to put them in the same line of production, where their relative effectiveness can be easily measured in purely physical terms."<sup>29</sup>

But this does not appear to be a correct solution. What line of production should be chosen for the experiment? What if, their effectiveness differs from one type of work to another?

In this context, Meek's answer seems to be more satisfactory. According to him, industries where such innate abilities are significant should be treated separately as 'specialised industries'. "I see no reason in principle" says Meek, "why specialist industries of this type should not be grouped together and dealt with in terms of the sort of analysis which Marx (and Ricardo) reserved for agriculture. The labour theory could then be regarded as applying only at the margin in the case of industries normally employing persons of unusual and highly specialised natural ability."<sup>30</sup> However, Meek is of the opinion that such refinements are not required to give the labour theory "the required degree of generality". The labour theory of value was always intended to apply only to those commodities which can be freely reproduced by human labour. Marx praised Ricardo for having emphasised this point. "Ricardo's investigations", writes Marx in the Critique, "are concerned exclusively with the magnitude of value, and regarding this he

is at least aware that the operation of the law depends on definite historical pre-conditions. He says that the determination of value by labour time applies to such commodities only as can be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint."<sup>31</sup>

The number of exceptions which must be made because of the problem of innate abilities is unlikely to be large : sculptors and professional sportsmen are hardly typical of the modern worker. Once it is recognised that labour theory of value was never intended to apply to such exceptional cases, no problem would arise. It is also to be remembered that most of the theories are valid in normal circumstances. Even in an exact science like physics, many laws are not valid in exceptional cases. Hence it may be concluded that the reduction of skilled labour to unskilled labour is not that insurmountable.

### Commodity Fetishism

The two fold character of commodities and of the labour which produces them creates a problem. Marx was the first to perceive this and called it in a celebrated phrase 'commodity fetishism'.

In commodity producing societies, economic relations between people involve the exchange of objects. People meet on the market to buy or sell. They exchange money for commodities and commodities for money. Commodities and money are interposed between people. Everything has its price and money enters into

all economic relations. This is the heart and core of commodity fetishism, a state of affairs in which, "a definite social relations between men ... assumes in their eyes the fantastic form of a relation between things."<sup>32</sup> Thus instead of seeing their own social relations as they are men see them only as they appear, as the independent activities of inanimate material objects.

Marx writes : "In the mist-enveloped regions of the religious world ... the production of human brain appear as independent beings endowed with life, and entering into relation both with one another and the human race so it is in the world of commodities with the product of men's hands. This I call the Fetishism which attaches itself to the products of labour, so soon as they are produced as commodities and which is therefore inseparable from the production of commodities.

This Fetishism of commodities has its origin ... in the peculiar social character of the labour which produces commodities.

As a general rule articles of utility become commodities only because they are products of the labour of private individuals or groups of individuals who carry on their work independently of each other. The sum total of the labour of all these private individuals forms the aggregate labour of society. Since the producers do not come into social contact with each other until they exchange their products, the specific social character of each producer's labour does not show itself except

in the act of exchange. In other words the labour of the individual asserts itself as a part of the labour of society, only by means of the relations which the act of exchange establishes directly between the products and indirectly through them, between the producers. To the latter therefore, the relations connecting the labour of one individual with that of the rest appear, not as direct social relations between individuals at work, but as what they really are, material relations between persons and social relations between things."<sup>33</sup>

In earlier periods of history, when the relations of production had a direct personal character, such a reification of social relations was obviously impossible. Even in the early stages of commodity production itself this mystification is as yet very simple and is therefore easily seen through. It is, in fact, only when commodity production becomes so highly developed and so widespread as to dominate the life of society that the phenomenon of reification of social relations acquires a decisive importance. This occurs under conditions of relatively advanced capitalism. Here the impersonalisation of productive relations is brought to its highest pitch of development. The individual producer deals with his fellowmen only through the market, where prices and amounts sold are the substantial realities and human beings merely their instruments. "These qualities vary continually, independently of the will, foresight and action of the producers. To them their own social action takes the form of the action of objects which

rule the producers instead of being ruled by them."<sup>34</sup> And this has an important effect upon bourgeois political economy. According to Marx, though, it has "indeed analysed however incompletely, value and its magnitudes and has discovered what lies beneath these forms. But it has never once asked the question why labour is represented by the value of its product and labour time by the magnitude of that value. These formulae which bear it stamped upon them in unmistakable letters that they belong to a state of society, in which the process of production has the mastery over man, instead of being controlled by him, such formulae appear to the bourgeois intellect to be as much a self evident necessity imposed by Nature as productive labour itself. Hence forms of social production that preceded the bourgeois form are treated by the bourgeoisie in much the same way as the father of the church treated pre-christian religions."<sup>35</sup>

It may be true that political economy now has outgrown the illusions of the monetary system. But is it free from superstition? "Modern economy" writes Marx, "which looks down with such disdain on the monetary system, does not its superstition come out as clear as noon-day, whenever it treats of capital?"<sup>36</sup> We see the importance Marx places on the difference between 'reality' and the 'forms' it may take : the appearances. The distortion of social relation is commented on by Marx in an interesting passage in Vol. III of Capital while discussing what he calls the 'trinity' formula of modern political economy

in which land, labour and capital are assumed to produce the income which accrues to their owners. Writes Marx :

"In capital profit, or still better capital-interest, land-rent, labour-wages, in this economic trinity represented as the connection between the component parts of value and wealth in general and its sources, we have the complete mystification of the capitalist mode of production, the conversion of social relations into things, the direct coalescence of the material production relations with their historical and social determination. It is an enchanted, perverted, topsy-turvy world, in which Monsieur le capital and Madame la Terre do their ghost-walking as social characters and at the same time directly as mere things."<sup>37</sup>

#### Role of Demand

Before pointing out the role of demand in Marx's labour theory of value it could be argued that the exaggerated importance to demand given by standard economists for price formation conveys a type of "false consciousness", hence "fetishism". Marx has made it very clear that to understand price, the basic element is value which is created at the level of production. Demand comes at the phenomenal level.

Now the question is in putting forward his theory of prices what place did Marx give to demand? True, he built up his theory abstracting from demand. Like his classical predecessors, Marx also believed that assuming constant

returns to scale, changes in demand would not bring about changes in the long run equilibrium prices of commodities. "But this is not all to say Marx ignored demand"<sup>38</sup> altogether. Marx knew very well that before a commodity could possess exchange value it had to be in demand that change in demand might cause actual market prices to deviate from equilibrium prices, that prices under monopoly were determined largely by the eagerness of the buyers, that demand determined how much of social labour force would be allocated to any particular sector.

The last point needs some clarification. If a decrease in demand for cloth brought about a situation in which the total quantity of labour actually allocated to the cloth industry was greater than the total quantity which the society required to be allocated, then the effect upon the price of cloth would be the same as if each weaver had spent more labour time than socially necessary. According to some critics, Marx here means that the amount of socially necessary labour required to produce a commodity partly depends upon demand conditions. To agree with them is to misunderstand Marx. Marx does not say that the change in demand will cause a change in the quantity of socially necessary labour. He only points out that the effect of the change in demand upon the price of cloth will be the same as if each weaver had expended more than the quantity of socially necessary labour on his product. Marx wants to make it clear that one of the conditions required to be fulfilled before a yard of cloth will sell at its value is that

total quantity of labour allocated to the cloth industry and therefore the total supply of cloth should be just sufficient to satisfy the aggregate demand. In other words supply must be equal to demand which as Meek explains, "according to Marx is just another way of saying that use value is a prerequisite of exchange value not only in the case of each individual commodity, but also in the case of whole mass of commodities."<sup>39</sup> In Volume III of Capital Marx writes :

"Every commodity must contain the necessary quantity of labour and at the same time only the proportional quantity of total social labour time must have been spent on the various groups. For the use value of things remains a prerequisite. The use value of the individual commodities depends on the particular need which each satisfies. But the use value of the social mass of products depends on the extent to which it satisfies in quantity a definite social need for every particular kind of product in an adequate manner, so that the labour is proportionately distributed among the different spheres in keeping with these social needs which are definite in quantity ... The social need that is the use value on a social scale appears here as a determining factor for the amount of social labour which is to be supplied by the various particular spheres. But it is only the same law which showed itself in the individual commodity, namely that its use value is the basis of its exchange value and thus of its surplus value.

For instance, take it that proportionally too much

cotton goods have been produced, although only the labour time necessary for this total product under the prevailing conditions is realised in it. But too much social labour has been expended in this line, in other words a portion of this product is useless. The whole of it is therefore sold only as though it had been produced in the necessary proportion. This quantitative limit of the quota of social labour available for the various sphere is but a wider expression of the law of value, although the necessary labour time assumes a different meaning here. Only so much of it is required for the satisfaction of social needs. The limitation is here due to the use value. Society can use only so much of its total labour for his particular kind of product under the prevailing conditions of production."<sup>40</sup>

If Marx recognises so clearly the importance of demand in determining the allocation of social labour, why does he treat this factor so briefly in his theory? Dr. Sweezy<sup>41</sup> has very clearly given two reasons for this.

In the first place Marx perceives that in capitalism effective demand depends on income distribution which is a reflection of the relations of production and not so much on consumer's desires. Marx gives due importance to this fact when he says :

"It should be ... noted ... that the 'social demand' i.e. the factor which regulates the principle of demand, is essentially subject to the mutual relationship of the different

classes and their relative economic positions; notably therefore to, firstly, the ratio of total surplus value to wages and secondly to the relation of the various parts into which surplus value is split up of (profit, interest, ground rent taxes etc.). And this thus again shows how absolutely nothing can be explained by the relation of supply to demand before ascertaining the basis on which this relation exists."<sup>42</sup>

And again,

"It would seem ... that there is on the side of demand a certain magnitude of social wants (of the working class) which require for their satisfaction a definite quantity of a commodity, on the market. But quantitatively the definite social wants are very elastic and changing. Their fixedness is only apparent. If the means of subsistence were cheaper, or money wages higher, the labourers would buy more of them, and a greater 'social need' would arise for them. ... The limits within which the need for commodities in the market, the demand, differs quantitatively from the actual social need, naturally vary considerably for different commodities; what I mean is, the difference between the demanded quantity of commodities and the quantity which would have been in demand at other money prices or other money or living conditions of the buyers."<sup>43</sup>

Thus it is quite obvious to approach the problem of value through the relations of production rather than through demand when it is accepted that market demand is dominated by income distribution.

A second reason for Marx's apparent neglect of demand is that Marx is primarily interested in the process of social change, more specifically, his interest is studying the "economic law of motion of modern society". From this point of view anything which is relatively stable and reacts only to changes elsewhere must be given a subordinate place in the analytical scheme. To Marx consumers' wants fall to this category and depend on the technical and organisational development of the society and not vice-versa.

"The mode of production in material life" writes Marx, "conditions the general process of social, political, and intellectual life. It is not the consciousness of men that determines their existence but (on the contrary), their social existence determines their consciousness."<sup>44</sup>

And again,

"Production thus produces consumption : (1) by providing the material of consumption, (2) by determining the mode of consumption, (3) by creating in the consumer a need for the objects which it first presents as products. It therefore provides the object, of consumption, the mode of consumption, and the urge to consume."<sup>45</sup>

However, it may be argued that consciousness of consumer geared through advertisement and other persuasions may create a demand and production may be planned accordingly for the satisfaction of such demands. But one cannot deny that to Marx production has been the determining factor. Because nature of

consumption depends on the relations of production that is the structure of property ownership and types of consumption associated with such characteristics of ownership.

Thus one can hardly deny that Marx is justified in neglecting consumer's wants if one is interested in economic change and agrees that subjective factors play a passive role in the process of change.

### Surplus Value and Exploitation

It will be proper now to re-state briefly what has been examined so far. The economic world is a huge heap of commodities. These have been produced for the use of others than for the producers in order that, they may be sold or exchanged. But in what proportion will they exchange? Marx says that they will exchange according to the amount of socially necessary labour embodied in each commodity, for this alone furnishes the element of quantitative difference between commodities. Hence the amount of socially necessary labour power in the commodities is the measure of their exchange values. The exchange value is not to be confounded with use value, which depends on the quality of articles and not on the quantity of labour time embodied in them.

Now the problem is to derive a coherent theory of exploitation by applying the labour theory of value to the capitalist society. We know that a distinctive feature of capitalism is the emergence of labour as a commodity which is bought and

sold in the market. And since in free competition all commodities sell at their value, this should be true in case of labour also. But here we come across two problems. First, if the value of the commodity depends on the value of labour embodied, on what does the value of labour itself depend? Second if competition ensures all commodities sell at their values, how can a surplus value accrue? The classical theory was unable to give any satisfactory reason for the emergence of profit. Profit was then regarded as a residual quantity the size of which was determined by the other given factors - the value of the product and the value of labour power. But the explanation was incomplete, since profit had been left as a mere residual element without being itself explained. The nature of profit, the why and wherefore of its existence as a category of income, if at all, remained unexplained. Moreover, even though there might exist a difference between the expenses of production and the value of the product, why should this difference accrue to the capitalists and his partners than to anyone else? Why in a regime of economic freedom and competition did not such a surplus tend to disappear either into rent or into wages? As far as Marx was concerned 'buying cheap and selling dear' were no real explanations. Nor inventing a new category of 'real cost' nor any alleged special productivity of capital as attempted by the post-Ricardians were real explanations to the problem. "To Marx the explanation of profit lay not in any inherent property of capital as such, not in any real cost or

productive activity contributed by the capitalist (no more than land rent was to be explained in terms of the properties of nature or any activity of the land owner). Rather explanation had to be sought in the class structure of the capitalist society - that class division into possessing and dispossessed which lay behind the appearance of equality and free contract and natural values in terms of which the laws of political economy had been framed."<sup>46</sup> Marx was bent upon depicting that exploitation was carried out not in spite of but through the much advocated 'freedom' and 'equality' of the competitive capitalism.

#### Labour vs. Labour Power

Marx tries to solve the intriguing problem of how labour being an exchange value can be the measure of exchange value as well. To do this, he makes a distinction between labour and labour power. According to him, labour as the source of value can no more have a specific value than heat can have a specific temperature. But labour power which he defines as, "the aggregate of those mental and physical capabilities existing in a human being, which he exercises whenever he produces a use value of any description,"<sup>47</sup> is itself a commodity whose value like that of any other commodity is determined by the labour time socially necessary for its reproduction.

"The value of labour-power" says Marx, "resolves itself into the value of a definite quantity of the means of

subsistence. It therefore varies with the value of these means or with the quantity of labour requisite for their production."<sup>48</sup> Also these means of subsistence must include, "the means necessary for the labourer's substitutes i.e. his children, in order that this race of peculiar commodity-owners may perpetuate its appearance in the market."<sup>49</sup>

For educated skilled labour, the costs of education in terms of the value of commodities must be added. As has been pointed out, the expenses of education of different degrees of skill enter pro-tanto into the total value spent in its production.<sup>50</sup>

Unlike the other commodities, the value of labour-power has a moral and social element in it, which would vary from country to country over time.

"In contradistinction therefore to the case of other commodities, there enters into the determination of the value of labour-power a historical and moral element. Nevertheless, in a given country at a given period, the average quantity of the means of subsistence necessary for the labourer is practically known."<sup>51</sup>

It must be emphasised here that the subsistence level is not a physical minimum. It increases over time due to the increasing prosperity of society. Marx writes :

"The minimum limit of the value of labour-power is determined by the value of commodities without the daily supply of which the labourer cannot renew his vital energy, consequently

by the value of those means of subsistence that are physically indispensable. If the price of labour power falls to this minimum it falls below its value, since under such circumstances it can be maintained and developed only in a crippled state. But the value of every commodity is determined by the labour-time requisite to turn it out so as to be of normal quality."<sup>52</sup>

The capitalist pays the worker the value of his labour power and owns the worker's labour power temporarily. Apparently there seems to be nothing wrong in this. Marx's description of this deserves quotation in full.

"The consumption of labour-power is completed", writes Marx, "as in the case of every other commodity, outside the limits of the market or of the sphere of circulation. Accompanied by Mr. Moneybags and by the possessor of labour-power, we therefore take leave for a time of this noisy sphere, where everything takes place on the surface and in view of all men, and follow them both into the hidden abode of production, on whose threshold there stares us in the face, 'No admittance except on business'. Here we shall see, not only how capital produces, but how capital is produced. We shall at last force the secret of profit making.

This sphere that we are deserting within those boundaries the sale and purchase of labour-power goes on, is in fact a very Eden of the innate rights of man. There alone rule Freedom Equality, Property and Bentham. Freedom because, both buyer and seller of a commodity, say of labour power are

constrained only by their own free will. They contract as free agents, and the agreement they come to, is but the form in which they give legal expression to their common will. Equality because, each enters into relation with the other as with a simple owner of commodities, and they exchange equivalent for equivalent. Property because each disposes only of what is own. And Bentham, because each looks only to himself. The only force that brings them together and puts them in relation with each other, is the selfishness, the gain and the private interest of each. Each looks to himself only and no one troubles himself about the rest, and because they do so, do they all, in accordance with the preestablished harmony of things, or under the auspices of an all-shrewed providence, work together to their mutual advantage, for the common weal and in the interest of all.

On leaving this sphere of simple circulation or of exchange of commodities, which furnishes the 'Free Trader Vulgaris' with his views and ideas and with the standard by which he judges a society based on capital and wages, we think we can perceive a change in the physiognomy of our dramatis personae. He, who before was the money owner, now strides in front as capitalist, the possessor of labour-power follows as his labourer. The one with an air of importance, smirking, intent on business, the other timid and holding back, like one who is bringing his own hide to market and has nothing to expect but - a hiding."<sup>53</sup>

Thus the relations in the sphere of circulation are apparently on an equal footing, but this is only a superficial account. Marx writes : "He (labourer) and the owner of money meet in the market, and deal with each other as on the basis of equal rights, with this difference alone, that one is buyer, the other is seller, both therefore equal in the eyes of law. The continuance of this relation demands that the owner of the labour-power should sell it only for a definite period, for if he were to sell it rump and stump, once for all, he would be selling himself, converting himself, from a freeman into a slave from an owner of a commodity into a commodity."<sup>54</sup>

Thus in finding labour power "our friend, Money bags, must be so lucky as to find, within the sphere of circulation, in the market, a commodity whose use value possesses the peculiar property of being a source of value, whose actual consumption, therefore, is itself an embodiment of labour and consequently a creation of value."<sup>55</sup>

As we have already seen, the value of labour-power is the value of the product necessary to keep the labourer alive and able-bodied and to rear a fresh generation of workers. Since what the worker is paid is an amount equal to the cost of his subsistence the exchange is equivalent. We cannot observe the unequal relations between labour and capital. But there is an unequal relationship and exploitation of the workers by the capitalists. In order to observe this we need not study only the superficial market relations which do not reveal the

reality. To get the answer, we have to study the process of creation of surplus value.

### Origin of Surplus Value

The capitalist enters the market with money and buys machinery, materials, labour powers and other requisites necessary for production. He then combines these in a process of production which results in a certain mass of commodities which are again thrown upon the market. According to Marx, the capitalist buys what he buys at their equilibrium values and sells what he sells at its equilibrium value yet at the end of the process he is left with more money than what he started with. Somewhere along the line more value or surplus value has been created. How is this possible?

This cannot be the result of mere circulation, because as Marx elaborates in Chapter V of Capital Volume I, if all were to raise prices by a certain amount, what one gains as a seller, he will lose as a buyer, and the only result will be higher prices all around from which no one will benefit or to put it in a different manner if one capitalist makes profit at the expense of another capitalist by indulging in sharp practices, one man's gain is another man's loss, it is a zero-sum game. In aggregate circulation cannot explain the existence of profits. Marx writes :

"Turn and twist then as we may, the fact remains unaltered. If equivalents are exchanged no surplus value results, and

if non-equivalents are exchanged, still no surplus-value, circulation or the exchange of commodities begets no value."<sup>56</sup>

The surplus value can never be generated due to the materials entering into productive process. The value which the materials possess at outset is transformed to the product at the conclusion. They do not possess the power to expand their own value. The same is true in case of machines and buildings. The only difference between buildings and machinery and materials is that whereas the former transfer their value to the final product more slowly over a succession of production periods the latter transfer their value all at once. It is true that materials, machineries etc. possess physical productivity in that labour working with them produces more than without them. But physical productivity under no circumstances should be confused with value productivity. To make it absolutely clear machinery and materials do not possess value productivity. "This leaves us with only one possibility, namely that labour power must be the source of surplus value."<sup>57</sup>

The worker has sold his labour power to the capitalist at its value, that is to say, the capitalist pays to the worker as wages a sum corresponding to the value of the workers means of subsistence. Now the capitalist has control over the worker's labour power. The worker in the process of production has lost his freedom : he must do what the capitalist commands. The capitalist would control the worker so that he works in an efficient way so that he produces as much as possible using as

little inputs and with due care to and attention to the machinery. The products of labour are the property of the capitalist. The capitalist having paid the exchange value of labour power has gained its use value.

Let us assume that the value of the worker's means of subsistence is equal to the product of 5 hours labour. This implies that after production has continued for 5 hours the worker has added to the value of materials and machinery used up - a value which we know reappears in the product - an additional value sufficient to cover his own means of subsistence. At this point the capitalist would be able to sell the product for just enough to compensate his outlays. But why should a working day be limited to 5 hours? After all the capitalist has bought the labour power and he can very well make the labourer work a 10 hour day. In effect the worker is working for 5 hours to maintain himself and 5 hours for the capitalist without recompense, which the latter can claim as his own without in any way being accused of misappropriation.

Writes Marx in capital :

"The fact that half a day's labour is necessary to keep the labourer alive during the 24 hours does not in any way prevent him from working a whole day. Therefore, the value of labour power and the value which that labour power creates in the labour process are two entirely different magnitudes, and this difference of the two values was that that the capitalist had in view when he was purchasing the labour power. The useful

qualities that labour power possesses and by virtue of which it makes yarn or boots were to him nothing more than a 'conditio sine qua nun', for in order to create value labour must be expended in a useful manner. What really influenced him was the specific use value which this commodity possesses of being a source not only of value but of more value than it has himself. This is the special service which the capitalist expects from labour power, and in this transaction he acts in accordance with the 'eternal laws' of the exchange of commodities. The seller of labour power like the seller of any other commodity realises its exchange value and profits with its use value. He cannot take the one without giving the other.\*<sup>58</sup>

In this context Marx distinguishes between necessary labour and surplus labour. In a capitalist economy the product of necessary labour accrues to the labourer in the form of wages while the product of surplus value is appropriated by the capitalist. The phenomena of necessary and surplus labour are phenomena which are present in all societies except the most primitive ones. As we shall see later, the ratio of surplus labour to necessary labour is a measure of the rate of surplus value which is a matter of life and death for the capitalists.

#### Constant and Variable Capital

The value of any commodity consists of three component parts. They are constant capital denoted by  $c$ , variable capital denoted by  $v$  and surplus value which is represented by  $s$ .

The value of a commodity may, in keeping with this notation be written in the following formula.

$$\text{Total value} = c + v + s$$

Constant capital includes raw materials and machinery. They are called constant capital because they simply transfer their value to the final product, while only a fraction of the value of fixed capital gets used up in the process of production and transferred to the final product, the value of raw materials gets transferred in full. For instance, if the durability of a machine is 10 years, then one-tenth of it approximately gets used up or worn out every year. "This is similar to Keynes' user cost of capital which refers to the amount of capital that depreciates in the process of production."<sup>59</sup>

Variable capital refers to that part of capital which alters in value during the process of production, namely labour power. As we have already discussed, labour power produces value to replace itself in addition to creating surplus value. Marx defines the two concepts as follows :

"That part of capital, then, which is represented by the means of production, by the raw material, auxiliary material, and the instruments of labour, does not in the process of production undergo any quantitative alteration of value. I therefore call it the constant part of capital, or more shortly constant capital.

On the other hand, that part of capital, represented by

labour-power does in the process of production undergo an alteration of value. It both reproduces the equivalent of its own value and also produces an excess, a surplus value which may itself vary, may be more or less according to circumstances. This part of capital is constantly being transformed from a constant into a variable magnitude. I therefore call it the variable part of capital, or shortly, variable capital."<sup>60</sup>

To summarise, constant capital is the value of raw materials and machines used up in the production process. Variable capital is the value of labour power. It is worth noticing here that these definitions differ from the terms fixed capital and circulating capital which are popular among the bourgeois economists.

In Volume I of Capital, Marx assumes that there is a unit turnover of capital. In other words all constant capital is used up in the process of production. There are two important points in these definitions. In the first place both constant and variable capital are defined in the value domain, although Marx expresses them, sometimes in money units. Secondly constant capital is defined in terms of current values, not historical values. Thus technological change may affect the values of constant and variable capital.

Let us now take a numerical example of the production process with constant and variable capital. In order to produce a commodity, linen, we require raw materials with a value of 100 labour hours, machinery which lasts for 10 years with a

value of 200 labour hours and variable capital of 40 labour hours. The workers are assumed to work 80 hours : the capitalist gets the use value of labour power. The value of the commodity produced is  $100 + 20 + 80 = 200$  labour hours. The capitalist in the market bought constant and variable capital at its value. Nevertheless, he has produced surplus value worth of 40 labour hours i.e.  $200 - (100 + 20 + 40) = 40$  labour hours. These values can be converted into money units. The surplus value arises with free markets and competition.

Marx writes :

"Every condition of the problem is satisfied, while the laws that regulate the exchange of commodities, have been in no way violated. Equivalent has been exchanged for equivalent. For the capitalist as buyer paid for each commodity for the cotton, the spindle and the labour power, its full value. He then did what is done by every purchaser of commodities, he consumed their use value .... This metamorphosis, this conversion of money into capital takes place both within the sphere of circulation and also outside it, within the circulation because conditioned by the purchase of labour-power in the market; outside the circulation, because what is done within it is only a stepping stone to the production of surplus-value, a process which is entirely confined to the sphere of production."<sup>61</sup>

The magnitude of surplus value is independent of the amount of constant capital employed in the production process as it simply transfers values. A ratio of crucial significance

in the analysis of exploitation is the rate of surplus value which is a ratio of surplus value created to the value of variable capital and is denoted by  $s'$

$$s' = s/v = \text{rate of surplus value}$$

The rate of surplus value is the capitalist form of what Marx calls the degree of exploitation, that is to say, the ratio of surplus labour to necessary labour. Thus in a working day of 10 hours if 5 hours are necessary labour and 5 hours are surplus labour and if the product of surplus labour is appropriated by an exploiting class, the rate of exploitation will be 5 hours/5 hours = 100%.

Under capitalism, the rate of surplus value assumes value form. If we assume that in one hour the worker produces a value of £ 1, the rate of surplus value will be £ 5/£ 5 = 100 per cent.

"Both the ratios,  $s/v$  and  $\frac{\text{surplus labour}}{\text{necessary labour}}$  express the same thing in different ways : in the one case by reference to materialised, incorporated labour, in the other by reference to living fluent labour."<sup>62</sup>

The two concepts, rate of exploitation and the rate of surplus value, can be used interchangeably but whereas the former is the more general concept applicable to all exploitative societies, the latter holds good only under capitalism.

The rate of surplus value is of crucial importance in determining the rate of profit which is nothing but the ratio

of surplus value to total capital outlay.  $P$  (rate of profit) =  $s/(c + v)$ . According to Marx, the direct motive and the aim of capitalist production is to extract the greatest possible amount of surplus value and consequently to exploit labour power to the greatest possible extent.

Thus the capitalist ceaselessly strives to increase the rate of surplus value in order to increase his rate of profit. The principal methods he adopts as follows:

- a) Lengthening the working day,
- b) Forcing the labourer to submit to a wage cut,
- c) Raising the productiveness of labour.

The first establishes the total time to be divided between necessary and surplus labour and the second and third together determine how much of this time is to be counted as necessary labour. In case of an increase in the length of the working day, Marx speaks of the production of absolute surplus value, while either a lowering of the real wage or an increase in productivity, leading to a reduction of necessary labour, results in the production of relative surplus value.

#### Productive and Unproductive Labour

Before going to end this chapter, it will not be out of place to give an outline of Marx's distinction between productive and unproductive labour. M. Blaug dismisses the whole question when he says, "Marx's distinction between productive and unproductive labour ... stands or falls with the labour

theory of value, and has no interest apart from it."<sup>63</sup> But, as we have seen and Mrs. Robinson<sup>64</sup> rightly recognises, the reverse is true. Without a coherent theory of productive and unproductive labour, the labour theory of value itself fails, since without such a distinction the crucial proposition that surplus value arises in production and not in circulation becomes meaningless.

Marx applies the distinction between productive and unproductive labour solely to capitalism and points out that a quite different distinction might be called for in other types of society. Value judgements are entirely irrelevant, since "there is no question of moral or other standpoints in the case of either the one or the other."<sup>65</sup> The production of use value is a necessary condition for the performance of productive labour, but in this context use value means simply that there is a demand for whatever is produced.

According to Marx, in a capitalist economy where production is for exchange, labour power used in the production process creates surplus value. Labour that creates surplus value is productive labour. Labour used in the process of circulation does not produce surplus value and is unproductive labour. The distinction is independent of whether the commodity is a tangible product like cloth or an intangible product like the services of a teacher. Marx criticises Adam Smith for his emphasis on the labour producing material objects as productive and the labour producing services as unproductive.

Marx says : "An actor, for example, or even a clown ... is a productive labour if he works in the service of a capitalist (an entrepreneur) to whom he returns more labour than he receives in the form of wages; while a jobbing tailor who comes to the capitalist's house and patches his trousers for him, producing a mere use value for him, is an unproductive labourer. The former's labour is exchanged with capital, the latter's with revenue. The former's labour produces a surplus value, in the latter the revenue is consumed."<sup>66</sup>

The same type of work is productive or unproductive depending on the context in which it is performed. Marx's tailor, when employed by a capitalist in a factory is a productive labourer; his clown is unproductive labourer if it is engaged to give a private performance for a wealthy man.

To come back to the question : how can production based on the exchange value determined by pure labour time lead to the exchange value of labour power being less than the exchange value of the products of this same labour power?

As Mandel explains : "Theoretically the problem ... comes down to the distinction between the exchange value of labour power (wages, the value of all the commodities needed for the reconstitution of labour power) and its use value (which consists in providing its buyer with unpaid labour, beyond the point at which it has produced the equivalent of its own exchange value, the cost of its own upkeep). Historically, the problem comes down to an analysis of how the modern proletariat

was formed, the creation of an industrial reserve army, the separation of the craftsmen and peasants from their means of labor, the transformation of all the land into private property (abolition of common land etc.) - that is to the creation of a social class obliged by its destitution and insecurity to agree to sell its labour power at the market price determined by the law of value".<sup>67</sup>

This is what Marx tried to explain and therein lies his unique contribution: Schumpeter remarks : "His (Marx's) merit and achievement were that, he perceived the weakness of the various arguments by which the tutors of the mass mind before him had tried to show how exploitation came about and which even to-day supply the stock in trade of the ordinary radical. None of the usual slogans about bargaining power and cheating satisfied him. What he wanted to prove was that exploitation did not arise from individual situations occasionally and accidentally but that it resulted from the very logic of the capitalist system, unavoidably and quite independently of any individual intention."<sup>68</sup>

#### Notes and References

1. Ira Gerstein. "Production, Circulation and Value, The Significance of Transformation Problem in Marx's Critique of Political Economy", Economy and Society, Vol.5, No.3, Aug. 1976, p. 248.
2. J. A. Schumpeter. History of Economic Analysis, (Ed) E. B. Schumpeter, George Allen and Unwin Ltd., 1954, p. 390.

Schumpeter explains the reference to "Ricardo's followers" in this way : "Ricardo is the only economist whom Marx treated as a master ... Marx used Ricardian apparatus, he adopted Ricardo's conceptual lay-out and his problems presented themselves to him in the form that Ricardo had given to them. No doubt he transferr-ed these forms and arrived in the end at widely different conclusions. But he always did so by starting from and criticising Ricardo. Criticism of Ricardo was his method in his purely theoretical work."

3. K. K. Dasgupta. Essentials of Marx's Capital, Sterling Publishers Ltd., 1984, p. 9.
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5. While dealing with the history of the theory of commodities Marx states in "A Contribution to the Critique of Political Economy", that the analysis of commodities according to their two fold aspect of use-value and exchange-value is, "the decisive outcome of the research carried on over a century and a half by classical school of political economy beginning with William Petty in Britain and Boisguillerbert in France and ending with Ricardo in Britain and Sismondi in France", A contribution to The Critique of Political Economy, Progress Publishers, Moscow, 1977, p. 52.
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9. Ibid., Ch.I, p. 36.
10. P. M. Sweezy. Theory of Capitalist Development Modern Reader Paper Backs, New York, 1968, p. 27.
11. Marx. Capital, Vol. I, op.cit., Ch.I, pp. 37-38.
12. Maurice Dobb. Political Economy and Capitalism, George Routledge and Sons Ltd., London, 1944, pp. 9-10.
13. Marx. Capital, Vol.I, op.cit., Ch.I, p. 38.
14. Ibid., Ch.I, p. 39.
15. Ibid., Ch.I, p. 39.

16. Ibid., Ch.I, p. 40.
17. Ibid., Ch.I, p. 43.
18. Ibid., Ch.I, p. 44.
19. Ibid., Ch.I, p. 45.
20. Sweezy. op.cit., p. 29.
21. Karl Marx. Poverty of Philosophy, International Publishers, 1971, p. 48.
22. A footnote here runs like this : "The reader must note that we are not speaking here of the wages or value that the labourer gets for a given labour time, but of the value of the commodity in which that labour time is materialised. Wages is a category that as yet, has no existence at the present stage of our investigation."
23. Marx. Capital, Vol.I, Ch.I, p. 44.
24. Smith and Ricardo gave the same opinion. See Wealth of Nations, p. 134 and The Works and Correspondence of David Ricardo, Vol.I, pp. 20-21 respectively.
25. Marx. Capital, Vol.I, op.cit., Ch.VI, p. 172.
26. Ibid., Ch.VII, pp. 197-198.
27. M. C. Howard and J. E. King. The Political Economy of Karl Marx, Longman, Great Britain, 1977, p. 130.
28. Meek. op.cit., p. 172.
29. Sweezy. op.cit., p. 43.
30. Meek. op.cit., p. 173.
31. Marx. A Contribution to the Critique of Political Economy, 1977, p. 60.
32. Marx. Capital, Vol. I, Ch.I, p. 72.
33. Ibid., Ch.I, pp. 72-73.
34. Ibid., Ch.I, p. 75.
35. Ibid., Ch.I, pp. 80-81.
36. Ibid., Ch.I, pp. 82-83.

37. Capital, Vol. III, Foreign Language Publishing House, Moscow, 1962, Ch. XLVIII, p. 809.
38. Meek. op.cit., p. 178. Pat Sloan also voices the same opinion in Marx and orthodox Economists, Basil Blackwell, London, 1973, p. 28.
39. Ibid., p. 179.
40. Sweezy. op.cit., pp. 48-49 (Quoted).
41. Ibid., pp. 49-51.
42. Marx. Capital, Vol. III, op.cit., p. 178.
43. Ibid., Ch. X, p. 185.
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45. Ibid., p. 197.
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47. Marx. Capital, Vol. I, Ch. VI, p. 167.
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51. Ibid., Ch. VI, p. 171.
52. Ibid., Ch. VI, p. 173.
53. Ibid., Ch. VI, pp. 175-176.
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55. Ibid., Ch. VI, p. 167.
56. Ibid., Ch. V, p. 163.
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## CHAPTER III

### TRANSFORMATION PROBLEM

It has been pointed out in the last chapter that according to Marx the value of a commodity depends on the amount of socially necessary labour, reduced to a common measure of value i.e. a unit of unskilled labour which goes into its production. Now the problem is to convert values into prices which according to Marx is nothing but the 'phenomenal form' of the former. In the Marxist literature this conversion is known as the "transformation problem" and it has been at the centre of controversies since, the publication of Vol. III of Capital. For many critics of Marx his failure to show that prices are proportional to values is a sufficient reason for abandoning his apparatus. Bohm-Bawerk in his "Karl Marx and the close of his system" was the first to point out that Marx had asserted that the prices are proportional to value in Vol. I of Capital and promised to show this solution explicitly which he failed to do so. In Vol. III, Marx was stuck with an example where prices in different departments were not proportional to values. In his brilliant polemical work, Bohm-Bawerk tried to show that the various reasons Marx advanced in order to salvage this result was not adequate. Values if they were based on labour content alone could not explain prices and profits in the real world. If labour

values could not explain the structure of prices and profits in the real world, then the theory of surplus value which asserted that capitalism was based on exploitation of workers also fell.

But is it correct as alleged by Bohm-Bawerk, H. B. Parkes and others that Marx was not aware of the very problem itself? To what extent is it reasonable to say that Marx failed to transform values into prices in a logically convincing manner? Are there no alternative methods to solve the transformation problem, maintaining the logical consistency of Marxian labour theory of value so as to justify the generation of surplus value and hence the theory of exploitation? Is it not possible to show at least the logical impeccability or the operational validity of the labour theory of value? These are the relevant questions which will be taken up in the present chapter. Let us first start with understanding the problem itself.

#### What is the Transformation Problem?

The value of any commodity according to Marx is the socially necessary labour expended in its production, which as we saw in the preceding chapter, has three component parts : constant capital (c), variable capital (v) and surplus value (s),  $w \text{ (value)} = c + v + s$ .

Marx assumes that in general the ratio of  $s/v$  which he calls the rate of surplus value or the rate of exploitation is the same for all workers. The argument he gives is as follows. The value of labour-power is the same for all workers

because it is the abstract labour time needed to produce these commodities which are essential to reproduce the labourer. By definition of the social nature of value this does not vary from worker to worker. On the other hand, surplus value is the difference between new value created in a given length of the working day at given intensity and this value, assuming that the reduction from concrete to abstract labour is the same for all workers. Now since work has 'neither meaning nor dignity' under capitalism, despite the attempts of bourgeois ideology to convince people otherwise, perfectly free wage labour will search for the shortest working day with lowest intensity. Furthermore this is not merely a passive search but is part of the content of the class struggle at the economic level, which for example, establishes a normal i.e. fixed and uniform working day. Under these conditions all workers produce the same amount of surplus value and so the rate of exploitation is uniform everywhere. Perhaps it would be more accurate to assert that there is a tendency in the capitalist mode of production towards equalisation of the rate of exploitation.

Another tendency could also be found in the capitalist mode of production, that of the equalisation of the rate of profit. The search of the capitalist for the highest rate of profit is the essence of the capitalist mode of production. No capital can be satisfied unless it produces the highest profit possible and on this basis capitalist competition takes place. The competition is not confined to intrabranh competition

between producers of identical or substitutable products, but proceeds across branch lines. The competition is not for consumer's money but for the highest rate of profit. The result of this general competition is an equalisation of the rate of profit. Marx defines the rate of profit as the ratio of surplus value to total capital i.e.  $r = s/(c+v)$ . Rearranging the terms of the equation gives  $r = s/v(1-c/c+v)$ .<sup>1</sup> Since the rate of exploitation is the same for all labourers independent of industry, it follows that  $r$  will be uniform only if the organic composition of capital<sup>2</sup> i.e.  $c/c+v$  is the same for all industries. When Marx put forward his labour theory of value in Capital Vol. I, its validity was based on the uniformity of organic composition throughout the economy. But there is no reason to expect the organic composition to be uniform. The chemical industry for example uses more complex and costly machinery and fewer workers proportionately than does say textile industry. The existence of different organic compositions of capital would give rise to different rates of profit. However, as we have pointed out above, competition ensures total equilibrium by equalising the rate of profit everywhere. Thus it is said that there is a conflict between an analysis based on Marx's theory of value and a characteristic feature of the capitalist mode of production, the formation of general rate of profit.

The problem can be better understood with the help of the tables Dr. Sweezy gave in the Ch. VII of his book 'Theory of Capitalist Development'.<sup>3</sup>

Let us start with a case where the transformation problem is a non-problem : the case of equal organic composition of capital. The industry is divided into three major departments. Department I produces means of production, Department II produces consumption goods of the workers, whereas Department III produces luxury goods needed by the capitalists. If we assume a rate of surplus value as 100 per cent, then we have a situation as shown in Table 3.1.

Table 3.1

Dept.	Con- stant capi- tal (c)	Vari- able capi- tal (v)	Sur- plus value (s)	Value c+v+s	Rate of surplus value (s/v)	Organic composi- tion of capital (c/c+v)	Rate of profit (s/c+v)
I	200	100	100	400	100%	66.67%	33.33%
II	100	50	50	200	100%	66.67%	33.33%
III	100	50	50	200	100%	66.67%	33.33%
Total	400	200	200	800	100%	66.67%	33.33%

As depicted above, the capitalist in Department I spends 200 on constant capital, 100 on variable capital which produces surplus value of 100. The total value becomes 400. The organic composition of capital which is nothing but  $c/(c+v) = 200/300 = 66.67\%$ . The rate of profit =  $s/(c+v) = 100/300 = 33.33\%$ . Both the organic composition of capital and the rate of profit

remain uniform over the departments. As a result there would be no tendency for capitalists to move their capital from one department to another in search of a higher rate of profit. Hence this is an equilibrium situation. All commodities sell at their values. The conditions of simple reproduction are fulfilled : total amount of constant capital produced (400) equals the amount of constant capital required (400), total wages (200) also remain equal to the quantity of wage goods produced (200) and the output of luxury goods (200) is just equal to surplus value of all departments (200).

Now let us remove the unrealistic assumption that organic compositions of capital are equal, to make our analysis more realistic. We assume as before that the rate of exploitation is uniform across the departments i.e. 100 per cent. The situation is depicted in Table 3.2.

Table 3.2

Dept.	Con- stant capi- tal (c)	Vari- able capi- tal (v)	Sur- plus value (s)	Value c+v+s	Rate of surplus value (s/v)	Organic composi- tion (c/c+v)	Rate of profit (s/c+v)
I	250	75	75	400	100%	77%	23%
II	50	75	75	200	100%	40%	60%
III	100	50	50	200	100%	66.67%	33.33%
Total	400	200	200	800	100%	66.67%	33.33%

In Table 3.2 the organic composition of capital in case of the Department I is made higher and in Department II it is made lower, whereas Department III has been left unchanged. As before total production is 800, and the conditions of simple reproduction are still satisfied as far as the output of three departments is concerned. If we look at the new rates of profit which now differs from department to department we can realise the effect of changing the organic composition of capital. Previously the rates of profit were all equal at 33.33 per cent, they now stand 23 per cent, 60 per cent and 33.33 per cent respectively. Obviously this cannot be a point of equilibrium as the capitalists would be tempted to go to Department II where the rate of profit is the maximum. Such a transfer of capital from one department to the other would upset the whole balance and equilibrium will be established only when the rates of profit yielded by all the departments are equalised. In this context writes Marx, "there is no doubt that aside from unessential accidental and mutually compensating distinctions, a difference in the average rate of profit of the various lines of industry does not exist in reality and could not exist without abolishing the entire system of capitalist production."<sup>4</sup>

So when the rate of profit remains equal and organic composition of capital differs from industry to industry 'Prices of Production'<sup>5</sup> cannot be proportional to values. In other words the law of value breaks down. This is the crux of the transformation problem. Marx writes, "it would seem as though

the theory of value were irreconcilable with the real phenomena of production, so that we should have to give up the attempt to understand these phenomena."<sup>6</sup>

This admission by Marx in Vol. III was seized upon by the critics of Marx to raise their penchant criticisms against him. To Bohm-Bawerk this was the greatest contradiction on which the Marxian system floundered. For he wrote, "I cannot help myself. I see here no explanation and reconciliation of contradiction, but the bare contradiction itself. Marx's third volume contradicts the first. Theory of average rate of profit and the prices of production cannot be reconciled, with the theory of value. This is the impression which must, I believe, be received by every logical thinker. And it seems to have been very generally accepted."<sup>7</sup> Prof. Samuelson also points out the same thing : "In Volume III of Capital Marx faced upto the contradiction."<sup>8</sup>

#### Was Marx Unaware of the Problem?

Bohm-Bawerk alleged that Marx's analysis of transformation was an after thought tackled in response to an error of this labour theory of value. H. B. Parkes voiced the same opinion when he wrote : "The reason for the assertion that Marx was not trying to explain prices is that when Marx came to write the 3rd volume of Das Kapital, he found that some of the theories which he had advanced in the first volume were inapplicable."<sup>9</sup>

But Marx was quite conscious of the dilemma into which the theory of value led. "In fact the first glimpse of Marx's subsequent analysis is found in Grundrisse (pp. 435-36) in a passage written in December 1857 or January 1858. This analysis permeates Marx's Critique of Classical Political Economics in Theories of Surplus Value, which was written before the publication of Capital Vol. I. A large part of Marx's theory is thus based on and inexplicable without his analysis of transformation."<sup>10</sup>

Besides as Prof. Sweezy points out, since the first draft of Vol. III was completed before the publication of Vol. I of Capital, the views held by some critics that the discussion in Vol. III of prices of production is no more than a clumsy effort to cover up previously unrecognised error does not hold water.

Marx deliberately confined the discussion of Transformation Problem to 3rd Vol. of Capital.

If Marx was quite aware of this transformation problem before Vol. I was published, why is there no clear statement of the issue there? This mystery does have a known solution. The definitive answer is provided in an exchange of letter between Marx and Engels. As they were making the final corrections for Vol. I, Engels mildly rebuked Marx for his failure to deal with the issue in Vol. I. In a letter dated 26th June 1867, he wrote :

"As for the origin of surplus value, the following : the

manufacturer and with him the vulgar economist will at once object : If the capitalist pays the worker only the price of six hours for his twelve hours of working times, no surplus value can originate from this, for then every hour of labour of the factory worker is only equal to half an hour of labour - equal to what is paid for it - and enters into the value of the product of labour as worth only that much ... No matter how terribly shallow this argument is, no matter how much it identifies exchange value and price, value of labour and wages, no matter how absurd its assumption that one hour of labour enters into value as only half an hour of it is paid for as only half an hour; I marvel that you have not taken this into consideration already, for it will quite certainly be held up to you at once and it is better to disprove it in advance. Perhaps you will return to it in the next (Printer's Proof) sheet. ..."

To this Marx replied on the next day : "... As for the inevitable objections you mention of the philistine and vulgar economist ... (The answer to this problem) presupposes (among other matters) ... that the conversion of surplus value into profits, of profit into average profit etc. is set forth. This presupposes a previous account of the process of the circulation of capital, since the turnover of capital etc. plays a part here. Hence this matter can be set forth only in third book.

If I were to silence all such objections in advance I should ruin the whole dialectical method of development. On the contrary, this method has advantage of continually setting

traps for these follows which provoke them to untimely demonstration of their assinity."<sup>11</sup>

Thus Marx deliberately and consciously confines his discussion of the so-called transformation problem to Vol. III of Capital. In fact his approach in Vol. I and Vol. III is in keeping with his method of 'successive approximation' i.e. he begins his analysis with certain assumptions in Vol. I and at a latter stage in Vol. III drops these assumptions in order to make the analysis more realistic and practical. Failing to perceive the methodological principle at work, remarks James F. Becker, "Boehm mistook models resting upon different assumptions for an inconsistency in reasoning."<sup>12</sup>

### Marx's Solution

Assuming the figures as shown in Table 3.2, the unequal organic composition of capital causes the profit rates to differ. The existence of unequal rates of profit causes movement on the part of the capitalist to earn the highest possible rates of profit, until no one can improve his position by a further move, a state of affairs which will be reached only when the rate of profit is the same for every industry. The actual amount of production remains unchanged since the total amount of labour hours expended also remain unchanged. Likewise total amount of capital value and surplus values produced remain unchanged. The prices of commodities and the division of surplus value, which is created according to the amount of variable capital will be changed now. The share of the

capitalist from the pool of the surplus value will be determined according to their total capital invested but not on the basis of variable capital as before. The prices of departments with below average rate of profit must rise (be more than proportional to values) and prices of departments with above average profit rate must fall, until profit rates are equalised. All the changes take place in the variables in the price domain as a result of the circulation process. As Marx puts it :

"So far as the profits are concerned, the various capitals are just so many stock holders in a stock company in which shares of profit are uniformly divided per 100 so that profits differ in the case of the individual capitalist only in accordance with the amount of capital invested by each in the aggregate enterprise i.e. according to his investment in social production as a whole, according to the number of his shares."<sup>13</sup>

It is important to note that as a result of the circulation process the profits obtained by the capitalist of one department are no longer proportional to the surplus value created in that department. The origin and nature of profit is mystified by the circulation process.

So far as prices of production are concerned they will be made up of the capital expended in production plus a profit, calculated as a certain percentage of the capital outlay. This percentage is the average rate of profit and is obtained by dividing total surplus value by total capital. The system in value terms will appear as follows:

Department I	$C_1 + V_1 + S_1 = W_1$
Department II	$C_2 + V_2 + S_2 = W_2$
Department III	$C_3 + V_3 + S_3 = W_3$
Totals	$C + V + S = W$

The average rate of profit  $P = S/C + V$

When we convert the above scheme into price terms we obtain the result as follows:

Department I	$C_1 + V_1 + P (C_1 + V_1) = P_1$
Department II	$C_2 + V_2 + P (C_2 + V_2) = P_2$
Department III	$C_3 + V_3 + P (C_3 + V_3) = P_3$
Totals	$C + V + P (C + V) = P$

According to Marx,  $P (C + V) = S$  which implies that the total surplus value is identical with total profit, and further total price equals total value though individual prices and values differ. When we apply this method to the data given in Table 3.2 we get the following : (Table 3.3) :

If we compare the Table 3.3 with that of the Table 3.2 we will find that the first four columns of the Table 3.3 reproduce data from Table 3.2. Moreover, we notice that the price of commodities produced in Department I has increased by 33.33 whereas in case of Department II it has diminished by

that of prices. In transforming values into prices, it is inadmissible to exclude from the recalculation the constant and variable capital invested in the various spheres of production."<sup>14</sup> Perhaps Marx foresaw this objection. He says, "Aside from the fact that the price of a particular product, let us say that of capital B, differs from its value because the surplus value realised in B may be greater or smaller than the profits added to the price of the products of B, the same circumstance applies also to those commodities which form the constant part of capital B, and indirectly also its variable part as the labourers' necessities of life. So far as the constant capital is concerned, it is itself equal to cost price plus profit, and this profit may again be greater or smaller than the surplus value for which it stands. And for the variable capital the average daily wage is indeed always equal to the actual value produced in the number of hours the labourers must work to produce the necessities of life."<sup>15</sup> But this does not pose any formidable difficulty to Marx. As he says, "However, this always resolves itself to one commodity receiving too little of the surplus-value while another receives too much, so that the deviations from the value which are embodied in the prices of production compensate one another. Under capitalist production, the general law acts as the prevailing tendency only in a very complicated and approximate manner, as a never ascertainable average of ceaseless fluctuations."<sup>16</sup>

Table 3.3

Dept.	Constant capital (c)	Vari- able capital (v)	Sur- plus value (s)	Value C+V+S	Av.rate of pro- fit $P =$ $S/C+V$	Profit	Price C+V+P	Devia- tion
I	250	75	75	400	33.33%	108.33	433.33	+33.33
II	50	75	75	200	33.33%	41.67	166.67	-33.33
III	100	50	50	200	33.33%	50	200	0

the same amount. The price of commodities produced in Department III remains unaltered as its average rate of profit is equal to the social average. However, the totals of the profits and prices of all departments are respectively equal to the former totals of surplus value and value.

#### Problems with Marx's Solution

Marx's demonstration of values into prices has come in for sharp criticisms.

#### Bortkiewicz's Critique

According to Bortkiewicz the procedure employed by Marx to transform the values into prices is wrong. "We would involve ourselves in internal contradictions" writes Bortkiewicz, "by deducing prices from values in the way in which this is done by Marx. He made the mistake of carrying over certain magnitudes without alteration from the table of values into

that of prices. In transforming values into prices, it is inadmissible to exclude from the recalculation the constant and variable capital invested in the various spheres of production."<sup>14</sup> Perhaps Marx foresaw this objection. He says, "Aside from the fact that the price of a particular product, let us say that of capital B, differs from its value because the surplus value realised in B may be greater or smaller than the profits added to the price of the products of B, the same circumstance applies also to those commodities which form the constant part of capital B, and indirectly also its variable part as the labourers' necessities of life. So far as the constant capital is concerned, it is itself equal to cost price plus profit, and this profit may again be greater or smaller than the surplus value for which it stands. And for the variable capital the average daily wage is indeed always equal to the actual value produced in the number of hours the labourers must work to produce the necessities of life."<sup>15</sup> But this does not pose any formidable difficulty to Marx. As he says, "However, this always resolves itself to one commodity receiving too little of the surplus-value while another receives too much, so that the deviations from the value which are embodied in the prices of production compensate one another. Under capitalist production, the general law acts as the prevailing tendency only in a very complicated and approximate manner, as a never ascertainable average of ceaseless fluctuations."<sup>16</sup>

Thus Bortkiewicz observes, Marx tries to defend his position by two arguments : "firstly that divergences of prices from values compensate each other; and secondly, that the capitalist economy is a field in which strict laws have never an undisputed validity."<sup>17</sup>

According to Bortkiewicz, Marx's line of defence is weak. Against Marx's first point Bortkiewicz argues, "the fact that the positive divergences of prices from values match the negative ones, or in other words, that total value equals total price"<sup>18</sup> "appears not as a permissible, though arbitrary assumption, but as the consequence of a series of mutually incompatible identifications of certain magnitudes of price with the corresponding magnitude of value."<sup>19</sup>

Bortkiewicz also dismisses Marx's second point as equally unconvincing. As he puts it, "The law of economics, including the law of equal rate of profit do not, indeed, even find a pure concrete expression. In actual fact divergences from the norm occur under the influence of various factors which are inherent in the theoretical model itself and which have nothing to do with any disturbing factors,"<sup>20</sup> as Marx seems to have in mind. According to Bortkiewicz, "Marx's error is due to the illogical method he used in deriving prices from values."<sup>21</sup>

### Sweezy's Critique

Similar reactions against Marx's solution have been expressed by Dr. Sweezy. According to him, "The Marxian method

of transformation results in a violation of the equilibrium of simple Reproduction."<sup>22</sup> This will be seen from an inspection of Table 3.3. The total quantity of constant capital used up in production still equals 400 but the constant capital produced in Department I is now priced at 433.33. The total wage bill of three departments amounts to 200 but the output of wage goods is priced at only 166.67. By a mere coincidence the total surplus value still covers the output of luxury goods. A satisfactory procedure of transforming values into prices should not disturb the condition of simple reproduction. "Going from value calculation to price calculation has no connection with the question whether the economic system as a whole is stationary or expanding. It should be possible to make the transition without prejudicing this question one way or the other."<sup>23</sup> Sweezy is not ready to ignore this fact as nothing serious. This is evident from his remark : "only one conclusion is possible, namely, that the Marxian method of transformation is logically unsatisfactory."<sup>24</sup>

#### Steedman's Critique

To Steedman, Marx's failure to transform the prices of inputs is a 'minor problem', which can be easily dealt with. According to him, "the central objection is that, even if input prices are transformed, Marx's solution is internally inconsistent."<sup>25</sup> In an economy during a particular period of time say, a year, there will be a bundle of goods going to the capitalist which may constitute net investment and capitalist's

consumption a bundle of commodities which replace produced means of production i.e. the physical aspect of constant capital and a bundle of commodities going to workers as wages i.e. the physical aspect of variable capital. In order to form a rate of profit it is clear that one must value these three bundles in a consistent way. Marx values them in terms of embodied labour, to obtain aggregate surplus value  $S$ , constant capital  $C$  and variable capital  $V$ , and then define the rate of profit in value terms as  $S/C+V$ . One has to value the three bundles in terms of prices and then divide profit by total capital, to get the rate of profit in money terms.

When all prices are proportional to values i.e. to quantities of embodied labour, then, it will be clear, the two values of profit (in value terms and money terms) would be the same. However, in general, the two rates of profit must differ once prices diverge from values which is precisely the situation that Marx was concerned with.

Now the pertinent question is, if the two rates differ, which is the important one and which will affect capitalists decisions and actions? Besides, which rate of profit will tend to be uniform, as between industries in a competitive economy? It is actually the money rate of profit which affects the capitalist's decisions and tends to be equalised. The value rate of profit used by Marx is of no concern to the capitalists, it will not be known to them and there is no force acting to make it equal, as between industries. The implication is

clear;  $S/C+V$  is not a significant rate of profit in a competitive economy and it does not equal the actual money rate of profit.

Marx defines the average rate of profit in terms of values but then shows that prices diverge systematically from values, which implies that the rate of profit in terms of prices of production cannot equal the value rate of profit. Hence his argument is "internally inconsistent".

Assuming Marx's stand that total surplus value remains equal to total profit, Steedman's argument can be logically refuted. If the rate of profit in case of individual industries differs from the average rate of profit of the economy as a whole in both directions, the sum total of the differences will be zero. Symbolically,

$$\sum (\pi_i - \pi_0) = 0 \quad \text{---} \quad (1)$$

where  $\pi_i$  stands for rate of profit of particular industries.  $\pi_0$  stands for the average rate of profit of the economy as a whole.

Similarly, if every value  $W_i$  differs from  $P_i$ , that is prices of production and the aggregate effect is

$$\sum (W_i - P_i) = 0 \quad \text{---} \quad (2)$$

assuming that the deviations are in both directions, relations (1) and (2) make it clear that Steedman's objection does not seem to be that convincing.

### Transformation of Input Prices

As has been mentioned Marx is criticised for his failure to transform the input prices though for Steedman its a 'minor problem'. It has occasionally been argued, however, that this is no problem at all and that it is quite proper not to transform input prices. Two points need to be made : first that input prices do have to be transformed in any sensible solution and second that Marx was fully convinced that input prices have to be transformed. His arguments could be understood from the following three passages of Capital III, Part II.

"... the fact that under capitalist production, the elements of productive capital are, as a rule, 'bought on the market, and that for this reason their prices include profit which has already been realised, hence include the price of production of the respective branch of industry, together with profit contained in it, so that profit of one branch of industry goes into the cost price of another."<sup>26</sup>

"We had originally assumed that the cost price of a commodity equalled the value of the commodities consumed in its production. But for the buyer the price of production of a specific commodity is its cost price, and may thus pass as cost-price into the prices of other commodities. Since the price of production may differ from the value of a commodity it follows that the cost price of a commodity ... containing this price of production of another commodity may also stand above or below that portion of its total value derived from

the value of the means of production consumed by it. It is necessary to remember this modified significance of the cost-price, and to bear in mind that there is always the possibility of an error if the cost-price of a commodity in any particular sphere is identified with the value of the means of production consumed by it."<sup>27</sup>

"We have seen how a deviation in prices of production from values arises from :

- 1) adding the average profit instead of the surplus-value contained in a commodity to its cost price;
- 2) the price of production, which so deviates from the value of a commodity, entering into the cost price of other commodities as one of its elements, so that the cost price of a commodity may already contain a deviation from value in those means of production consumed by it, quite aside from a deviation of its own which may arise through a difference between the average profit and the surplus value."<sup>28</sup>

However, Marx dropped the matter without pursuing it further. Nevertheless the problem continued to bother him and he came back to it in theories of surplus value "where he devoted two full pages"<sup>29</sup> to demonstrate the transformation of values into prices. But he failed to prove his point in a logically convincing manner.

### Alternate Solutions

The failure of Marx to solve the transformation problem adequately, led critics to question the operational validity

of the labour theory of value. The simplest method for the demonstration of the operational validity of the theory would have been to measure by means of a calculus the total expenditure of labour in commodities produced and then correspond them with actual prices. But that is not possible. Hence arose the necessity of finding an alternative and coherent method of transformation.

### Bortkiewicz

The Bortkiewicz solution<sup>30</sup> starts with three equations of the value scheme that describe the conditions of simple reproduction.

$$\begin{aligned} \text{Department I (Means of production)} - C_1 + V_1 + S_1 = \\ C_1 + C_2 + C_3 \end{aligned}$$

$$\begin{aligned} \text{Department II (workers' consumption goods)} - \\ C_2 + V_2 + S_2 = V_1 + V_2 + V_3 \end{aligned}$$

$$\begin{aligned} \text{Department III (luxury goods)} - C_3 + V_3 + S_3 = \\ S_1 + S_2 + S_3 \end{aligned}$$

If we assume the price of a unit of constant capital is  $x$  times its value and the price of a unit of wage goods is  $y$  times its value and the price of a unit of luxury goods is  $z$  times its value, if we further call the average rate of profit  $r$ , and if we state as a condition of the problem that the relations appropriate to simple reproduction should continue to remain after the transformation of values into price as before, then the following equations must hold:

$$\text{I } C_1X + V_1Y + r(C_1X + V_1Y) = (C_1 + C_2 + C_3) X$$

$$\text{II } C_2X + V_2Y + r(C_2X + V_2Y) = (V_1 + V_2 + V_3) Y$$

$$\text{III } C_3X + V_3Y + r(C_3X + V_3Y) = (S_1 + S_2 + S_3) Z$$

Here we have three equations and four unknowns (X, Y, Z and r) whereas for a unique solution the number of equations is required to be equal to the number of unknowns. Bortkiewicz reduces the unknowns to three by making two convenient admissible assumptions: (a) that the value scheme is expressed not in terms of units of labour-time but in terms of gold, and (b) that gold is the money-commodity and is produced in Dept. III. One unit of gold of fixed weight serves as the unit of value in the value scheme and as unit of account in the price-scheme. In this case, Z the price-value ratio of Department III may reasonably be taken as 1, that is,  $Z = 1$ .

Thus by assuming a relation of proportionality between price and value in the case of commodities of the first two departments and a relation of equality between them in the third, Bortkiewicz makes his equational system determinate. Now we can get the values of X, Y and r. "Upon applying these solutions to various sets of figures it is seen that total profits comes out equal to total surplus value, but the total prices normally diverge from total values. Neither the equality nor the inequality, however, has anything more than formal significance."<sup>31</sup> As Bortkiewicz himself notes, "that the total price exceeds the total value arises from the fact

that Department III from which the good serving as value and price measure is taken has a relatively low organic composition of capital. But the fact that total profit is numerically identical with total surplus value is a consequence of the fact that the good used as value and price measure belongs to Department III."<sup>32</sup>

### Winternitz

A similar but a simpler solution comes from Winternitz. Winternitz does not accept the view that the conditions of simple reproduction should necessarily form part of the conditions for any solution. He starts with the usual value scheme in three departments.

### Values

$$\begin{array}{ll} \text{I} & C_1 + V_1 + S_1 = a_1 \\ \text{II} & C_2 + V_2 + S_2 = a_2 \\ \text{III} & C_3 + V_3 + S_3 = a_3 \end{array}$$

### Assumptions

- 1) The price-value ratio for means of production = X
- 2) The price-value ratio for wage goods = Y
- 3) The average rate of profit = r
- 4) and when  $a_1$  varies by X then  $C_1, C_2, C_3$  also vary by X and that when  $a_2$  varies by Y, then  $V_1, V_2, V_3$  also vary by Y.

On the basis of these assumptions, Winternitz arrives at the following simple equational system.

Prices of Production

$$I) C_1X + V_1Y + S_1 = a_1X$$

$$II) C_2X + V_2Y + S_2 = a_2Y$$

$$III) C_3X + V_3Y + S_3 = a_3Z$$

$$\text{Now } C_1X + V_1Y + r(C_1X + V_1Y) = a_1X$$

$$\text{or } (1 + r)(C_1X + V_1Y) = a_1X$$

$$\text{or } (1 + r) = a_1X/C_1X + V_1Y$$

$$\text{similarly } C_2X + V_2Y + r(C_2X + V_2Y) = a_2Y$$

$$\text{or } (1 + r)(C_2X + V_2Y) = a_2Y$$

$$\text{or } (1 + r) = a_2Y/C_2X + V_2Y$$

$$\text{Thus } \frac{a_1X}{C_1X + V_1Y} = \frac{a_2Y}{C_2X + V_2Y}$$

From this relation we get easily the solutions for X, Y and r. In order to determine the price-level for the system as a whole, Winternitz makes an additional assumption that,

$a_1X + a_2Y + a_3Z = a_1 + a_2 + a_3$  i.e. the sum of prices = sum of values. In his opinion, this is "the obvious proposition in the spirit of the Marxian system."<sup>33</sup> Solutions for X, Y and Z are then yielded immediately without any special

difficulty. When applied to various sets of figures, these solutions naturally bring out the sum of prices equal to the sum of values, but total profit normally diverges from total surplus value.

In non-technical language the Winternitz solution boils down to : "if Department I has a higher organic composition of capital than Department II, prices in the former will tend to rise relatively to those in the latter. This raising of the price of the constituents of  $c$  relatively to  $v$  will lower the profit rate in Department II (and conversely raise it in Department I by cheapening the constituents of  $v$ ). The change in price ratio will continue until the profit-rate is the same in the two departments."<sup>34</sup>

### Meek

In Meek's judgement the calculation by Winternitz brings an undoubted improvement and a simplification to the method of Bortkiewicz. However, Meek goes beyond the purely mathematical problem in reminding us of the 'historical' importance to Marx, of the transformation problem into prices. According to him, "He (Marx) proceeded ... to transform values into prices, not only because this course appeared to be logically necessary but also because he believed that history itself had effected such a transformation."<sup>35</sup> To substantiate his argument he quotes Marx :

The exchange of commodities at their values or approximately at their values, "... requires ... a much lower stage

than their exchange at their prices of production which requires a relatively high development of capitalist production ...

Aside from the fact that prices and their movements are dominated by the law of value, it is quite appropriate, under these circumstances to regard the value of commodities not only theoretically but also historically, as existing prior to the prices of production. This applies to conditions, in which the labourer owns his means of production and this is the condition of the land-owning farmer and of the craftsmen in the old world as the new. This agrees also with the view formerly expressed by me that the development of product into commodities arises through the exchange between different communes, not through that between the members of the same commune. It applies not only to this primitive condition, but also to subsequent conditions based on slavery or serfdom, and to the guild organisation of handicrafts, so long as the means of production installed in one line of production maintain to a certain degree, the same mutual relations as foreign countries or communistic groups."<sup>36</sup>

According to Meek, Marxists could exclude this problem by allowing a 'renaissance' of the classical labour theory formula. It would then have to be emphasised, that the labour-value formula would remain applicable even in capitalism, by making additions or subtractions. Meek himself doubts whether even in the precapitalistic society, where monopolies and low factor mobility, and so on existed, the labour value formula has ever

been widely applicable. He then simplifies the problem by asking whether "history did not simply bring about a transformation from one type of supply price to another". This would merely imply that in the historical process one would have to switch over from one scheme of calculation to another.

### Seton

Seton demonstrated how Bortkiewicz's solution devised for a three sector model could be extended to an n-sector model. After completing the mathematic presentation of the transformation theorem, he added some fundamental considerations founded upon comments by Meek. Seton opines that in the Marxist conception it is not the logical and mathematical element which prevails but rather the historical. "Thus in early stages of capitalism" writes Seton, "when this transformation had already begun, the rate of profit obtainable in capital goods industries (when organic composition is held to be relatively high) will not as yet have reached equality with that of consumer goods industries. Capitalists will therefore prefer to invest their resources in the latter until the transformation has gone for enough to equalise the rate of profit everywhere. In Marxist ideology, therefore, the process of capitalist industrialisation is bound to begin with the development of light industry (textiles, sugar etc.) until a comparatively advanced stage has been reached..."<sup>37</sup>

## Conclusion

"The whole upshot of the discussion over more than half a century" concludes Dobb, "is that Marx was quite correct in supposing that prices of production as the actual 'equilibrium prices' of a competitive economy could be regarded as being determined by the conditions and relations of production, including in the latter the basic exploitation ratio which in value terms is expressed as the rate of surplus value."<sup>38</sup>

F. Seton, towards the end of his study also concludes that the analysis fully vindicates "the internal consistency and determinancy of Marx's conception of the transformation process"<sup>39</sup> and the formal inferences he drew from it.

It is true that Marx made an error in trying to show that a system of price calculation can be derived from a system of value calculation by using an average rate of profit calculated directly from value magnitude. This error loses much of its importance when we realise that the function of arithmetical illustration in capital was to simplify arguments rather than to prove them. "To suggest that any argument in capital stands or falls", Meek writes, "by Marx's arithmetical illustration is to betray a serious misunderstanding of his method, and it would be equally wrong headed ... to set out to rescue Marx from his errors with the aid of mathematical formulae."<sup>40</sup> K. May almost voices the same opinion when he writes, "Marx ... used calculation primarily as illustrations to accompany verbal arguments which combined process and cross section analysis in

a way which could hardly be fitted to the mathematical technique available even to-day."<sup>41</sup>

To come back to the alternative solutions of the transformation problem put forward by different economists, almost all the methods discussed above aimed at finding a coefficient of transformation between value and price and in deriving an equational system. This is found to be logically sound and operationally admissible. But operational admissibility never means operational possibility. In spite of this deficiency in the whole exercise the main issue in the controversy whether labour theory of value is methodologically acceptable has been very well tackled by solving the correspondence question. It should be emphasised that the theory of exploitation cannot be rejected on logical grounds as the correspondence is made possible between value and price. Being visible only on the surface price does not explain exploitation but transformation then justifies explanation of exploitation by value theory.

### Notes and References

$$\begin{aligned}
 1. \quad r &= S/C+V \\
 &= SV/V(C+V) \\
 &= \frac{SC + SV - SC}{V(C+V)} \\
 &= \frac{S(C+V) - SC}{V(C+V)}
 \end{aligned}$$

$$\begin{aligned}
 &= \frac{S(C+V)}{V(C+V)} - \frac{SC}{V(C+V)} \\
 &= \frac{S}{V} - \frac{S}{V} \cdot \frac{C}{C+V} \\
 &= \frac{S}{V} \left(1 - \frac{C}{C+V}\right)
 \end{aligned}$$

2. The expression for the organic composition of capital used by Marx is  $C/V$ . The expression  $C/C+V$  moves in the same direction as  $C/V$ . This has the advantage of showing the related changes in the organic composition the rate of surplus value and rate of profit.
3. P. M. Sweezy. Theory of Capitalist Development, Modern Reader Paper Books, New York, 1970, pp. 110-111.
4. Capital, Vol. III, Ch. VIII, p. 151.
5. Marx defines prices of production as the cost price plus an average rate of profit on the capital employed. It is "the same thing which Adam Smith calls natural price, Ricardo prices of production or cost of production and the physiocrats prix necessaire, because it is in the long run a prerequisite of supply, of the reproduction of commodities in every individual sphere" (Capital, Vol. III, Ch. X, p. 194). Marx goes on to define cost price as follows: "The portion of the value of the commodity which replaces the price of the consumed means of production and labour-power, only replaces what the commodity costs the capitalist himself. For him it therefore represents the cost price of the commodity." (Capital, Vol. III, Ch. I, p. 26).
6. Capital, Vol. III, Ch. VIII, p. 151.
7. Eugene Von Bohm Bawerk, Karl Marx and the close of his system Ed. by Paul Sweezy, Augustus M. Kelley, New York, 1949, p. 30.
8. P. A. Samuelson. "Understanding the Marxian Notion of Exploitation, A Summary of so-called Transformation between Marxian Values and Competitive Prices", Journal of Economic Literature, Vol. IX, No.2, June, p. 413.
9. Quoted by Sweezy, op.cit., p. 111.
10. M. C. Howard and J. E. King. The Political Economy of Karl Marx, Longman, Essex, 1977, p. 173.

11. Quoted by W. J. Baumol. "The Transformation of Values into Prices, What Marx really meant (An interpretation and comment)", *Journal of Economic Literature*, Vol.12, 1974, p. 61.
12. James F. Becker. *Marxian Political Economy, An Outline*, Cambridge University Press, London, 1977, p. 154.
13. Karl Marx in K. K. Dasgupta. *Essential of Marxist Capital*, Sterling Publishers Private Limited, New Delhi, 1984, p. 284.
14. L. V. Bortkiewicz. *Value and Price in the Marxian System*. Retranslated and reproduced in *International Economic Papers No.2*, Ed. Peacock, Lutz, Turvey and Henderson, MacMillan and Company Limited, London, 1952, p. 9.
15. Karl Marx in K. K. Dasgupta. *op.cit.*, p. 285.
16. *Ibid.*, pp. 285-286.
17. Bortkiewicz. *op.cit.*, p. 10.
18. *Ibid.*, p. 10.
19. *Ibid.*, p. 12.
20. *Ibid.*, p. 13.
21. *Ibid.*, p. 11.
22. Sweezy. *op.cit.*, p. 114.
23. *Ibid.*, p. 114.
24. *Ibid.*, p. 115.
25. I. Steedman. *Marx after Sraffa*, New Left Book, London, 1977, p. 29.
26. *Capital*, Vol. III, Ch. 9, pp. 157-158.
27. *Ibid.*, Ch. 9, p. 162.
28. *Ibid.*, Ch. 12, pp. 202-203.
29. Sweezy. *op.cit.*, p. 116.

30. Von. L. Bortkiewicz. "On the correction of Marx's Fundamental Theoretical Construction in the Third Volume of Capital" in Bohm-Bawerk, Karl Marx and the close of his system, edited by Paul Sweezy, Augustus M. Kelley, New York, 1949, pp. 199-221.
31. R. L. Meek. "Some Notes on the Transformation Problem", Economic Journal, Vol.63, 1956, p. 101.
32. Bortkiewicz. op.cit., p. 205.
33. J. Winternitz. "Values and Prices : A solution to the so-called Transformation Problem", Economic Journal, Volume 58, 1948, p. 279.
34. M. Dobb. On Economic Theory and Socialism, Collected Papers, Routledge and Kegan Paul Ltd., London and Boston, 1972, p. 276.
35. Meek. op.cit., p. 105.
36. Quoted by Meek. ibid., p. 105.
37. F. Seton. "The Transformation Problem", Review of Economic Studies, No.24, 1956-57, p. 157.
38. M. Dobb. Marx's Capital and its Place in Economic Thought, Science and Society, Vol. 31, 1967, p. 535.
39. Seton. op.cit., p. 160.
40. Meek. op.cit., Footnote 1, p. 103.
41. K. May. "Value and Price of Production : A Note on Winternitz Solution", Economic Journal, December, 1948, p. 598.

## CHAPTER IV

### CRITIQUE OF THE LABOUR THEORY OF VALUE OF MARX

#### Introduction

Among the critics of Marx's Labour Theory of Value, Bohm-Bawerk, the "head and front of scientific Austrian school of political economy"<sup>1</sup> draws our attention most importantly for two reasons. "First because, Bohm-Bawerk is so far superior to his comrades in arms and his authority is acknowledged by them to such an extent, that it can hardly be claimed to be unfair to these critics to pick Bohm-Bawerk as an example of them all. Second because there seems to be quite a good deal of unanimity among these critics, on this particular point (i.e. labour theory of value) and the arguments advanced by the others are either directly borrowed from Bohm-Bawerk, very often with an acknowledgement of receipt or are variations on the same tune deserving no particular attention."<sup>2</sup> Hence it is quite obvious that, any discussion on the critique of Marxian labour theory of value, should start with the great Bohm-Bawerk. It is proposed, in the current chapter to discuss first some of the criticisms of Bohm-Bawerk through which he tried to contest Marx and then pass on to a few other critics, like Pareto, Bernstein, Lindsay, Croce, Lange, Schlesinger, Joan Robinson and so on.

However, while examining the views of these authors, the present author had to refrain himself from an exhaustive treatment of all the contentions of these authors regarding labour theory of value of Marx. That would be the subject of a book itself or rather several volumes. Neither in competence nor in scope of the present study such an ambitious effort is permissible.

Along with the critiques, the inherent inadequacies of some of the arguments have been laid bare, sometimes somewhat elaborately, in other cases briefly. The purpose of this chapter is not to counterpose arguments of the Marxist economists against the critics as rebuttal. But Boudin and Meek have been singled out for outstanding contributions in defence of the Marxian position. Mainly, a critical appreciation of the critiques have been the main focus. The limitations of availability of materials has also been an important consideration in not providing further treatment to some authors like Pareto, Lange, Knight and so on. Also the author has to make a choice of what to include and what to leave aside as he had to deal with a number of issues.

#### Bohm-Bawerk

Bohm-Bawerk starts out by stating that unlike his predecessors, Marx was the first who not only asserted the labour theory of value but also wanted to prove it. However, he does not appreciate the way in which Marx did it. According to him, two ways were open to Marx : first to analyse the psychological

motives of the process of exchange, second to examine the actual experience of the relations of exchange. It is a matter of regret argues, Bohm-Bawerk, that Marx adopted neither of these two and chose a purely logical deduction and dialectic argumentation. In Aristotle, Marx found the idea that exchange cannot take place without equality and equality cannot exist without commensurability. Hence when two commodities exchange, there must be a common factor of equal amount existing in the two which will represent their exchange value.

The process of distillation by means of which Marx obtains the sought for common factor in labour is not at all satisfactory. It is, argues, Bohm-Bawerk, just like putting white balls in an urn and trying to draw out one of the same. That is, what, Marx has done by limiting his field of investigation to 'commodities' i.e. products of labour as opposed to goods which may be the subject of exchange. It is claimed that by limiting his analysis from the outset to the products of labour only, he prejudged the case and forced the result of living labour as the only common something and that if the analysis were to be made on all exchangeable goods including the gifts of nature the result would be different. However, Marx is extremely careful not to mention that he excludes from his investigation a part of the exchangeable goods, "he manages to glide with eel-like dialectic skill over the difficult points of his argument."<sup>3</sup>

Let us now stop for a moment recapitulating Bohm-Bawerk's

criticism and try to ascertain the validity of the arguments of the "leader of the Psychological school".

It is perfectly true that, Marx did not try to discover "the psychological motives of exchange which remain unchanged throughout the history of mankind"<sup>4</sup> could not possibly have anything to do with the problems confronted by Marx. But it is not true that Marx neglected the actual experiences of exchange relation. Nowhere in the economic writings of Marx, one can find a mention of the 'economic man' nor is any kind of abstract man part of his discussion. Throughout his work he confines himself to the doings of real, live man in the real historic situation known as the capitalist system.

In this context, it is worth mentioning the observation made by Louis Boudin a great American authority on Marx of yester years. After comparing the opening passages of Smith's "Wealth of Nations", Ricardo's "principles", Jevon's "The Principle of Political Economy" and Bohm Bawerk's book, Boudin makes some significant observations on Marx's labour theory of value and in the process contests Bohm Bawerk's position. He says, referring to Marx, "with one mighty stroke of the pen all the conditions and limitations of the problem are given, the picture put in its historical setting".<sup>5</sup> He continues, "history with its actual, real facts and relations does not exist for them."<sup>6</sup> (Smith, Ricardo, Jevon & Bohm Bawerk). Further for Marx, "there is no soaring in the air, superior to space and time. No generalisations that may fit everything in

general and nothing in particular. But a real, live situation, with a definite burning problem."<sup>7</sup> That is why he delves right into the heart of the problem and declares, "our investigation must therefore begin with the analysis of a commodity".<sup>8</sup>

Bohm-Bawerk also finds in Marx's analysis the supposed neglect of usefulness as influencing the exchange-value of commodities. As we have already discussed, in order to find out a common something, that is, being products of labour in the exchangeable commodities, Marx has made abstraction from its use value as it is manifested in concrete labour. He has also kept out of sight both the useful character of the various kinds of labour and the concrete forms of that labour common to all commodities. Bohm-Bawerk does not agree with this. It is true, he argues, that in the exchange relation of commodities, the particularly useful qualities of the articles exchanged do not matter. But what about their general usefulness which remains common to them all? Why then labour is given undue importance as against general usefulness?

Louis Boudin's refutation of the above argument of Bohm-Bawerk is commendable. He states : "It is true that as regards both labour and usefulness, we abstract in the exchange relation from the particular labour and particular usefulness, and leave only general labour and general usefulness. But in abstracting from the particular utility we have abstracted from the quality of the utility and have shown the exchange relation to be purely a quantitative relation. But general usefulness

cannot be measured as to quantity .... If you cannot measure it, it cannot serve as a measure of value. And if it cannot serve as a measure of value, it cannot be the cause of value, for we judge the cause of value from the changes in value as shown by the measure of value."<sup>9</sup> But that is not the case with abstract general human labour which can be measured quantitatively. Hence there is nothing wrong in Marx's analysis. Moreover, Marx does not disregard usefulness altogether. He is of the opinion that, no commodity can have exchange value without having its use value.

Next comes the allegation that the Marxian labour theory of value does not take nature into consideration, and it denies the participation of nature in the production of goods. Could Marx be guilty of this? The answer is an emphatic no. Marx is well aware of the participation of nature in the production of goods. But one should be careful to note that when Marx speaks of the participation of nature he refers to wealth or bodies of commodities and when he speaks of labour as its source of measure, it is always exchange value that he has reference to. He does not claim that labour is the only source of wealth but he rightfully denies the participation of nature in the creation of exchange value. The reason is even if nature has existed from time immemorial the combination of nature and labour has failed to produce a commodity out of a mere good, until the appearance of the capitalist system. There must be something inherent in capitalist system that is responsible for this,

and should be called to account for it. That is why Marx went in search of the social phenomenon which distinguishes the capitalist system from its predecessors. Ofcourse Marx did not deny the existence of limited production for exchange in pre-capitalist social formations. But there also, nature did not bestow an exchange value automatically.

Bohm-Bawerk further contests Marx's assertion that if the use-value of the commodities be disregarded there remains in them, only one other quality, that of being products of labour. He stoutly questions : "Is that really the only common property left? Have not the exchange-value possessing goods still left to them, for instance, the common property of being scarce in comparison with the want for them? Or that they are the subject of supply and demand? Or that they are appropriated? Or that they are natural products?" And he adds, "why then ... may not the principle of value reside in any one of these common properties as well as in the property of being products of labour?"<sup>10</sup>

We have already discussed about the question of nature. The issue of appropriation can be easily dismissed, since being appropriated is not a common property of the goods but a condition of relation of men with reference to them.<sup>11</sup> Being scarce in comparison with a want is the something as being the subject of supply and demand. The very fact that a commodity is produced implies the scarcity of a commodity, though it is not commensurable between two commodities. It can at most be

deduced from the allocation of the total labour time available to the society. This indirect procedure brings us back to the claim of Marx that commodities possess a common property i.e. being products of labour.

The next allegation of Bohm-Bawerk is on the basis of the 'experiences'. According to him the Marxian rule that the value of a commodity depends on the amount of labour expended in their production has so many exceptions that it can hardly be called a rule. In this respect, Bohm-Bawerk is supported by economists like Prof. Knies and Prof. Masaryk.

They argue : all the bounties of nature are admitted to be free as the air, provided they are available in plenty. When natural objects are scarce, they have exchange value although no labour was expended on them. Bohm-Bawerk asks; what about the value of a lump of gold which falls from the cloud on the land of a farmer? Or what about the silver mine which the farmer accidentally discovers on his land? And what is the difference between the wood produced by human labour in an artificial grove and wood grown in a forest? enquires Prof. Knies. Prof. Masaryk asks : how is it that the virgin soil, a free gift of nature is bought and sold in the market?

Boudin meets these objections in a convincing manner. He divides the above-mentioned objects into two categories. Category one includes the objects whose attainment without labour are purely accidental and category two includes those whose attainment without labour is the only way in which they

are attainable, as they cannot be produced by labour. The value of the articles of the first category does not contradict the law of value as laid down by Marx. The value of the lump of gold falling from the sky like all other commodities will depend on the socially necessary labour which must be spent in its reproduction. As it is known to everybody the cloud does not have the habit of showering gold on earth and the normal way of obtaining gold is to spend labour on its production. The same argument holds good in case of silver found in the mine, and the wood grown in the forest.

However, it is entirely different with the articles of second category, the most typical of which is land. In case of land, no labour was spent for its production and no labour can be spent for its reproduction. Still, argues Boudin, it does not contradict Marx's theory as the latter makes it clear that land has no value as it is not produced by labour. The fabulous prices paid for land is merely a capitalisation of the rent. In other words, it is not the value of the land that the price paid for it represents but the price of the rent. The transaction which formally and nominally appears as a sale of land is in reality the discount of rent. "The virgin soil", writes Boudin, "is not bought and sold. It is only after the soil has been husbanded and raped and has given birth to bastard rent, that, it becomes the subject of purchase and sale, not before."<sup>12</sup>

Another objection raised by Bohm-Bawerk is in connection

with Marx's method of reduction of skilled labour to unskilled labour. According to him such a reduction fails to note that the difference is not just one of degree but of very nature. For example the difference between the labour of a sculptor and that of a stone-cutter is not just a question of degree, the two are entirely different types of labour. To corroborate his claim that this reduction is being made constantly, Marx resorts to experience. But his reference point is the actual exchange relations themselves. The basis for this is that "their value makes them equal to the product of unskilled labour". To Bohm-Bawerk, this is nothing but circular reasoning that is, commodities exchange the way they do, because experience shows they do exchange this way. Bohm-Bawerk's arguments do not sound convincing. The reduction of skilled to unskilled labour has already been discussed and it has been noted that the reduction does not involve a circular reasoning.

There is no end to Bohm-Bawerk's criticisms. He continues to argue that even in case of those commodities whose exchange values coincide on the whole with the labour expended in their production, this process is not always found to be maintained. Due to the changes of supply and demand, the exchange value of even such commodities may rise or fall below the level of value which corresponds to the amount of labour incorporated in them. Hence this is another exception to Marx's theory.

With due respect to Bohm-Bawerk it may be pointed out that the above argument merely shows his failure to grasp the

difference between value and price in the system of Marx. "To speak of individual or actual price (for that is what Bohm-Bawerk refers to) which according to Marx is usually different from value, as an exception to value, reveals a constitutional inability to understand Marxian theory...".<sup>13</sup>

To say that the labour theory of value enunciated by Marx is free from limitations is as good as making a wrong statement. And for that matter is there any economic theory free from limitations? To say that all the allegations raised by Bohm-Bawerk are logically sound and valid is certainly to make a blunder.

Bohm-Bawerk has no conception of Marx's analysis of the structure of capitalist mode of production. His analysis is confined to the critique of the value theory. He criticises Marx, because, labour time does not explain the prices at which commodities exchange. He forgets that Marx's labour theory of value is not concerned about establishing labour as the substance which makes possible and explain all exchanges. Money in a capitalist society is the material form in which exchange of equivalents takes place. These exchanges are simply the derived effects of the material forms of exchange in a definite society. The labour theory of value deals with these social relations, with the exchange of products of labour. The category of value is not simply a means of accounting for the exchangeability of all commodities but a part of the law of distribution of social labour. Marx

arrives at exchange relations as a result of penetrating the essence of social relations of capitalism. The fault of Bohm-Bawerk is that he criticises Marx for the "contradictions" inherent in labour theory of value, equating Marx's objectives with his own.

### Pareto

Pareto's critique which bore, "the authoritative stamp of the Lausanne school" is more or less similar in content to Bohm-Bawerk's. Though his criticisms are many and varied we shall select here those which have direct bearing on the theory of value. In Volume III of Capital, Pareto points out, Marx lays down three conditions which have to be fulfilled if the prices at which commodities are exchanged are to correspond with their values : "(1) The exchange of the various commodities to cease being purely accidental or occasional. (2) So far as the direct exchange of commodities is concerned, these commodities have to be produced on both sides in approximately sufficient quantities to meet mutual requirements. (3) So far as selling is concerned no natural or artificial monopoly (would prevail) to enable either of the contracting sides to sell commodities above their value or to compel them to undersell. By accidental monopoly we mean a monopoly which a buyer or seller acquires through an accidental state of supply and demand."<sup>14</sup>

Two objections have been raised here. In the first place, Pareto points out, that there was hardly any stipulation of

these conditions when Marx, put forward the equation, "I quarter of corn : a kilo of iron", in the first volume of Capital in order to establish that exchange ratios correspond to labour time ratios. Pareto wonders whether the introduction of the conditions not included in the original statement is admissible at a latter stage.

Pareto goes on to argue that the second condition laid down by Marx merely means that exchange ratios will correspond to labour time ratios only when supply and demand balance one another. This is, according to Pareto, is nothing but to assume away a thing which cannot be easily explained. He writes : "we see that, it is always the same process of reasoning. When certain circumstances get in our way we suppress them by hypothesis, doing our best to make this hypothesis pass for reality."<sup>15</sup>

Against the first argument of Pareto it may be pointed out that the conditions by no means, contradict the original statement. They only serve to give the law of value the definiteness it needed and define the field of its application. Marx's final observation on the problem of value is; "whatever the manner in which the prices of various commodities are first mutually fixed and regulated, their movements are always governed by the law of value."<sup>16</sup>

The second criticism of Pareto / also misses the mark. As we have already mentioned, the labour theory of value was used by Marx not to throw light on actual market conditions but on the

course and development of capitalism. That is why it was not required to explain any prices other than those which are ultimately balanced by supply and demand, i.e. equilibrium prices.

There is still one more criticism which is as follows. According to Pareto, in Vol. I Marx assumes that the amount of profit received by each capitalist depends upon the quantity of variable capital which he invests. In Vol. III Marx says that in reality each capitalist shares profit on the basis of the total quantity of capital which he employs. This apparent contradiction is resolved by Marx, as the organic composition of capital becomes equal in all branches of production under the pressure of competition. Therefore, Pareto concludes, it means the same thing whether we say that the surplus value is proportionate to variable capital or it is proportionate to the total capital which he employs.

Marx, however, never argues in this way. The 'problem of transformation' arises because competition does not equalise the organic composition of capital but the rate of profit. It has also to be remembered that in Vol. I, Marx was analysing "Capitalism in General" and in Vol. III, "Competitive Capitalism".

### Bernstein

Bernstein's arguments against the labour theory of value may be summarised as follows.

According to the Marxist theory, surplus value is the pivot of the economy of a capitalistic society. But to understand surplus value one must first know what value is. The value of a commodity in Marxian theory is determined by the socially necessary labour spent on them according to time. "But with the analysis of this measure of value" argues Bernstein, "quite a series of abstractions and reductions is necessary",<sup>17</sup> as a result of which so far as "single commodities or a category of commodities comes into consideration, value loses every concrete quality and becomes a pure abstract concept."<sup>18</sup> But what becomes of the surplus value under these conditions? Bernstein points out that, "... at the moment when labour value can claim acceptance only as a speculative formula or scientific hypothesis, surplus value would all the more become a formula - a formula which rests on an hypothesis."<sup>19</sup>

In Volume III of Capital the value of the commodities is not that important as they are sold at the prices of their production i.e. cost of production plus profit rate. Total value now holds the crucial position. The difference between the value product of the total production of the society and the total amount of the wages of the working classes is the total surplus value which is realised in proportion to the relation between the total production and the total demand i.e. the buying capacity of the market. Bernstein writes :

"From this point of view i.e. taking production as a whole - the value of every single kind of commodity is

determined by the labour time which was necessary to produce it under normal conditions of production to that amount which the market - that is the community as purchasers can take in each case. Now just for the commodities under consideration, there is in reality no exact measure of the need of the community at a given moment; and thus value conceived as above is purely abstract entity, not otherwise than the value of the final utility of the school of Gossen, Jevons and Bohm-Bawerk. Actual relation lies at the foundation of both; but both are built up on abstractions."<sup>20</sup>

In Bernstein's view the labour theory of value, "is nothing more than a key, an abstract image, like the philosophical atom endowed with a soul - a key which, employed by the master hand of Marx, has led to the exposure of and presentation of the mechanism of capitalist economy as this had not been hitherto treated, not so forcibly logically and clearly. But this key refuses service over and above a certain point, and therefore it has become disastrous to nearly every disciple of Marx."<sup>21</sup> Marx used the key to disclose the empirical fact of surplus labour. But this is a fact, Bernstein holds, "which is demonstrable by experience" and "needs no deductive proof". Thus, "whether the Marxist theory is correct or not is quite immaterial to the proof of surplus labour. It is in this respect no demonstration but only a means of analysis and illustration."<sup>22</sup>

The above arguments of Bernstein boil down to two simple

propositions : (1) Marx's value is too abstract a concept to provide a basis for any adequate theory of prices. (2) The proof of surplus labour does not depend upon the correctness or otherwise of the Marxian theory of value which can at best serve as a tool to analyse and illustrate this "fact of experience".

There is no doubt that Marx's value is an abstract concept. But it is a deliberate abstraction made to provide an essential tool for the scientific analysis of capitalist reality. As Strachey remarks, "if the labour theory of value and the categories built upon it, do enable us to understand the nature of the capitalist system and its crisis and hence to make valid predictions about the capitalist system's future destinies, then they are some of the most significant abstractions ever achieved by the mind of man."<sup>23</sup>

Regarding the second criticism of Bernstein, Meek says : "while it is perfectly true that the existence of unearned income is a fact of experience which needs no theory of value to prove it, it does not by any means follow that a theory of distribution can do without a theory of value. A theory of distribution which only said that unearned income was the fruit of surplus labour of those employed in production would hardly qualify as a theory at all."<sup>24</sup>

To build a theory of distribution without a theory of value to support it is like building castles in the air.

Lindsay

Lindsay considers the claim of the labour theory of value to be a theory of market prices as unjustified. He agrees with the claim that the labour theory of value, is in some degree a theory explaining how market prices are determined. "But the careful reader will soon find out that the market prices so explained are not actual existing prices, but the prices which would prevail under highly abstract conditions. It is a theory of how prices are determined under certain standard conditions."<sup>25</sup> These conditions are those which would prevail in a society so organised that commodities would fetch what they are worth.

According to Lindsay, "The labour theory of value, if regarded as an explanation of the determination of market prices, has two obvious defects - its disregard of monopoly and its inadequate treatment of demand."<sup>26</sup> The disregard of monopoly is deliberate and reasoned because the labour theory "is not really a theory of how actual market prices are determined, but an account of how market prices would be determined in conditions where commodities fetched what they were worth."<sup>27</sup>

Neglect of demand says Lindsay is, "perhaps the most striking defect in the theory. For a theory of value which says practically nothing about demand is a theory of value which says practically nothing about valuing."<sup>28</sup> Marx's method of allowing for demand according to Lindsay is to say that commodities exchange in proportion to the amount of socially

necessary labour embodied in them. He argues that, "if labour is to be socially necessary and therefore to create value, the labourer must not only come up to the general standard of skill but must meet and even anticipate rightly the demand of others. Skill in anticipating demand should then be regarded equally with hard work and technical skill as a factor in producing value. The social necessity of labour is not something fixed but is determined by the proportion between men's capacity to produce and their wants. The conception of social necessity, therefore, transforms the labour theory of value into something not unlike the ordinary theory of interplay of supply and demand."<sup>29</sup>

But this view of Lindsay is not tenable. Marx never says, as we have already discussed, that the quantity of socially necessary labour required to produce an article changes with variations in social conditions which include the condition of demand. It is true that demand determines how much of the socially necessary labour is to be allocated to any particular sphere of production under given conditions of labour productivity but it is this productivity and not the demand which determines the value of a unit of the commodity. Thus while appreciating the role of demand as an allocator of social labour in different spheres of production, one should be careful not to take it for what it is not - a determinant of the value of commodities.

So far as monopoly is concerned, Marx admits that prices

of commodities might deviate from their values. But he does not think that this constitutes any serious challenge to his theory. He writes, "if one examines price lists over a more or less long period of time, and if one disregards those cases in which the actual values of all commodities is altered by a change in the productiveness of labour, and likewise those cases in which the process of production has been disturbed by natural or social accidents, one will be surprised in the first place by the relatively narrow limits of the deviations and secondly, by the regularity of their mutual compensation. The same domination of the regularity of averages will be found here that Quetelet pointed out in the case of social phenomena."<sup>30</sup> What Marx wants to say is that "the limits within which the monopoly price would affect the normal regulation of the prices of commodities would be firmly fixed and accurately calculable."<sup>31</sup>

He goes on to write in the closing sections of Vol. III of Capital, "... if the equalisation of surplus value into average profit meets with obstacles in the various spheres of production in the form of artificial or natural monopolies, and particularly monopoly in landed property, so that a monopoly price becomes possible, which rises above the price of production and above the value of the commodities affected by such a monopoly, then the limits imposed by the value of the commodities would merely transfer a portion of the profit of the other commodity - producers to the commodities having the

monopoly price. A local disturbance in the distribution of the surplus-value among the various spheres of production would indirectly take place, but it would leave the limit of this surplus value itself unaltered."<sup>32</sup>

But the question is whether this type of approach is useful in a world in which the artificial and natural monopolies have become a rule rather than exception, and in which the possession of monopoly power is becoming increasingly associated with the use of extra-economic methods of maintaining and enlarging profits. Meek observes, "in such a world, it does not seem to me to be reasonable to assume any longer that the sole source of profit is the surplus labour of the workman employed by the capitalist .... If total profits diverge from total surplus value, then it can no longer be really said that the limits within which deviations of actual prices from prices of production may occur under monopoly are determined in accordance with the Volume I analysis."<sup>33</sup>

Prof. Meek's argument is not convincing. In the Marxian sense of the term, one can rightfully deny any surplus not originating in the labour process as profit. Moreover, one may wonder why contemporary capitalism is faced by periodic crises despite the fact that it can take resort to extra-economic methods of maintaining and enlarging profit as supposed by Meek. This could be argued as follows : monopoly superprofits in the aggregate may exceed total values in a given time period but it will be compensated in the aggregate by loss at the time of

crisis, thus bringing in the equality between total value and total profit in a longer time period.

### Benedetto Croce

Croce's critique of Marxian labour theory seems to be much more competent than that of Lindsay. He argues, as regards method, *Das Kapital* is without doubt an abstract investigation. The capitalist society studied by Marx is not a society historically existing in France or in England. Nor is it the modern society of the most civilised nations that of western Europe and America. It is an ideal and formal society, deduced from certain hypotheses which could indeed never have occurred as actual facts in the course of history, though "it is true that these hypotheses correspond to a great extent to the historical conditions of the modern civilised world."<sup>34</sup> And so far as its scope is concerned, "Marx's investigation does not cover the whole field of economic fact .... It limits itself ... to one special economic system, that which occurs in a society with private property in capital...."<sup>35</sup>

Marx begins by assuming a proposition outside the field of economic theory i.e. "the proposition that the value of commodities produced by labour is equal to the quantity of labour socially necessary to produce them."<sup>36</sup> But he never explicitly states the connection between this proposition and the laws of capitalist society. According to Croce it is actually this point which creates greatest confusions among the economists like Sombart, Sorel, Labriola etc.

Prof. Werner Sombart is of the opinion that, "Marx's law of value is not an empirical but a conceptual fact ... which aids our thought in understanding the actual realities of economic life."<sup>37</sup>

According to the French scholar Sorel, who was regarded by many as a Marxist, "there is no way of passing from Marx's theory to actual phenomena of economic life, and that, although it may offer elucidation in a somewhat limited sense, it does not appear further that it could ever explain, in the scientific meaning of the word."<sup>38</sup>

Prof. Labriola, partly agreeing and partly criticising Prof. Sombart writes : "the theory of value does not denote an empirical factum nor does it express a merely logical proposition, as some have examined, but it is the typical premise without which all the rest would be unthinkable."<sup>39</sup>

After presenting the suggestions of the critics, Croce gives his own as follows:

"Marx's labour-value is not only a logical generalisation, it is also a fact conceived and postulated as typical i.e. something more than a mere logical concept. Indeed it has not the inertia of the abstract but the force of a concrete fact, which has in regard to capitalist society in Marx's investigation the function of a term of comparison, of a standard of a type.

This standard or type being postulated, the investigation, for Marx takes the following form. Granted that value is equal to the labour socially necessary, it is required to show with

what divergencies from this standard the prices of commodities are fixed in capitalist society, and how labour power itself acquires a price and become a commodity."<sup>40</sup>

In other words, we are to indicate the part played by the standard in the investigation. He gives the real meaning of the standard by observing that, "Marx ... in postulating as typical the equivalence between value and labour and in applying it to capitalist society, was, as it were, making a comparison between capitalist society and a part of itself, isolated and raised upto an independent existence i.e. a comparison between capitalist society and economic society as such (but only in so far as it is a working society)",<sup>41</sup> a society from which we have abstracted all goods that cannot be increased by labour, all class distinctions, and in which all modes of distributing the produced wealth have been disregarded as these can only be determined upon consideration belonging to society as a whole. In case of a society like this, without class distinctions whose only commodities are the products of labour, the value must be the sum of the quantity of labour which the production of various kinds of commodities demands. It was by virtue of this method, Marx was able to discover and define the social origin of surplus value. It was also by means of the same premise that, Marx could, "arrive at the proposition that the products of labour in a capitalist society do not sell, unless by exception, for their value ... to put it shortly, value does not coincide with price."<sup>42</sup>

It follows from all this, "that (1) Marxian economics is not general economic science, (2) that labour-value is not a general concept of value. Alongside then, the Marxian investigation there can or rather must, exist and flourish a general economic science, which may determine a concept of value deducing it from quite different and more comprehensive principles than the social special ones of Marx."<sup>43</sup>

Croce's analysis appears to be fundamentally defective. He fails to notice that Marx's method in essence is historical. At the same time Marx was a firm follower of the abstract deductive method. As Sweezy observes, "Marx believed in and practised what modern theorists have called the method of successive approximations, which consists in moving from the more abstract to the more concrete in a step-by-step fashion, removing simplifying assumptions at successive stages of the investigation so that the theory may take account of and explain an ever wider range of actual phenomena."<sup>44</sup> Marxian system should not be considered as pure abstractions only as these abstractions are the results of an analysis of a real historical process.

When one comprehends the full meaning of Marx's logical historical approach to an understanding of social phenomena, one can see that Marx not only compared the abstract society with the fullfledged capitalist society, "but argued that the law of value which was directly operative in the first was still indirectly operative in the second. It was not just a

question of demonstration that values diverged from prices under capitalism, but of showing that the very extent of these divergencies was itself determined in terms of the original theory. In other words what was involved was not a logical comparison between values and prices of production, but a logical (and historical) transformation of values into prices of production."<sup>45</sup>

F. H. Knight<sup>46</sup>

Prof. Knight is of the opinion that a labour theory of value would hold good provided labour was a rigid and non-transferable factor of production. In the actual practice, we find that labour as well as other agencies of production are mobile. And this mobility of the factors leads to a situation in which different combinations of these factors are possible and this makes it possible to determine their value on the basis of "marginal productivity".

The argument of Prof. Knight can be refuted as follows. The value of the machine is well known and is independent of the number and value of the commodities which the machines produce. When a capitalist purchases a machinery he does not calculate the surplus value it will yield. He is only interested in the savings in his costs of production that the machinery will enable him to make. Further it is known to everybody that a machinery lying in a factory without moving cannot produce a particle of value. It is only when labour participates, production takes place, new value is created.

Marx discovered this when he formulated his law of surplus value. But what about automatic machines which do not need labour to move them? This is no doubt an important question but it could be argued that this is an exception rather than a law.

### Schumpeter

Schumpeter criticises the supporters of the labour theory of value being inspired by ethical philosophies and political doctrines, that have nothing to do with economic reality as such. "In other words", writes Schumpeter "they failed to see that all that matters for this purpose is the simple fact that, in order to produce a firm needs not only labour but all things that are included in land and capital as well, and that this is all that is implied in setting up the three factors (of production)."<sup>47</sup>

Schumpeter's argument is contestable. A firm in order to produce needs not only labour, land, buildings, machinery, raw materials and money but also an organised society, police protection, an infrastructure and many other things as well. Why then talk of three but not five factors of production i.e. labour, land, machinery, reserves of liquid money, state organisation and then discover incomes corresponding to these factors, wages, ground rent, profit, interest and taxes?<sup>48</sup>

The capitalists strongly object to this. According to them no real contribution is made by some factors, for example,

state to new value created within the enterprise. Thus it is implied that a factor indispensable for production may not contribute in the creation of value. What then about land and machinery which are indispensable for production? Do they make any contribution to the new value created? The answer is negative. Therefore, argues Mandel : "We are thus brought back to the problem of the ultimate origin of the value added in production which can only come from living labour."<sup>49</sup>

### Oscar Lange

A more serious and more sophisticated objection is advanced by Oscar Lange in one of his early writings. Lange asserts that Marxian economics is superior to bourgeois economics in explaining the fundamental tendencies in the development of capitalism and in formulating them into a theory of economic evolution while admitting that the latter excels the former in providing a theory of economic equilibrium. Marxian economics according to Lange has not proved able to supply an adequate theory of prices and particularly of monopoly prices or an adequate theory of the optimum use of resources in a socialist economy, or, above all, a theory of crises because it is nothing but, "a static theory of general equilibrium".<sup>50</sup> Besides, according to him, the labour theory of value fails to explain the nature of wages and the survival of profit, which are supposed to be determined by the technical progress, inherent in the capitalist system. But this 'dynamic element' is not so much a result of the internal

logic of labour theory of value as of the institutional framework of capitalism revealed by Marx.

Lange's view that labour theory of value is a "static theory of equilibrium" does not seem to be convincing. The labour theory of value is very much linked with the theory of surplus value. The two theories considered together form a dynamic theory. "They are in fact a synthesis of two opposites, a conception of equal exchange linked with a conception of unequal exchange. It is above all the exchange between labor and capital that possesses this dual quality."<sup>51</sup>

Consequently, Marxian economics is by nature dynamic as it leads to the conclusion that the production of new value, the increase in value, economic expansion are inherent in capitalist mode of production. The dynamics of development of capitalist economy is explained also on this basis.

Moreover, Lange's idea that economic evolution or the dynamic element results from the institutional framework rather than from the internal logic of the labour theory of value is not acceptable. Lange is of the opinion that in order to understand why wages do not "threaten to annihilate the employers' profits",<sup>52</sup> the element of technical progress is necessary. Without technical progress profit cannot go on existing. This assertion does not seem to be that correct. He forgets that wages cannot abolish profits even without technical progress, as the capitalists will stop employing labourers long before this point is reached. The capitalists

may prefer to shut down their factories in this situation and thereby help in enlarging the industrial reserve army. As it is known to everybody whereas the capitalist can wait, the workers cannot as they possess neither the means of subsistence nor the means of production. Moreover, it is not only the competition between capitalist and labour but also the competition among capitalists that explain technical progress.

Regarding Lange's charge that Marxian economics is inferior to bourgeois economics as it is unable to explain monopoly prices, Meek says, "so far as general laws of monopoly prices are concerned it (Marxian economics) can say just as much or as little as bourgeois economics". To Lange's allegation of Marxian economics' failure to provide an adequate theory of optimum utilisation of resources in a socialist economy, Meek observes : "it (Marxian economics) can at least contribute a knowledge of the fact that this would probably not be the basic problem in a socialist economy."<sup>52</sup>

### Schlesinger

Schlesinger's critique seems to be more competent than that of Lange. According to him, theoretical difficulties in case of Marxian economics arise, "when generalisations valid at one level of abstraction are transferred to other levels characterised perhaps by the very fact that features of reality which were omitted when making those generalisations have been restored. The theory of value provides a most impressive

example of this process."<sup>53</sup> From the fact that in simple commodity production exchange ratios are equal to labour time ratios, so that the law of value governs average prices, Marx deduces that the law dominates economic events in capitalist production as well, even though the average prices no longer correspond to the values of the exchanged commodities."<sup>54</sup> Marx, in the opinion of Schlesinger, "derived laws valid for a certain model from those valid in the model which was simpler in structure and earlier in historical succession."<sup>55</sup>

Schlesinger points out that Marx's scheme of deriving prices from values is of no value except as expression of a methodological approach. He is not prepared to give more than a limited role to the labour theory in Marx's system. He wants to retain only its qualitative aspect which according to him is the essence of Marxian methodology. As he puts it, "what appears essential to me in this methodology is the definition of the subject of economics contained in the so-called theory of value and the dynamic approach to it." The point what Schlesinger wants to make is "If economics is defined as the material relations between men working for each other, the amount of work done for each other is the basic economic fact linking them, and any other economic fact has to be derived from it."<sup>57</sup>

Schlesinger does not give any importance to the quantitative aspect of the value theory. To demonstrate the quantitative relation between values and prices is unnecessary for him.

His suggestion is to drop this aspect of the value theory of Marx and retain the concept of value only as a "methodological approach which by mere incident coincides with the law of prices actually valid in a past stage of society."<sup>58</sup> According to him it does not follow from "the fundamental importance of social labour as the factor dominating economic events" that "it must be possible to derive/exclusively from this factor."<sup>59</sup>

The argument of Schlesinger though is more powerful than Lange suffers from some major defects. To Marx economics is not a mere material relations between the members of a society founded upon commodity exchange and the conception of social labour as the factor dominating economic events, does not exhaust the entire significance of the law of value. Noticing that men's relations of production ultimately determined their other economic relations in a commodity producing society, Marx was bent upon to study, "the relations of production in a given, historically defined society in their inception, development and decline."<sup>60</sup> It is in this connection we find that the labour theory of value plays a significant role, since it is in effect, "a particular way of stating that the social relations of production determine relations of exchange."<sup>61</sup> In the words of Meek, "To Marx ... the task of showing how relations of production determine the (forms of) consumption, distribution and exchange reduced itself in its essentials to the task of showing how the law of value operates as commodity produc-

tion develops."<sup>62</sup> Once this real significance of the law of value is realised one cannot think of dropping the quantitative aspect of the law without severely affecting the entire Marxian system. Meek remarks aptly:

"If the quantitative aspect of the Marxian theory of value is dropped, nothing will remain of the Marxian theory of distribution but a sort of sociological skeleton."<sup>63</sup>

And finally, we must not forget Croce's remark that, "a system of economics from which value is omitted is like logic without the concept, ethics without duty, aesthetics without expression. It is economics ... cut off from its proper sphere."<sup>64</sup>

#### Mrs. Robinson

In Mrs. Robinson view Marx like Ricardo was mistaken in seeking an intrinsic value of commodities analogous to "weight and colour". Marx, like other classical economists sought a measure of value "which would be invariable", which he found in labour. She considers Marx's definition of value as nothing more than a purely "dogmatic statement".

Mrs. Robinson also discovers in capital, Marx's own statement that the labour theory of value "fails to provide a theory of prices".<sup>65</sup> However, she argues, that Marx "used it nevertheless to express certain ideas about the nature of the capitalist system, and the importance of these ideas in no way depends upon the particular terminology in which he chose to set them forth."<sup>66</sup>

Further, Mrs. Robinson is not happy with transformation of values into prices. She argues :

"Marx in Vol. III discarded the assumption that prices are proportional to values, but in calculating the output of industries, in some numerical examples, he carelessly reckons raw materials and wear and tear (constant capital) at prices corresponding to values. Since the raw materials for one lot of industries are the output of another lot, his examples fail to hang together." And further, Marx's "whole argument is condemned to circularity from birth, because the values which have to be transferred into prices are arrived at in the first instance by transforming prices into values."<sup>67</sup>

Mrs. Robinson, further points out, "The theory of value in the narrow sense of a theory of relative prices is not the heart of Marxist system (though both he and Bohm-Bawerk believed that it was) and nothing that is important in it would be lost if value were expunged from it altogether,"<sup>68</sup> and "no point of substance in Marx's argument depends upon the labour theory of value."<sup>69</sup>

As she puts it : "Voltaire remarked that it is possible to kill a flock of sheep by witchcraft if you give them plenty of arsenic at the same time. The sheep in this figure, may well stand for the complacent apologists of capitalism; Marx's penetrating insight and bitter hatred of oppression supply the arsenic, while the labour theory of value provides the incantations."<sup>70</sup>

Mrs. Robinson reflects in the above statements an astonishing failure to grasp some of the essential ideas of Marx, even if he expounded them clearly enough.

In the first place, Marx explicitly denied that the exchange value of commodities was an intrinsic quality of the commodities in the physical sense. On the contrary he showed that the common quality that makes commodities commensurable is not physical but social in nature. "What Joan Robinson has not grasped is the difference between concrete labour, which creates use values and the physical properties of products and abstract labour, which creates exchange value."<sup>71</sup>

Moreover, Marx did not attempt to discover an invariable measure of value. Rather he showed that the measure of exchange value must itself be a commodity, that it must itself be variable. "It is just because exchange value proposes a common quality in all commodities the fact that they are all produced by abstract labour, by a fraction of the total labour potential at society's disposal - that it is at once social and variable and not physical and immutable."<sup>72</sup>

As we noticed in order to show how insignificant a role labour theory of value plays in the Marxian system, Mrs. Robinson takes the help of an analogy. But it may be argued that analogy is no argument, still less a bad analogy. The labour theory of value is the fundamental premise of the theory of surplus value and supplies the basis upon which Marx developed a rational theory of wages and gave for the first time

the basic features of history of capitalist accumulation and a portrayal of its historical trend.

It is unjust to compare the necessary relations between Marx's 'penetrating insight' and his instrument of analysis, that is, the labour theory of value with that of the absurd relation between witchcraft and arsenic.

Mrs. Robinson further says that value is non-observable and is "a meaningless metaphysical concept". Wolfson and Blaug strongly support her in this regard. Wolfson argues : "we can observe prices ... but we do not and cannot observe values. Why not jettison the concept (of value) as a metaphysical philosophers stone?"<sup>73</sup> Blaug argues that Marx's concept of value "is not a ratio at which products exchange but purely an abstraction that is posited and not observed."<sup>74</sup>

These expressions support the extreme view that concepts must refer to entities which are directly observable. But what about natural and other social sciences? Do they not use similar concepts in order to explain observable phenomena? One could recall the controversy in physics arising out of Pauli's theory of neutrino which is not measurable but which provided a justification for upholding the conservation principle. The science of physics rejected measurability as an essential criterion in all matters. So is the problem with the measurement of entropy.

Moreover, there should be no objection in using non-observable concepts which can be translated into concept that

refer to entities which are themselves directly observable. According to Morishima such a transformation is possible for Marx's concept of value. He writes; "the accounting in terms of value is observable, since it is no more than the calculation in terms of employment."<sup>75</sup> Statements concerning values can be reformulated as statements referring to quantities of labour employed in different industries and employment is no doubt observable.

Thus Mrs. Robinson's attack seems to be misconceived.

#### Notes and References

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## CHAPTER V

### CONCLUSION

In the foregoing chapters, the pre-Marxian labour theory of value, Marx's own exposition of the labour theory inter-linked with the theory of surplus value and the so-called transformation problem are outlined. Some of the criticisms levelled at Marx's theories are also discussed.

As we have explained, Marx's theory of value was a significant departure from Smith's and Ricardo's theories. It may be recalled that Ricardo's theory of value in spite of it being an improvement over Smith's had also its share of contradictions. One of the signal contributions of Marx's labour theory of value was that he put it on a proper scientific foundation. He started from Ricardo's position and was full of praise for his insights. But Marx's position was also a break from Ricardo's. An important departure of Marx from Ricardo was in his making a distinction between labour and labour power. According to Marx, the only common measure of the values of the commodities produced is the amount of socially necessary labour, reduced to a common measure that is, a unit of unskilled labour, which goes into their production. Marx maintains that labour power, once it is bought and sold as a commodity, is itself valued on average according to the amount of commodities required to keep up its supply.

Understood in these terms Marx's labour theory of value still holds water. In this connection it has to be noted that the size of the commodity basket for the workers' subsistence is variable according to time, place and level of economic development as Marx emphasised. Hence, Marx by no means was a "minor post-Ricardian"<sup>1</sup> as alleged by Prof. Samuelson.

It will be seen in this context that Marxian theory of value is not a theory of price, since values and prices can diverge considerably from each other. Marx rejects the use of the term value for anything not produced by human labour. The price system for him is a superstructure imposed on the more basic value system.

Now a few words about the role of the labour theory of value. In evaluating the role of the labour theory, one must not forget that to Marx it is central for "descriptive, predictive and normative purposes".

The most important role that the labour theory plays in Marx's writings is the exposure of the conflict between the classes : i.e. between the capitalists and the workers. Society develops as a result of dialectical contradictions between forces and relations of production and the class contradiction is a phenomenal manifestation of this. The labour theory of value helps to select and focus on those descriptive aspects that highlight the social relationships. As opposed to neo-classical economists whose main concern is prices, Marx's analysis gives emphasis on the study of human relationships.

According to him the mode of production determines the relations of production, hence if one wants to change the relations of production the mode of production of necessity has to be changed. That is why Marx gives so much emphasis on production in Volume-I of Capital. His whole doctrine of historical materialism is aimed at understanding this complex human relationship starting from production.

In studying the nature and origin of profit, Marx has used the labour theory of value as an analytical tool for a descriptive theory. He stresses the fact that profits are not due to the private ownership of the means of production, but due to the existence of surplus labour or surplus value which the property owners expropriate as profit. For Marx, the surplus value is created in the sphere of production, not in the process of circulation. The concept of exploitation, the appropriation of surplus value by the capitalist is central to his economics. He made a significant contribution by showing that exploitation takes place even under competitive conditions. This is what Morishima refers to as Marx's 'fundamental theorem'. Exploitation for Marx is not an accidental result of cheating or monopoly power but the necessary result of a competitive system, where competition takes place on an equal footing. This has important, political and social implications : hence the controversy over the Marxian labour theory of value.

The importance of the Marxian labour theory of value in

exposing the reality beneath the appearances is often emphasised by Marx. For example, in discussing the transformation problem, he refers to the mystification of surplus value.

"Disguised as profit, surplus value actually denies its origin, loses its character and becomes unrecognisable."<sup>2</sup>

The importance of social compulsion in the extraction of surplus labour is an important aspect. Marx criticises Ricardo for ignoring this vital phenomenon in society. In the Theory of Surplus Value he explains : "For this (surplus labour) to occur, the labourer must be compelled to work in excess of the time, and this compulsion is exerted by capital. This is missing in Ricardo's work, and therefore also the whole struggle over the regulation of the normal working day."<sup>3</sup>

The labour theory of value also helps Marx to explain the importance of the dual nature of labour; its use value being different from its exchange value and the concept of alienation. It also provides Marx with a predictive theory about the prices of production. However, as we have occasion to notice, Marx has failed to derive prices satisfactorily from values. It is also true that the derivation of prices of production is not the most important aspect of the labour theory of value. His failure in this derivation does not make his system unsuitable for understanding the social dynamics.

It is important to recall Kuhn's concept of a paradigm which maintains that "Marx's paradigm using the labour theory of value focusses our interest, poses questions, suggests

empirical studies where the major interest is on social relationships in an economy and not on relative prices."<sup>4</sup>

To end the discussion an attempt to evaluate Marx is not certainly out of place. Evaluating an outstanding and a controversial figure like Karl Marx is not an easy task. Because of the revolutionary implications of his theory it is very difficult to find many impartial, dispassionate evaluations of his work. On the one hand there are staunch supporters who propagate everything Marx has said and find nothing wrong in his writings and on the other, there are die-hard anti-Marxists who delight in criticising in their own way whatever Marx has written. Most often it is forgotten that there is a very important difference between propagandising or criticising Marxism on the one hand and familiarising oneself on the other with Marxist ideology in an objective atmosphere where its merits and defects can be discussed.

Nothing is or can be perfect in this world. There is no wonder that Marx's analysis has its own limitations. But it should not stop us in appreciating his ideas. To Schumpeter, the greatness of Marx's message lies in its continuing vitality. He writes :

"We need not believe that a great achievement must necessarily be a source of light or faultless in their fundamental design or details. On the contrary, we may believe it to be a power of darkness, we may think it fundamentally wrong or disagree with it on any number of particular points." In the

case of the Marxian system, such adverse judgement or even exact disproof, by its very failure to injure fatally, only serves to bring out the power of the structure."<sup>5</sup>

In spite of its alleged short-comings, does not Marx's theory raise even now some vital questions of socio-political importance after more than a hundred years since his death? Was not Marx through his powerful writings able to penetrate the surface and reach the root cause of the contradictions of capitalism based on 'free competition'? It is really difficult to get negative answers to these vital questions. As Isaiah Berlin writes : "even if all specific conclusions of (Marx's theory) were proved false, its importance in creating a wholly new attitude to social and historical questions, and so opening up new avenues of human knowledge would be unimpaired."<sup>6</sup>

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