CHAPTER XVIII

VARIOUS FORMULÆ FOR THE RATE OF SURPLUS-VALUE

We have seen that the rate of surplus-value is represented by the following formulæ.

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

The two first of these formulæ represent, as a ratio of values, that which, in the third, is represented as a ratio of the times during which those values are produced. These formulæ, supplementary the one to the other, are rigorously definite and correct. We therefore find them substantially, but not consciously, worked out in classical Political Economy. There we meet with the following derivative formulæ.

$$\text{II.} \quad \frac{\text{Surplus-labour}}{\text{Working-day}} = \frac{\text{Surplus-value}}{\text{Value of the Product}} = \frac{\text{Surplus-product}}{\text{Total Product}}.$$

One and the same ratio is here expressed as a ratio of labour-times, of the values in which those labour-times are embodied, and of the products in which those values exist. It is of course understood that, by "Value of the Product," is meant only the value newly created in a working-day, the constant part of the value of the product being excluded.

In all of these formulæ (II.), the actual degree of exploitation of labour, or the rate of surplus-value, is falsely expressed. Let the working-day be 12 hours. Then, making the same assumptions as in former instances, the real degree of exploitation of labour will be represented in the following proportions.

$$\frac{\text{6 hours surplus-labour}}{\text{6 hours necessary labour}} = \frac{\text{Surplus-value of 3 sh.}}{\text{Variable Capital of 3 sh.}} = 100\%.$$

From formulæ II. we get very differently,

$$\frac{\text{6 hours surplus-labour}}{\text{Working-day of 12 hours}} = \frac{\text{Surplus-value of 3 sh.}}{\text{Value created of 6 sh.}} = 50\%.$$

These derivative formulæ express, in reality, only the proportion in which the working-day, or the value produced by it, is divided between capitalist and labourer. If they are to be treated as direct expressions of the degree of self-expansion of capital, the following erroneous law would hold good: Surplus-labour or surplus-value can never reach 100%.[1] Since the surplus-labour is only an aliquot part of the working-day, or since surplus-value is only an aliquot part of the value created, the surplus-labour must necessarily be always less than the working-day, or the surplus-value always less than the total value created. In order, however, to attain the ratio of 100:100 they must be equal. In order that the surplus-labour may absorb the whole day (i.e., an average day of any week or year), the necessary labour must sink to zero. But if the necessary labour vanish, so too does the surplus-labour, since it is only a function of the former. The ratio $\frac{\text{Surplus-labour}}{\text{Working-day}}$ or $\frac{\text{Surplus-value}}{\text{Value created}}$ can therefore never reach the limit of $\frac{100}{100}$, still less rise to $\frac{100+x}{100}$. But not so the rate of surplus-value, the real degree of exploitation of labour. Take, e.g., the estimate of L. de Lavergne, according to which the English agricultural labourer gets only $\frac{1}{4}$, the capitalist (farmer)

on the other hand $\frac{3}{4}$ of the product[1] or of its value, apart from the question of how the booty is subsequently divided between the capitalist, the landlord and others. According to this, the surplus-labour of the English agricultural labourer is to his necessary labour as 3:1, which gives a rate of exploitation of 300%.

The favourite method of treating the working-day as constant in magnitude became, through the use of the formulæ II., a fixed usage, because in them surplus-labour is always compared with a working-day of given length. The same holds good when the repartition of the value produced is exclusively kept in sight. The working-day that has already been realised in a given value, must necessarily be a day of given length.

The habit of representing surplus-value and value of labour-power as fractions of the value created—a habit that originates in the capitalist mode of production itself, and whose import will hereafter be disclosed —conceals the very transaction that characterises capital, namely the exchange of variable capital for living labour-power, and the consequent exclusion of the labourer from the product. Instead of the real fact, we have the false semblance of an association, in which labourer and capitalist divide the product in proportion to the different elements which they respectively contribute towards its formation.[2]

Moreover, the formulæ II. can at any time be reconverted into formulæ I. If, for instance, we have $\frac{\text{Surplus-labour of 6 hours}}{\text{Working-day of 12 hours}}$, then the necessary labour-time being 12 hours less the surplus-labour of 6 hours, we get the following result,

$$\frac{\text{Surplus-labour of 6 hours}}{\text{Necessary labour of 6 hours}} = \frac{100}{100}.$$

There is a third formula which I have occasionally already anticipated; it is

III. $\dfrac{\text{Surplus-value}}{\text{Value of labour-power}} = \dfrac{\text{Surplus-labour}}{\text{Necessary labour}} = \dfrac{\text{Unpaid labour}}{\text{Paid labour}}.$

After the investigations we have given above, it is no longer possible to be misled, by the formula $\dfrac{\text{Unpaid labour}}{\text{Paid labour}}$, into concluding, that the capitalist pays for labour and not for labour-power. This formula is only a popular expression for $\dfrac{\text{Surplus-labour}}{\text{Necessary labour}}$. The capitalist pays the value, so far as price coincides with value, of the labour-power, and receives in exchange the disposal of the living labour-power itself. His usufruct is spread over two periods. During one the labourer produces a value that is only equal to the value of his labour-power: he produces its equivalent. Thus the capitalist receives in return for his advance of the price of the labour-power, a product of the same price. It is the same as if he had bought the product ready made in the market. During the other period, the period of surplus-labour, the usufruct of the labour-power creates a value for the capitalist, that costs him no equivalent.[1] This expenditure of labour-power comes to him gratis. In this sense it is that surplus-labour can be called unpaid labour.

Capital, therefore, is not only, as Adam Smith says, the command over labour. It is essentially the command over unpaid labour. All surplus-value, whatever particular form (profit, interest, or rent), it may subsequently crystallise into, is in substance the materialisation of unpaid labour. The secret of the self-expansion of capital resolves itself into having the disposal of a definite quantity of other people's unpaid labour.