

# **GLOBALISED MILITARISM AND THE NEED FOR CRITICAL ECONOMIC THEORY TODAY**

***INTRODUCTORY CHAPTER  
of the study on  
NUCLEAR AND MILITARY PRODUCTION  
AND CRITICAL ECONOMIC THEORY***

Dedicated To All Those  
Who Participated in the  
Historic Day of Worldwide Resistance  
Against the Planned US-War Against Iraq  
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# CHAPTER ONE

## ***GLOBALISED MILITARISM AND THE NEED FOR CRITICAL ECONOMIC THEORY TODAY***

### **1. Introduction: The Global Reach of Militarism Today**

This study theorizes the global reach of militarism at the beginning of the new millennium. Hardly a decade ago, it appeared that humanity could breathe a sigh of relief. For a period of half a century the danger of a nuclear conflagration and the destruction of many millions of human lives within seconds, had been an all too real possibility. Now suddenly the confrontation between the two superpowers with their over-kill nuclear capacities was over. Both Russia, which power remained largely in charge of the various component parts of the former Soviet Union's military-nuclear production complex, was forced to vastly reduce its spending on the military; and the United States, which in the 1980s had spent all-out on the purchases of armament systems and on other Pentagon-related costs, too felt forced to limit the size of its military budget. The world entered a decade of globalization, in which the production of information-technology was to lead the world's business cycle. Meanwhile the threat of militarism and of nuclear destruction, at least at the world level, appeared to recede. As the economies of the US and of its former chief adversary were partly being 'civilianized', there seemingly was much reason for optimism.

Today, a decade later, the optimism of the early 1990s looks entirely misplaced, and militarism and nuclear destruction at the start of the new millennium continue to pose a global threat. First, - the US, although it de-activated a part of its stock of atomic weapons in the 1990s, throughout the decade of globalization has continued to be a ponderous spender on the military. Thus, according to some analysts, throughout the same decade in which military spending was brought back from some 6 percent to less than 3 percent of the US's Gross Domestic Product, the US has been responsible for roughly half of the world's spending on the production of arms. Its military spending in the late 1990s was equivalent to that of 9 or 10 potential adversaries combined (1). Moreover, since the late 1990s, there has been a perceptible tendency of successive US-governments to increase the size of the military budget. Today's tendency of the Bush-administration to, partially, resume the policies of the Reagan era, is not only bound to have wide-ranging effects on the global economy. As the cases of the war in Afghanistan and the planned full-scale military aggression against Iraq bring out well, it inevitably will also result in ever new wars (2).

Second – the nuclear threat, far from having disappeared, today is only taking on new forms – forms different from the threat of a confrontation between the two nuclear superpowers of the Cold War-period. First and foremost, whereas in the past the use of nuclear weapons as a first-strike option was publicly very difficult to defend, the world's only superpower, now baptized 'hyperpower', has dared to state that it now does consider

using atomic weapons as part of a 'pre-emptive' strike against any of its adversaries (3). Moreover, although the spread of nuclear production for civilian and military ends during the 1990s was (temporarily at least) halted in the West's centers of the world economy, and though reliance on nuclear energy was assessed as uneconomical and hazardous, - the spread of nuclear production, including nuclear production for military ends, has been alarming especially in countries of Asia. Today, for the first time, two Southern adversaries, i.e. India and Pakistan, which are *adjacent* powers in the South-Asian subcontinent, face each other as *nuclear* adversaries (4). Hence, a comprehensive assessment of the nature of nuclear production, within the context of critical economic theory, is overdue.

Thirdly – and no less importantly – is the issue of the *exports* of arms and armament systems, which too should draw prominent attention in any discourse on globalised militarism. Even as proponents sing the praises of 'free trade', and advocate integration of each and every country and nation in the world economy, the flow of weaponry from North to South, in exchange of commodities representing sources of key wealth for weapons' importers, is playing havoc on Southern economies. And whereas the trade of social waste against wealth is well rooted in the past, the institutionalization of this form of trade around crude oil in the 1970s now has culminated in a situation where the given form of trade is applied in relation to several Southern continents, including to the poorest of continents, Africa (5). Here again, the negative consequences for humanity are not limited to the waste of resources that could be used towards the relief of poverty, for during the 1990s, one after another African country importing arms in exchange of primary commodities, has erupted into civil war. And since the wars have only increased the misery for peoples living in African countries, the given trade can only be termed a new form of *enslavement*.

This study theorizes today's globalised militarism from particular angles. Based on a critical reading of Marx's *Capital II*, a view of the individual circuit of capital is proposed in the first Part of this study which takes account of the existence of nuclear waste at each link of the military-nuclear and civilian-nuclear production chain. Then, in the second Part of the study, I will move on to address the social accumulation of capital, taking account of the fact that through much of the second half of the twentieth century, the military sector has been used by the American government to regulate the US's business cycle. In the third part of the study, I will take the discussion on trade-relations between North and South which theoreticians on unequal exchange had undertaken during the sixties and seventies of the previous century forward. The end-result has been an economic theory on the production and exports of arms, - i.e. a theory that has been dearly lacking so far. Yet while the below theory, I claim is, novel and may respond to the need of the hour, - the understanding of the given topics undoubtedly requires further theorizing. With regard to the development of human knowledge, I share the view of the anarchist theoretician Michael Bakunin, who humbly stated his own inability to grasp 'any very large portion of human knowledge', and argued that all 'human science is always and necessarily imperfect..' (6).

## 2. The Social Circuit of Capital and Marx's Reproduction Schemes

What concepts and theses from the legacy of critical economic theory do we need to refer back to in order to highlight how globalised militarism is rooted in the very nature of today's capitalist system? First, we need to re-assert the relevance of Marx's method for the analysis of the business cycle. Amongst the economic thinkers of his day, Marx was one of the first to argue - in opposition, for instance, against David Ricardo - that accumulation, which is the very purpose of the endeavours of all entrepreneurs, cannot proceed along a smooth path, but tends to be interrupted at regular intervals. Ever since the Industrial Revolution, the process of economic expansion in central economies, then located in Europe, was halted intermittently, as capitalist entrepreneurs failed to find a market for the goods they produced. The pattern of periodic downturns in the business cycle ultimately got to be known by the name of *recessions*. Whereas other economists reacted with disbelief, Marx early put forward the view that periodic crises were the inevitably by-product of the capitalism (7).

Further, Marx located the basic reasons for periodic crises in the anarchic nature of capitalist production. Under this system, no company can survive unless it seeks to continually expand its own scale of manufacturing, for the rule of the game is: either you expand or you perish. Yet in taking decisions regarding production, each company or entrepreneur has to fend for him self. This process of unplanned self-expansion necessarily results in numerous imbalances, as some entrepreneurs decide to expand at one rate, whereas other entrepreneurs take larger risks and expand at a quicker rate. No matter how carefully one may try to assess the future demand for one's own commodities on the market, - there is a likelihood that one will either under- or overestimate demand. Marx spoke in this context of capitalism's tendency towards *disproportionality*, which could be revealed either as an imbalance between the total quantity of goods produced and the total quantity of goods demanded, or as an imbalance in the expansion rate of different industrial sectors (8).

Marx sought to scientifically illustrate the problematic of disproportionality, by building reproduction schemes, somewhat analogous to the reproduction scheme developed in the 18<sup>th</sup> century by the father of the physiocrats, Francois Quesnay (9). Like the latter, Marx drew a diagram depicting several actors functioning as fundamental producers, and/or as fundamental purchasers of capitalist commodities. Yet whereas Quesnay constructed his scheme in the period before the industrial system had become the dominant one, Marx took the predominance of industrial manufacturing for granted and devised his diagram accordingly. His diagram thus came to consist in two basic Departments of Production, i.e. the Department for production of the Means of Production (**MP**), or Department I, and the Department for production of the Means of Consumption (**MC**), or Department II. In a complicated series of calculations presented in the last part of *Capital II*, Marx sought to demonstrate that a balanced process of social accumulation was possible, but that numerous difficulties existed, in terms of the proportionalities to be maintained between the two Production Departments (10).

In this study I have, following the Polish revolutionary thinker Rosa Luxemburg, argued that Marx' discussion on Production Departments was invaluable, but that his

view nevertheless was not fully convincing since he ignored exports, i.e. the flows of commodities towards other countries and continents. As Rosa Luxemburg rightly pointed out, - one of the limitations of Marx's reproduction schemes is that it presumes capitalism to be a 'closed' national system, whereas capitalism has in fact been a world system from the start. According to her, Marx rightly emphasized the difficulties underlying the exchanges in an anarchic market system, but in his closed reproduction scheme failed to highlight the need for and the potentials of external markets. Exports are required in particular for the sale of commodities representing the surplus part of manufactured goods. Thus, whereas Luxemburg accepted Marx's basic method of analyzing the system, in terms of two complementary Departments of Production of **MP** and **MC**, she raised initial questions regarding the final validity of Marx's famous reproduction schemes (11).

### **3. The Social Circuit of Capital and the Role of the Military Sector**

In the below study, I am going to argue that we urgently need to revive Marx's debate on the difficulties of social accumulation, be it in a manner different from the way this was argued by Rosa Luxemburg. First, capitalism through the twentieth century has continued to be beset with periodic crises, and such both in the period preceding and in the period following the occurrence of World War 'Two' (12). Moreover, whereas initially policymakers, more particularly those in the United States, sought to solve the problem of recurring crises by stimulating aggregate demand via *civilian* infrastructural programs, from the Second World War onwards a consensus was created within the US ruling class in favour of reliance on the military sector as regulating mechanism for the business cycle (13). Consequently, whereas historically, it may have been correct to analyse the capitalist system as a system of two Production Departments, through most of the last half century the hegemonic US economy has functioned as an economy of *three* Production Departments, including the Department for production of the Means of Destruction (**MD**), Department III.

We should further note the specific nature of Department III, for it cannot be equated with the Production Departments I and II. Whereas the latter two Departments are largely market Departments, which sell their goods to the other Department on the basis of mutuality, the Department for production of the Means of Destruction is not a purely market Department, but rather a *non-reciprocal* Department. That means: whereas this Department helps capitalists of I and II to realize their profits, since the owners of armament corporations buy raw materials from I, and since its employees buy consumer goods from II, the commodities churned out by Department III itself are, within the domestic economy, sold to one single actor only, being the hegemonic capitalist state (14). Consequently, whereas Karl Marx envisaged the capitalist economy as an economy existing of only two fundamental Departments, in reality the functioning of the US economy has been dependent on the 'interplay' between *four actors*, i.e. three Production Departments and the hegemonic state (15).

Now, the view that the military sector is used as leverage for regulation of the business cycle is not a novel view. It was already put forward by leading Marxist authors who in the later part of the last century analyzed the US-economy, then popularly labelled as the 'permanent war economy' (16). So why re-chew an old discussion, - a

discussion which, moreover, so clearly proved to be outdated when US policymakers restructured the American economy in the 1990s, and henceforth relied on information technology as major stimulus for the business cycle? Below, I will argue that the debate on Production Departments is once again of great actuality, be it that Marxists need to once again rethink their interpretation of 'Production Departments'. For although it is true that the military sector during the 1990s was not used as pump primer or multiplier, - throughout most of the preceding period, from the beginning of the 1950s till the late 1980s, it *had* functioned as a Production Department in Marx's sense. Hence, we need to speak of a *non-permanent* Department, as distinct from the *permanent* Production Departments, I and II (17).

Moreover, experience has brought out that the military sector is a double-edged sword, since it, for instance during the decade of the 1980s, was both *regulator* of the business cycle, and the *cause of a renewed, periodic crisis* in the system. Hence, ultimately, my discussion on Production Departments leads me to put forward the need for a re-adaptation of the Marxist theory of crises. As I will argue in Part Two below, Marx's view on inevitable disproportionalities needs to be upheld, but needs to be expanded in order to take stock of the experience of 20<sup>th</sup> century capitalism. Initially, US policymakers took recourse to the military sector in order to solve existing disproportionalities, between aggregate supply of commodities and aggregate demand. In the end, however, after a series of business cycles was run through, the military sector itself became a 'disproportional' or *discomplementary* Department, as investment money, under the impact of US state-policies, was increasingly shifted from industrial sectors belonging to the civilian economy, - to the military sector and the hegemonic state. No matter how much emphasis be placed on the manufacturing of commodities representing social waste, capitalism's basic predicaments remain (18).

#### **4. The Individual Circuit of Capital: Marx's Forgotten Formula**

Just like Marx's discussion on *social* accumulation, Marx's discussion on *individual* accumulation contained in the first part of *Capital II*, retains its full relevance today. Marx interpreted the mode of operation of individual entrepreneurs or companies as a series of transformative actions, or *metamorphoses*. Whereas the first action led to the transformation of money capital **M** into commodity capital **C**, composed of raw materials, other capital goods, and human labour power, - during the second transformation the commodities purchased were set to work in order to manufacture new commodities. In a characteristic statement Marx termed this phase of transformation, which he gave the letter code ... **P** ... , the 'productive phase' of the individual circuit of capital. Again, during the third phase of transformation, new goods were brought onto the market for sale, which, if carried out successfully, would result in the re-transformation of commodity capital **C**' into the form of capital with which the circuit had started, i.e. into money capital **M**'.

Further, Marx emphasized that the transformative actions did not each have equal significance in terms of helping individual capitalists to accumulate. According to him, the decisive phase from the standpoint of accumulation, was the second or 'productive' phase, during which manufacturing took place. It is during this phase that new values are

being created, thanks primarily to the efforts of workers employed by the entrepreneurs. For whereas the commodities purchased in the first phase of the circuit may have a certain value, being  $C$ , the commodities which emanate from the second phase do represent additional value, hence should be depicted as  $C'$ . Hence, Marx was keenly interested in seeking to understand how the transformation from  $C$  into  $C'$  took place. It was clear to him that the commodities emanating from the manufacturing phase ...  $P$  ... , were/are not just new in qualitative terms, in the sense that the *use-value* of  $C'$  was different from the use-values of  $C$ . In *quantitative* terms too the values of  $C'$  was/is larger than the value of the commodities that had entered ...  $P$  ... (19).

Marx explained things by offering a further analysis, i.e. regarding the composition of  $C$ , the commodities entering the manufacturing process. According to him,  $C$  consisted basically in two types of commodities, being means of production ( $MP$ ) and labouring strength ( $L$ ). In his view any increment in the value of commodities that takes place in the course of ...  $P$  ... should be credited to the labourers who are set to work by the entrepreneur. As he stated it, whereas the value of the means of production remains constant during ...  $P$  ... , a *surplus* is being created in consequence of the fact that the labourers are not paid fully for the labour they perform for the capitalist. Hence, Marx drew a basic distinction between constant capital,  $c$ , labouring strength or variable capital,  $v$ , and surplus capital, or  $s$ . All manufacturing processes result in commodities  $C'$  containing triple value, i.e. both  $c$ ,  $v$ , and  $s$ . All manufacturing, by the same token, also results in the accretion of value, taking place due to the exploitation of members of the working class (20).

Now, whereas at one time Marx's argumentation regarding the individual circuit of capital was common currency amongst his intellectual followers, today even some of his most consistent followers appear to have forgotten the given discussion, or appear to consider the formula which Marx put forward to depict the mentioned transformations as no longer relevant. Yet no matter how one may ultimately assess the scientific truth of other aspects of Marx's economic theory, the formula for the individual circuit of capital seems to be appropriate as a formula rightly depicting the fact that individual owners of capital engage in three successive transformative actions, i.e. the transformation of money capital into commodity capital ( $M - C$ ), the transformation of purchased commodities into new commodities in the course of the manufacturing process (...  $P$  ...), and the transformation back of the new commodity capital into enlarged money capital ( $C' - M'$ ). Hence, my starting point for analysis in the below study is Marx's original formula for the individual circuit of money capital, the formula  $M - C \dots P \dots C' - M'$ . Whatever critical reflection may be required on this formula, the originality of Marx's scientific effort stands.

### **5. The Individual Circuit of Capital and the Analysis of Nuclear Waste**

Marx's formula for the individual circuit of capital needs to be brought back, but, paradoxically, not in order to re-assert the thesis that all manufacturing results in added value  $s$ , but rather in order to highlight the very opposite, the fact that manufacturing can, at times does result in a *decrease* in the value of commodities available to the capitalist. First, the outcome of manufacturing may already be paradoxical in this sense, that the new commodities represent commodities with added value in monetary terms, yet at the

same time do represent social waste. This, of course, is the case where the entrepreneur or company investing in production has chosen to manufacture armaments. For whereas weapons, just like any other commodities, can be sold to market or non-market purchasers, - from the standpoint of their possible use-value they are a form of waste. Hence, a first commentary on Marx's formula for the individual circuit of capital is that it tends to disguise the nature of certain new commodities  $C'$ . In the case of weaponry, the new commodities should be depicted as  $C' (= W)$ , with  $(= W)$  referring to the fact that the military goods are social waste (21).

Further, although all entrepreneurs aim at creation of commodities with added value, - in many industrial sectors entrepreneurs have to cope with the fact that manufacturing results in embarrassing by-products, i.e. in non-commodity waste which entrepreneurs need to dispose of. This is true for sectors such as the chemical sector, where entrepreneurs have developed elaborate procedures for the recycling of their chemical by-products. But it is especially true of the nuclear sector, where individual enterprises have to cope with non-commodity waste which cannot be recycled, but has to be stored for prolonged periods, or even perpetually. Again, in all these cases, it would not suffice to depict the outcome of the manufacturing process ...  $P$  ... as  $C'$ , for entrepreneurs may have to cope with the costs for the packaging, the transportation and the storage of (nuclear) waste, -  $W$ . A more appropriate formula than the one originally advanced by Marx, to summarize cases where production results both in commodities and in waste, therefore is the formula  $M - C \dots P \dots C'(- W) - M' (- W)$  (22).

Having advanced a formula which includes a letter code for the emergence, along with new commodities, of non-commodity waste from the phase of manufacturing in the individual circuit of capital, we can now visualize what effect the presence of non-commodity waste exerts on the profit of nuclear entrepreneurs. In the first place, the costs which the capitalist incurs because of the presence of this waste ( $- W$ ) effects the level of the surplus  $s$ . Although the capital and other investments made to get nuclear production started, in principle may result in generating a surplus, the size of the surplus naturally is negatively affected by the capitalist costs which the entrepreneur is forced to bear on account of ( $- W$ ). And although in the end the given entrepreneur may still bag a profit, although at the end of the third transformation he may have in hand money capital which is larger than the money capital with which he had started the circuit, - potentially the costs for the processing and storage of nuclear waste may be so large as to wipe out the surplus  $s$  entirely.

In any case, the nuclear production-chain emanates in a multitude of forms of waste. For instance, the reprocessing of fuel elements from nuclear reactors, with the aim of manufacturing military plutonium, results in an extremely dangerous military commodity, which can be sold, yet is social waste ( $C' (= W)$ ). But it at the very same time also results in high-level waste, i.e. in non-commodity waste which needs to be handled with the greatest precaution, since it is highly radioactive in content. The outcome of reprocessing to produce weapons-grade plutonium, then, may be expressed in the letter code  $C' (= W) (- W)$ . Yet the wasteful character of nuclear production does not end here, for when efforts are made to vitrify nuclear waste, such as to facilitate its storage, the given manufacturing process ...  $P$  ... will result not only in waste which is less damaging, but in new forms of non-commodity waste (23). In short, by readapting

Marx's original formula for the individual circuit of capital, and by devising letter codes representing the two main subcategories of waste, we can make the irresponsible nature of nuclear production quite well visible.

## **6. Marxist Theories of International Trade: Samir Amin and the Question of Unequal Exchange**

This study consists in yet another Part, i.e. in the one relating to international circuits of capital. As noted already, Marx in his *Capital II* stopped short of analyzing the relationship between the accumulation of capital at the national level and capital flows in the world economy. Attempts have repeatedly been made since to try and fill the gap, for instance by Rosa Luxemburg who based her view regarding capitalism's need for trade with non-capitalist regions of the world on her analysis regarding the lack of domestic purchasers for commodities representing the capitalists' surplus  $s$  (24). Yet a different Marxist theory of international trade has emerged in course of the 20<sup>th</sup> century, when several authors, on the basis of empirical research carried out under the United Nations system, put forward the theory of *unequal exchange*, stating that the trade relations between North and South throughout the (past) century have been inherently exploitative, since Southern exporters receive a lower price for the commodities they sell internationally, than do Northern countries when exporting commodities (25).

The most eloquent theoretician of unequal exchange is Samir Amin, who covered the question of North-South trade relations in his comprehensive book on the relations of dependency between central and peripheral economies (26). According to Amin, one of the reasons for the continued dependence of Southern economies is in the asymmetrical nature of their export sector as compared to the export sector of economies of the North. For whereas the export sector of Northern economies tends to be integrated, meaning that production in the given sector is closely linked to manufacturing in other industrial sectors, - the same is not the case for Southern economies. Here, economic policy often is heavily biased in favour of the exporters of key commodities. Yet the export sector of Southern economies tends to be *disarticulated*, meaning that production here is isolated, is not intimately connected with production in other industrial sectors of the given economies. This, in Amin's view, forms part of the explanation for the continued economic backwardness of the South (27).

Another major difference between central and peripheral economies explaining unequal exchange, according to Amin, lies in their differential levels of productivity, measured in capitalist terms (in terms of the quantity of goods produced in a given unit of time). Here Amin drew two comparisons. First, he referred to the different levels of productivity with regard to the production of the *same type* of commodity, produced both in countries of the North and in countries of the South, - such as productivity achieved when growing a particular agricultural crop. But Amin also put forward a more overall comparison, that between the *general level* of productivity reached in central economies, - and the general level of productivity that is prevailing in peripheral economies. While some theoreticians believed that a sufficient explanation for the differential international value of Northern and Southern goods can be provided comparing the evidence on differential wage-levels, - Samir Amin was convinced that broader questions, such as

those regarding the development of technology, needed to be looked into in order to understand the reasons for the existence of unequal exchange (28).

Although the Marxist debate on unequal exchange is almost half a century old, it appears that the given debate has been buried since the founding of the World Trade Organisation (WTO), which is fully committed to the ideology of 'free trade'. Still, it would be wrong to conclude that the problem of changing terms of international trade, between Northern and Southern commodities, has disappeared, for recent research carried out under the UNCTAD has brought out clearly that Subsaharan countries, which rely on the exports of non-fuel primary products, in recent years have continued to face the detrimental effects of unequal exchange (29). Moreover, while efforts have been made in the past, especially by exporters of crude oil, to transcend the mechanism of unequal exchange, these efforts have only partly borne fruit. For though a historic price-rise was imposed in 1973 around crude oil, this price-rise above all has resulted in an expansion in arms' exports from central economies to oil-exporting countries in the South. Thus, a new mechanism of exploitation has been instituted, being that of the transfer of sources of natural wealth in exchange of commodities representing social waste. This mechanism may be termed *disparate exchange*.

### **7. Towards a Theory of the Arms' Trade Between North and South: the Concept of Disparate Exchange**

Where exactly should the concept of disparate exchange be situated, what is its precise meaning? Disparate exchange refers essentially to the *qualitatively different* nature of the commodities which are transferred respectively from North to South, and from South to North. As under unequal exchange, under the trading system of disparate exchange many Southern economies, in particular in Subsaharan Africa, continue to be dependent on the export of a single or a few primary products, - products which often express the main form of natural wealth available in the given countries. Where these primary commodities are exchanged against arms, representing social waste, the Southern government or other Southern party squanders the opportunity to employ the given natural resources for the enlargement of people's welfare. Disparate exchange, however, does not just refer to the exchange of primary products against arms, for where Southern industrial goods are exchanged for weaponry bought from the North, the commodities transferred from South to North and from North to South respectively, too are different in kind.

Further, disparate exchange generally takes place in the form of *parallel* transfers. Although in some cases arms' sales have been organised as barter, more often than not the transfers of military commodities from the North against civilian commodities from the South are only indirectly interlinked. Both the differential nature of the commodities transferred mutually, and the parallel nature of the exchange, can well be expressed via Marx's letter codes for money capital **M** and commodity capital **C**, and via the additional letter code for social waste (= **W**) which I have mentioned above. Thus, the transfer of arms from North to South needs to be presented as **C (= W) – M**, whereas the transfer of primary commodities or other civilian goods from South to North should be represented as **C – M**. Whereas both the Northern trading partner and the Southern trading partner surrender monetary resources (**M**) in order to obtain the commodity desired, only the

Southern trading partner is left with a commodity representing social waste ( $C = W$ ); the Northern trading partner, on the contrary, after completion of the exchanges is left with a commodity  $C$  which adds to the economic wealth available in the central economy.

To explain the existence of disparate exchange, we may draw on the reasoning that Samir Amin had advanced to explain the existence of unequal exchange. For central economies are not only better situated to participate in international trade in view of the fact that productivity in capitalist terms is relatively higher here than it is in peripheral economies. They are also better situated to engage in arms' trade, since under the system of monopoly capitalism, these economies have placed a great emphasis on the development of the *forces of destruction*, with Northern states intervening since the later part of the 19<sup>th</sup> century in the military to finance and guide research carried out by arms' companies (30). And although the concept of the forces of destruction is a novel concept, which has rarely been employed by Marxist economists in the past (31), it appropriately sums up the nature of the technology incorporated in arms, - as against the nature of the technology which is incorporated in civilian commodities. The concept, then, is essential towards construction of a theory of the arms' trade between North and South.

Lastly, it can hardly be emphasized with enough force that the exploitative character of disparate exchange is far larger, and its negative consequences for the peoples of Southern countries far more serious than the negative impact of unequal exchange for Southern economies has been or is. Whereas under the trading system of unequal exchange the South loses, because the commodities received in exchange of commodities transferred to the North do not represent an equal amount of value, under disparate exchange the entire value contained in the commodities transferred is lost, since what is obtained from the North is a product merely representing social waste. Hence, even if the background to the emergence of disparate exchange is formed by price-rises for oil, ending the huge exploitation via low prices that had existed before, the net result for the South is not positive in view of the fact that a new exploitative trading mechanism has been put in place. Moreover, Southern countries face further negative consequences from disparate exchange in case the military commodities bought are actually consumed in war. Which point is to be further elaborated in a separate section below.

## **8. Subsidiary Theme: The Negative Use-Value of Capitalist Commodities**

I will now move on to briefly refer to several subsidiary themes of this study, - subsidiary in the sense that they do not form the principal theme in any of the study's three Parts. The first such topic is that of the negative use-values contained in weaponry as well as in many other capitalist commodities. Marx, in formulating his theory, had presumed that each and every commodity brought onto the market contains 'use-values', meaning that each of them serves a concrete human need. Since the theme of the use-value of commodities was not fully elaborated by him, and since his primary focus of attention was, in fact, the exchange-value of commodities (32), Marx's followers have to my knowledge never cared to scrutinize whether Marx's employment of the term 'use-value' was fully appropriate. Yet scrutinize is what we urgently need to do, since it is quite obvious that not all capitalist commodities serve a human need. Who, for instance, can deny that the nuclear bombs thrown on Hiroshima and Nagasaki at the end of World

War 'Two' only served the purpose of mass destruction, - and hence can only be said to have contained *disvalues*?

In Chapter Two of this study I undertake to define the concept of *negative use-value*, a novel concept which can serve to express the negative health and environmental consequences of capitalist production, more particularly the damaging properties of military and nuclear commodities. In advancing this concept, I make several important definitional points. One is that the concept of negative use-value does not simply have an *inverse* meaning as compared to Marx's classical concept of use-value. For whereas the concept of use-value refers only to the significance of commodities for *human* beings, that of negative use-value, according to me, should also be employed to pinpoint the damaging consequences of market-goods for *non-human* beings and the environment. Thus, the dumping of nuclear waste into the oceans and seas can boomerang and impact on the health of human beings, who eat fish from the seas and oceans' food chain. But the damaging impact of radioactivity on the food chain itself too needs to be taken into consideration, even if human beings themselves are not affected by these consequences (33).

Moreover, we also need to realize that the *damaging properties* of arms and armament systems are not necessarily contained in all component parts of the given systems. Thus, a warship in earlier days was a merchantman loaded with a cannon, with the damaging properties, in the form of cannon bullets, being embodied in the cannon alone, and not in the rest of the warship. The damaging properties may, for instance, consist in a weapon's explosive potential, or in the radiating effect of atomic bombs (34). In any case, they would not reside in all component parts of a weapon or armament system. On the other hand, properties damaging to human health or the environment are not just contained in a whole range of capitalist commodities, but they can also be located in different types of *non-commodity* waste. Such as for instance in low-level, intermediate level, and high-level nuclear waste. In the latter cases, the materials emanating from the capitalist production process do not contain any exchange-values. Yet at the same time the materials do pose problems for the enterprises concerned, since they contain negative use-values, forcing the enterprises to make additional expenditures, on top of the regular production expenditures.

Lastly, it will be obvious to the reader that, in putting forward the concept of negative use-values, I have entered a discussion with a very wide scope of relevance, for the given discussion is not just crucial for the analysis of military and nuclear production, but in fact for the analysis of a whole range of other industrial processes as well. In the past, critical economic theory lacked the conceptual apparatus required to make a systematic evaluation of the environmental impact of industrial processes. Just like the question of non-commodity waste, the health and environmental impact of newly created commodities too was overlooked, as the mindset of Marxist economists was focused on assessing how much surplus value  $s$  was contained in the new market goods  $C'$ . The concept of negative-use value helps to expand the horizon of critical economic theory. It can help ensure that (Marxist) economists in the future will evaluate both the creative impact of industrial production, and the destructive impact of the selfsame production, - for human beings *and* for our non-human surroundings.

## 9. Subsidiary Theme: The View of Technology

The above-discussed concept of negative use-value, further, also makes it possible to assess the meaning of technological development in more critical terms than was the case under critical economic theory in the past. Marx basically considered technology to be a 'productive force', and he constructed his view on the historical evolution of economic systems accordingly (35). Thus, technological change in the form of new means of production to facilitate the spinning and weaving of clothes, laid the basis for the factory system and for the late 18<sup>th</sup> century Industrial Revolution in England. In Marx's view of history, technological change opened the way for the emergence of new relations of production, such as the relations between factory-owners and a mass of wage-labourers under a unified command. Later Marxist philosophers have wondered whether Marx's view of historical change was precise. Thus, Mao Tsetung has argued that decisive changes in production relations preceded, rather than followed, the technological transformations of the Industrial Revolution (36). However, the view that technological change itself was a historically progressive force, has remained.

The experience gathered since the beginning of the monopoly capitalist era, and through the 20<sup>th</sup> century, forces us to take a far more critical view of technology. First, the state – notably the British state intervening in the military sector from the late 19<sup>th</sup> century onwards -, took to patronizing research geared towards the construction of new arms and armament systems. Surely, proponents of military research often argue that such research does not only result in the devising of new weaponry, but also has so called 'spin-off' effects, in the form of technology that can well be applied towards the construction of civilian goods, such as personal computers and other means of information and communication. Again, as I have argued in the previous section, not all component parts of armament systems contain elements that are harmful for human life or for non-human forms of life in our natural environment, - not all components harbour 'negative use-values'. Nevertheless, the state's research is primarily geared towards the development of weaponry. And since modern weapons – unlike the artefacts used to kill in pre-modern times - can hardly be said to serve human needs, but are put in place to kill and destroy, the technology which they incorporate should be characterised as components of *means of destruction (MD)*.

Secondly, the 20<sup>th</sup> century has also given rise to the development of means of production (**MP**) which serve destructive ends. Here again, the concept of negative use-values helps to construct a far more critical view of technology than was common among Marxists in the past. For just as weaponry, as the end-product of capitalist manufacturing processes, contains negative use-values, - the technology invented to manufacture the weaponry too can have many negative effects for human health and the environment, quite aside from the harmful potential of the weaponry itself. Moreover, the same also holds for technological means devised in order to manufacture civilian commodities. These too may have their harmful side-effects. The example which brings out this point

most forcefully is, of course, the example of nuclear technology. Originally developed during World War 'Two' in order to construct atomic bombs – extraordinarily harmful means of destruction -, the technology has subsequently been employed towards 'peaceful' ends, being the production of nuclear energy. Yet the nuclear technology applied in the civilian-nuclear production chain too is very damaging towards human and non-human life (37).

In short, - the old Marxist view that technology is a productive force urgently needs to be revised. The degree to which means of production or end-products of capitalist manufacturing processes have damaging consequences for human beings and for our natural environment greatly varies. In some cases, new technology both *serves* a human need, and *harms* human beings at one and the same time. In other cases, technology is either a purely damaging, destructive force, - or is instead a purely productive force. In the end, we probably need to evaluate technology along a gliding scale, with the *purely productive* and the *purely destructive* being the two end-poles on the scale. In any case, the recognition that the technology incorporated in new weaponry is a force of destruction is overdue. For, since research carried out under the umbrella of the hegemonic and other central capitalist states is so much geared towards devising ever new, and ever more harmful types of weaponry, the development of the forces of destruction has become a dominant concern under today's capitalist world system (38).

#### **10. The Ultimate Theme: The Conceptualisation of Wars**

Wars have accompanied the rise of capitalism in Europe, from the 14<sup>th</sup> through to the Industrial Revolution at the end of the 18<sup>th</sup> century. They have also been endemic more recently, in the age of monopoly capitalism. During the 20<sup>th</sup> century two world wars have erupted in relatively quick succession. Again, after the hegemonic power in the world system, the United States, has started relying on the military sector for regulation of its business cycle subsequent to World War 'Two', wars have continued to be a fact of life, be it that most have since occurred in the periphery of the world system. Yet though wars have been *thematized* by some unconventional economists (39), the occurrence of wars under capitalism has never been *conceptualized* within the framework of critical economic theory. This task thus is clearly overdue, in particular in view of the dramatic economic consequences that wars tend to have. In this study, such a conceptualization is being attempted, once again by drawing on Marx's teachings.

The starting point for the given conceptualization is, again, Marx's discussion on the individual circuit of capital in *Capital II*. Here, Marx depicts the mode of operation of individual entrepreneurs, as stated, above, as a series of transformations, of money capital into commodity capital; of labouring strength, raw materials and other commodities which are set to work during the manufacturing phase, into new commodities; and of commodities emanating from the manufacturing process into capital's original form, money capital. My discussion on the conceptualization of wars starts from Marx's discussion on the second phase of capital's circuit, depicted by Marx as ... P ... . Whereas Marx on the one hand characterizes this phase as a productive phase, since during the given phase new values are created by the labourers, he also speaks of the manufacturing phase as a phase of *consumption*, since the commodities which were

bought during the previous phase are used up in order to create  $C'$  (commodities with added value) (40).

The conceptualization of wars under capitalism should start from the (partial) analogy between the consumption of commodities that takes place during ...  $P$  ... on the one hand, and the (ultimate) consumption of military commodities on the other hand. Since the use of arms by warring parties too can be interpreted as a form of consumption, the question basically is how the consumption of arms should be characterized. Here, the reality is that the outcome of this form of consumption is the very opposite of the consumption taking place during ...  $P$  ... . For whereas manufacturing processes result in creation, the very aim of the consumption of weaponry is to destroy, i.e. to kill human beings, as well as to destroy the structures built in support of human life. Hence, although we may speak of an analogous process of consumption, the content of the consumption of arms is radically different from the content of ...  $P$  ... . To express the nature of the former case, the consumption of weaponry, it is therefore best to employ the letter code ...  $D$  ... . The whole process of destruction can then be depicted as  $C' (= W) \dots D \dots (-C') \times X$  (41).

Lastly, it may be noted that under disparate exchange both the negative consequences of arms' production and those of arms' consumption are *diverted*, from central economies towards economies located in the South. For whereas under this trading system the exporter of arms obtains  $M$  in exchange of a commodity representing social waste  $C (= W)$ , i.e. gets rid of waste while bagging money capital, - the exporting country is also exempted from the destructive consequences of the *consumption* of the given arms. Both negative effects are dumped onto the South, both the unproductive consumption of commodities occurring during ...  $P$  ... , and the consumption-for-the-sake-of-destruction occurring during ...  $D$  ... . Moreover, since the trade form of disparate exchange is, also, implemented in the context of Southern *civil* wars, and since in a number of cases both warring parties rely on this trade for financing their military efforts, we need to be aware of the fact that here negative effects are *twice* enacted on a Southern economy. Clearly, disparate exchange, in the last analysis, is a *form of enslavement*, of ultimate exploitation of peripheral by central economies.

## **11. Conclusion:**

### **Taking Rosa Luxemburg's Life-Work Forward**

In conclusion: this book project poses, against the grain, the need to urgently re-assert the relevance of the critical economic theory, which Karl Marx, towering above other economic thinkers of his time, constructed in the second part of the nineteenth century. Since the downfall or demise of (most) state-socialist systems, few people have continued to believe that Marxist economic theory is helpful towards the interpretation of today's problems. In the 1990s it became a fashion to argue that Marx's views were outdated, and that the analysis of the dominant creed, neoliberalism, did not require the use of Marxist theoretical concepts. This study focuses on the issue of globalised militarism, which has come to the fore in recent years, i.e. since the end of the euphoria over the 'new economy'. My argument has been – against the dominant trend of outright rejection – that Marxist economic theory is highly relevant for the understanding of today's economic realities. If we are to understand the worldwide trend towards

militarization of production and of economic life, we need to re-assert the relevance of critical economic theory, be it from a completely unconventional position.

Further, in re-asserting the contemporary relevance of Marx's theory, I take my clues primarily from the Polish revolutionary thinker and activist, Rosa Luxemburg. Rosa Luxemburg, who joined the German Social Democratic Party (then one of the most powerful participant parties in the Second International), was fully committed towards Marx's theory. She, however, never read Marx and Engels' books uncritically, but instead tried hard to make an independent assessment of developments in the world economy in the period preceding World War 'One', i.e. in the opening period of monopoly capitalism and imperialism. And on the basis of her own scientific investigations, she put forward the view that the analysis which Marx presented in the second volume of *Capital* was flawed, since in his reproduction schemes, contained in the last part of *Capital II*, Marx had not taken account of the fact that capitalism is by nature an international system, - a system which for its survival depends on external markets. For he had presumed the capitalist economic system to be 'closed'(42).

In this study I have tried to take Rosa Luxemburg's scientific work forward, by questioning the final validity of Marx's analysis in *Capital II*, and such in a more comprehensive manner than Rosa Luxemburg did. For while I have taken account both of the formulas presented by Marx in the first Part of *Capital II*, as also the diagrams which he put forward in the last part of *Capital II*, I have argued that Marx's analytical work was not just incomplete with regard to the theorizing of international economic relations. Instead, I have argued that if we are to offer a convincing interpretation of globalised militarism today, we need to rethink both the formula for the individual circuit of capital, and incorporate the existence of non-commodity waste; we need to rethink his formula for the social circuit of capital, and take account of the fact that the military sector acts as 'non-permanent' Production Department; and we need to theorize the arms' trade, on the basis of the unconventional theoretical work accomplished by Samir Amir and other thinkers who have defended the thesis on unequal exchange.

This study, then, poses not only the need to re-assert the relevance of critical economic theory, but argues strongly in favour of *innovation*, of re-adaptation of Marx's formulas and theses. For no matter how farsighted Marx may have been in his own time, - the development of nuclear production, the worldwide spread of arms' trade and the intermittent reliance of the US government on the military sector, all point towards the need for theoretical innovation. In this study, then, I have put forward a new theory, around issues which have never been theorized, such as the international arms' trade and the nuclear production-chain. In the end, this study can in no way be said to be an orthodox study, for no formula, thesis or analysis of Marx's has simply been taken for granted. In the spirit in which Rosa Luxemburg rethought the ideas advanced by Marx in *Capital II*, I have in this study attempted to present a comprehensive study of militarism comprising the individual, the social and the international level of the accumulation of capital.

(January 6, 2005)

## References:

(1) Paul-Marie de la Gorce, 'L'Empire Contre 'ONU. Washington relance la Course aux Armements' (*Le Monde Diplomatique*, December, 1999, p. 4-50;

(2) for data on the size and composition of the US's military budget, see eg. Michael Mandel, 'Rethinking the Economy', *Business Week*, October 1, 2001, p.34; Laurent Zecchini, 'Etats-Unis et Europe: Grand Ecart des Budgets de Defense', *Le Monde*, February 6, 2002; Jacquens Isnard, 'Aux Etats-Unis, un Budget de Guerre a Risques', *Le Monde*, February 12, 2002; *The Economist*, 'Transformed? A Survey of the Defense Industry', July 20<sup>th</sup>, 2002; Patrick Jarreau, 'Le Projet de Budget Americain pour 2004 Prevoit 307 Milliard de Dollars de Deficit, Mais Pas de Guerre', *Le Monde*, February 5, 2003; and Jacques Isnard, 'Le 'Nouvelle Culture' des Armees Americaines', *Le Monde*, February 14, 2003;

(3) on the Bush administration's new military policy, aimed at developing or strengthening the capacity to invade hostile regional adversaries, see Michael Klare, 'De l'Antiterrorism a la Guerre. Les Vrais Desseins de M.George Bush' (*Le Monde Diplomatique*, November, 2002, p.16-17)

(4) for details on the militarization in South Asia, and on the evolution of the nuclear thinking of rulers in the subcontinent, see respectively Praful Bidwai, 'More Weapons, Less Peace. A Militarised South Asia Will Be Insecure, Unhappy', *Communalism Combat*, January, 2003; and Achin Vanaik, 'A Degenerating Nuclear Logic', *The Hindu*, January 23, 2003;

(5) Chapter Twenty and Chapter Twenty-One below ;

(6) Michael Bakunin, 'What is Authority?' (in: George Woodcock, *The Anarchist Reader*, Fontana Paperbacks, Glasgow, United Kingdom, 1983, p.313 and 311);

(7) Karl Marx, *Theories of Surplus Value. Part Two*, Lawrence & Wishart, London, United Kingdom, 1969, p.480; Fred Oelsner, *Die Wirtschaftskrisen. Erster Band. Die Krisen in Vormonopolistischen Kapitalismus*, Dietz Verlag, DDR, 1953, p.98; and Paul Sweezy, *The Theory of Capitalist Development*, Monthly Review Press, New York/Calcutta, USA/India, 1991, p.133;

(8) Fred Oelsner (1953), op.cit., p.43;

(9) Francois Quesnay, *Tableau Economique* (first printed in 1758, reprinted by the British Economic Association, facsimile edition, 1894);

(10) Karl Marx, *Capital. A Critique of Political Economy. Volume Two*, Progress publishers, Moscow, USSR, 1967, Chapter XXI, 'Accumulation and Reproduction on an Extended Scale', p. 493;

(11) Rosa Luxemburg, *The Accumulation of Capital*, Monthly Review Press, New York, USA, 1964;

(12) eg. Ernest Mandel, *The Second Slump*, Verso Editions, London, United Kingdom, 1980;

(13) Paul Baran and Paul Sweezy, *Monopoly Capital. An Essay on the American Economic and Social Order* (Monthly Review Press/K.P.Bagchi & Company (reprint), New York, USA/Calcutta, India, 1994);

(14) Ernest Mandel, *Der Spatkapitalismus. Versuch Einer Marxistischen Erklarung* (Late Capitalism –Attempt at a Marxist Explanation, Editions Suhrkamp Verlag, Frankfurt am Main, Germany, 1974, p.257);

(15) Chapter Ten below, p. ;

(16) Ernest Mandel (1974), op.cit., p.255; and Michal Kalecki, *The Last Phase in the Transformation of Capitalism*, Monthly Review Press, New York. USA, 1972;

(17) Chapter Seventeen below, p. ;

(18) *ibid*;

(19) Karl Marx (1967), op.cit., p.65-84;

(20) *ibid*, p.34-36;

- (21) Chapter Four below;
- (22) Chapter Two, Chapter Four, Chapter Five;
- (23) *ibid*;
- (24) Rosa Luxemburg (1964), *op.cit.*, p.350; Paul Sweezy (1991), *op.cit.*, p.202-207;
- (25) Arghiri Emmanuel, *Unequal Exchange. A Study of the Imperialism of Trade*, Monthly Review Press, New York. USA, 1972; Samir Amin, *Accumulation on a World Scale. A Critique of the Theory of Underdevelopment* (Monthly Review Press, New York, USA, 1974);
- (26) Samir Amin (1974), *op.cit.*, p.37;
- (27) *ibid*, p.286;
- (28) *ibid*, p.55-58;
- (29) United Nations Conference on Trade and Development (UNCTAD), *The Least Developed Countries Report 2002. Escaping the Poverty Trap* (United Nations, Geneva/New York, Switzerland/USA, 2002);
- (30) D.J.Scott, *Vickers. A History* (Weidenfeld and Nicholson, London, United Kingdom, 1962); Clive Trebilcock, *The Vickers Brothers. Armaments and Enterprise, 1865-1914* (Europa Publications Limited, London, United Kingdom, 1977);
- (31) a partial exception is Mandel – see Ernest Mandel (1974), *op.cit.*, p.255-288;
- (32) Paul Sweezy (1991), *op.cit.*, p.26-27;
- (33) Chapter Three below ;
- (34) Chapter Three below;
- (35) Karl Marx, *A Contribution to the Critique of Political Economy* (in: Robert Freedman, Marx on Economics – Penguin Books, Middlesex, England, 1976, p.5-6);
- (36) Mao Tsetung, *A Critique of Soviet Economics*, Monthly Review Press, New York, USA, 1977, p.66;
- (37) Chapter Fifteen below, p. ;
- (38) Chapter Fifteen below, p. ;
- (39) notably by Werner Sombart, *Krieg und Kapitalismus* (in German: War and Capitalism, Verlag von Dunkel & Humboldt, Muenchen and Leipzig, Germany, 1913);
- (40) Karl Marx (1967), *op.cit.*, p.34 and 43;
- (41) Chapter Twenty-Four below;
- (42) Rosa Luxemburg (1964), *op.cit.*