

THEORISING MILITARISM

CHAPTER ONE, SECTION C

MARX'S DIAGRAM ON ENLARGED REPRODUCTION - EFFECTS OF DEPARTMENT III ON ACCUMULATION

1. Introduction

In this third instalment regarding military production under capitalism, I will discuss Marx's diagram on enlarged reproduction. In the previous instalment I have only covered the situation which Marx characterized as one of 'simple reproduction', i.e. a situation in which the owners of capital refrain from re-investing (a part of) the surplus product. That situation, as stated, is an exceptional one. Self-expansion being capital's sacred mission, each and every entrepreneur endeavours to continuously enlarge his scale of operation. Instead of simply trying to ensure that he can continue to manufacture the same quantity of goods with the same value, each capitalist unceasingly seeks to expand his production and market share. His target is: to reap an every larger harvest of profit, expressed in money capital.

The combined drive of society's individual entrepreneurs to enlarge production, results in the self-expansion of capital on a social scale, it results in a process of overall, social accumulation. Marx's diagrams on enlarged reproduction precisely aim at reaching an understanding of what social accumulation means and of the circumstances under which it is possible. Comparing the situation of enlarged reproduction with that of simple reproduction, Marx himself pointed out that certain equations (that needed to exist under simple reproduction) are no longer valid (1). As the entrepreneurs of Department I and II shift from using the (entire) surplus for luxurious consumption - towards using (a part) for additional investments in constant and variable capital, the particular equations that ensured a stable production of means of production and means of consumption, tend to change.

In this third instalment, I will both summarize essential features of Marx's diagram on enlarged reproduction, and also look at the elementary effects of the existence of Department III, of the Department where Means of Destruction are manufactured, on accumulation as a whole. We will see that the consequences of the existence of Department III for overall accumulation are both profound and contradictory. On the one hand, the presence of Department III has a certain impact of *contraction*, but on the other hand it facilitates the *self-expansion* of capital, of production on an ever larger scale. In any case, the existence of Department III has far-reaching implications for Marx's diagram. An initial discussion of these effects already brings out how capitalism functions differently from what Marx's diagram on enlarged reproduction presupposed.

2. Expanded Reproduction - Elementary Exposition

Let's, to start, give an exposition of the meaning of enlarged reproduction, through a brief comparison between Marx's diagram on simple reproduction, and the diagram on enlarged reproduction. In the previous instalment we have already seen that *simple reproduction* is only possible if mutual exchanges between the Departments I and II take place along strictly proportional lines. Marx's formula for the necessary exchanges between I and II was I ($v + s$) versus II (c). Other necessary equations that logically follow from Marx's conceptualisation in merely two Department, relate to the total value of the product of Departments I and II respectively. These total products, too, cannot be arbitrary in size, but need to be very strictly quantified.

Thus, since the scale of production remains constant and since external sales (to revenue-holders or foreign customers) are not supposed to exist, the total value of the means of production manufactured by I should be equal to the value of the means of production used in I and II together. Similarly, the total value of the articles of consumption manufactured by II should be equal to the variable capital and the surplus of I and II combined. Marx gives a mathematical formula expressing these strict proportions well, namely:

$$\text{I. } 4,000c + 1,000v + 1,000s = 6,000 \text{ means of production (MP)}$$

$$\text{II. } 2,000c + 5,00v + 5,00s = 3,000 \text{ articles of consumption (MC)}$$

We also note that in this formula, the proportions between c and v is the same in both Department I and Department II, i.e. four to one (4 : 1) (2).

Now, let's move forward and discuss how the diagram on *enlarged reproduction* differs from that on simple reproduction. First and foremost, entrepreneurs no longer are satisfied to individually consume the whole surplus product. The first essential feature of enlarged reproduction, is that entrepreneurs re-invest a part of the surplus, in order to expand the scale of their production. Both in Department I and II the destination of the surplus product s is no longer exclusively to serve the consumption of luxury articles (manufactured by II). Entrepreneurs of I and II reserve a part of s (50% in Marx's presumption) for re-investment in additional capital, to be employed in the next or future cycles of manufacturing.

Further, the part of s that is reserved for re-investment is divided between constant c and variable capital v , it is spent on the purchasing of additional means of production (MP) and of additional labour power (L). This is entirely logical, since MP cannot be employed without L and vice-versa, yet Marx stresses this points since before him the classical economists such as Adam Smith had presumed otherwise. They had presumed that the whole capitalised surplus is spent on wages for the additional workers, and had disregarded the need for additional constant capital (3). In his discussion on enlarged reproduction Marx, and following him Luxemburg, thus pointed out that in both Department I and II the part of s that is destined for recapitalisation, needs to be divided between the two forms of commodity capital, i.e. between c and v .

Third, re-investment can only occur if *the material elements of production* entrepreneurs are looking for, *are already available* and can be purchased by them with the money capital representing the surplus product *s*. Already in *Capital I*, Marx pointed out that accumulation is accompanied by continual changes in the relation between constant and variable capital, with the size of *c* increasing in comparison *d* to the size of *v*. For along with 'technical progress', human labour is able to set into motion ever larger masses of means of production, i.e. ever more complex equipment and machinery (4). This means, in fact, that the strict proportions mentioned for simple reproduction no longer hold, that from the very beginning of the process of enlarged reproduction, an extra quantity of means of production (on top of the total value of I (*c*) and II (*c*)) must be brought onto the market by the entrepreneurs to make *disproportional expansion* (of *c* versus *v*) possible.

Thus, the diagram for enlarged reproduction, in contradistinction to that for simple reproduction, must express a *double disproportion*: more means of production are manufactured than those actually used by society in its current phase, and less consumer goods are manufactured than the sum of what is paid out in wages and the aggregate of surplus value. A mathematical diagram which expresses this double disproportion, is the following one:

$$\text{I. } 4,000\mathbf{c} + 1,000\mathbf{v} + 1,000\mathbf{s} = 6,000 \text{ means of production (MP)}$$

$$\text{II. } 1,500\mathbf{c} + 750\mathbf{v} + 750\mathbf{s} = 3,000 \text{ articles of consumption (MC)}$$

In this diagram, the total of the means of production manufactured (6,000) is larger than the sum of constant capital in I and II (5,500). On the other hand, the total of articles of consumption manufactured (3,000) is smaller than the sum of the variable capital and surplus value of I and II combined (3,500) (5).

Lastly, we note that the proportionate relationship between constant and variable capital which was the same for I and II under conditions of simple reproduction, is no longer necessarily the same for the two Departments. Whereas the proportionate relationship in the diagram mentioned at the beginning of this section was 4 : 1 in both the Departments I and II, the relative size of constant (versus variable) capital in Department I (which has remained the same in the new mathematical diagram) is now larger than that in Department II where the proportion is 2 : 1. It is these disproportions and new mathematical equations which make accumulation possible. They need to be kept in mind, while we move forward, in this and the following instalments, to discuss the consequences of the Department of the Means of Destruction for the accumulation process.

3. From Simple to Enlarged Reproduction: Continuation of 'Unproductive Consumption'

What new conditionalities does the existence of Department III create for enlarged reproduction? First, we need to elaborate once again on the concept of 'unproductive consumption', which I have already referred to in the first instalment of this series. As stated then, Marx gave this concept a very limited meaning, and thought it

was a prominent feature of simple reproduction only. He merely employed the term to designate the allocation of money capital representing the surplus product (**s**) - for the purchase and use of luxury articles by individual entrepreneurs. On the other hand, as noted above, enlarged reproduction for Marx was above all a situation whereby the allocation for such individual, unproductive consumption is reduced. Under enlarged reproduction, the use of resources for '*productive consumption*', in the manufacturing process, is (presumably) maximized. Marx' usage of terminology implied a positive appreciation of *all* manufacturing, whatever be the specific nature of the output.

My first critical comment on Marx's diagram of enlarged reproduction is, that unproductive consumption plays a far larger role in it than Marx presumed. For it does not just subsist as the outlived style of luxurious living maintained by the owners of capital, who continue spending a part of the surplus in a wasteful manner. In fact, unproductive consumption is one of the very pillars of capitalism's structure of accumulation. It endures and continues expanding all along, as the process of enlarged reproduction takes shape. The wastage of resources at the expense of society's labouring classes is not a hallmark (only) of a hypothetical, initial phase of capitalism - but is a part and parcel of capitalism's mode of living. *Unproductive consumption* is what happens in phase **...P...** of the capital circuit of all those entrepreneurs who are active in Department III, the output of which consists in Means of Destruction (**MD**).

Thus, in our understanding of enlarged reproduction we need to take account of a 'dual' reality. On the one hand, a shift takes place away from individual consumption by the entrepreneurs of all Departments - towards the employment of a part of **s** for the purchasing of additional means of production **c**, and for the purchasing of additional labouring capacity of waged workers, of **v**. Yet on the other hand, this shift in the case of Department III is not a shift away from unproductive towards productive consumption, but rather a shift away from one form of unproductive consumption (i.e. in the sphere of circulation) towards another form of unproductive consumption (i.e. in the sphere of manufacturing). This observation may appear semantic or superfluous, but it in fact provides us with a different starting point for the analysis of enlarged reproduction than the starting point that was taken by Karl Marx.

4. Contradictory Effects of Public Consumption

In my first instalment on military production and the capitalist economy, I have explained the need to revise Marx's conceptualisation of consumption in yet another way, i.e. by taking account of public consumption. In *Capital II*, Marx had presumed that those who are the purchasers of **C'**, of the commodities emanating from the manufacturing process, are all individual consumers. This is presumed to be so both for the means of production, and for the means of consumption proper, i.e. daily necessities and luxurious items. The purchasers may belong to the class of entrepreneurs, or to the working class - one more limitation in Marx's analysis being that the categories of consumers are limited to these two classes only -, but in any case they appear to all be *private* actors. In reality, however, the purchasers of commodities in the capitalist economy consist in both *individual* consumers, and in a major *public* consumer, i.e. the state. Unless we measure

the effect of state consumption, more particularly the effect of state purchases of arms, our analysis of the reproduction process cannot be complete.

Then how to measure the effects of public consumption on the reproduction process, more particularly on enlarged reproduction? We know that both as regards the content of arms manufacturing, i.e. the consumption of variable and constant capital in the manufacturing process of Department III, and as regards their ultimate consumption by the state, such public consumption is inherently *unproductive*. Not only is the consumption of raw materials, machinery, buildings, etc., and of means of subsistence and luxury goods by the capitalists of Department III wasteful, given the ultimate destiny of Department III's commodities. Moreover, the actual use, consumption of weapons, can and does lead to the destruction of commodities produced in the Departments I and II. Thus, the actual use of the means of destruction, leads to the destruction of capital itself. In war, commodities brought onto the market by III, are in practice used to wipe out commodities brought onto the market by the entrepreneurs of I and II.

While it is the task of political economy to expose these consequences of the existence of Department III, we on the other hand should also, and separately, analyse the specific consequences of the existence of this Department, and of the purchasing of its commodities by the state, for the accumulation process. These economic consequences of the state's role as purchaser should be analytically distinguished from the practical employment of weapons by the state's armed forces. Thus, under the heading of public consumption, we need to, also, look at the consequences which the existence of a separate revenue-holder, whose role is restricted to the appropriation of income (gathered by others) and of spending this income as public consumer, has on the accumulation of aggregate capital. Is this effect on the overall process of accumulation, on balance, positive or negative? Is there a way we can measure the, short-term and no doubt illusory, benefits which capitalism draws from the production of the means of destruction? Here I wish to, preliminarily, state that these effects are *contradictory*.

First, before it starts spending money and purchasing commodities, the state in a sense exerts a negative effect on the processes of accumulation in the Departments I and II (and even on the process in III). In order to collect revenue, states (whether capitalist or pre-capitalist) for many centuries have relied on taxation. The impact of taxation may vary, depending on the form of taxation chosen by the state. Where the form of taxation is indirect, such as through levies on daily necessities, the effect of taxation falls (mainly) on the workers, i.e. on the variable part of the entrepreneurs' capital. Where the form of taxation includes direct taxes (such as taxes on profits and on incomes of the richest segment of society), the effect of taxation falls also on the surplus product, i.e. on part *s* of the ultimate value of commodities. Yet whatever its form, and whether the source of revenue be the part *v* or the part *s* of commodity capital (*C'*) or money capital (*M'*), the implication of state taxation is that a certain *contraction* takes place: less money is available for the purchasing of means of production and articles of consumption in a new cycle of manufacturing.

However, this evidently is only one side of the coin, since the state's role is not restricted to the collection of revenue. The reverse side of the above-noted effect of contraction, is that the state supports the realisation of profits, and the possibilities of expanded production, by purchasing commodities, foremost commodities churned up by Department III. Presuming that the size of Department III is (e.g.) 3000 units, that the organic composition of III equals that of I (4 : 1), and that the rate of re-investment of surplus is equal that in the other two large Departments of manufacturing (i.e. 50 percent), there is no reason to presume *a priori* that the net effect of production in III on accumulation be negative. In any case, looked at from this side, the impact of the role of the state as public consumer is one in support of capital *expansion*, i.e. precisely the opposite of the contractive effect noted above. *Prima facie*, the fact that the capitalists of Department III engage in expansion of the scale of production themselves, as do those of I and II, signifies that public consumption of commodities hailing from III *strengthens* the process of enlarged reproduction.

In this instalment, I will not further elaborate on the consequences of public consumption for the overall accumulation process. What I wish to note initially, though, is that the effects of public consumption are in principle contradictory, that both *contraction* and *expansion* of reproduction are stimulated by the state's intervention in the accumulation process. It is the task of political economy to analyse and measure these effects of contraction and expansion, in order to facilitate our understanding of the impact of military production on the capitalist system as a whole. Yet to my knowledge, these contradictory effects have been largely ignored by (most) political economists, who, following Marx, have overlooked the unproductive consumption that takes place in Department III, and the public consumption of arms by the state. The consequence has been that neither the destructive potential of the capitalist system, nor the effects of arms' manufacturing on the business cycle, have been adequately addressed by economic theory.

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References:

- (1) Karl Marx, *Capital. A Critique of Political Economy. Volume II* (Progress Publishers, Moscow, USSR, 1967), p.524;
- (2) Karl Marx (1967), op.cit., p.514;
- (3) see Chapter Two below;
- (4) Karl Marx, *Capital. A Critique of Political Economy. Volume I* (Progress Publishers, Moscow, USSR, 1976), p.588/589; also Rosa Luxemburg, *The Accumulation of Capital* (Monthly Review Press, New York, USA, 1964), p.110;
- (5) Karl Marx (1967), op.cit., p.514; also Luxemburg (1964), op.cit., p.114.

