

CHAPTER NINETEEN

UNEQUAL EXCHANGE AND DISPARATE EXCHANGE

SUCCESSION AND CO-EXISTENCE OF TWO IMPERIALIST TRADING MECHANISMS

1. Introduction

In this Chapter I will draw a comparison between two mechanisms of imperialist exploitation of Southern peripheral economies, i.e. the mechanisms of *unequal* exchange and of *disparate* exchange. In the late 1940s, statistical research carried out under the aegis of the United Nations brought to light the fact that countries producing 'primary products' for almost half a century had been subject to a deterioration in the terms of their trade, in the order of 40 percent (1). The phenomenon contrasted with the experience during much of the 19th century, when prices reportedly had declined in Europe, then the centre of the world economy, and when prices outside of Europe had been on the rise (2). Moreover, figures were cited showing that the losses for peripheral economies due to deteriorating terms of trade were not just huge in financial terms: the significance of detrimental price changes as a mechanism of exploitation had grown over time. By the middle of the 20th century, the mechanism presumably had overtaken in significance direct capital investments, which earlier were identified by Lenin as the principal leverage of imperialist exploitation (3).

The empirical research on the deteriorating terms of trade thus set off a major debate on the continuing inequality between the centre and the periphery of the world system, a debate which was to last well into the decade of the 1970s. The discussion on the one hand inspired Southern countries which were dependent on the exports of one or a few raw materials and/or primary products, to devise policies either aimed at reducing their export dependence, or aimed at raising the price level of commodities they produced. On the other hand, the empirical research also fuelled theoretical debate, mainly by Marxist oriented economists, seeking to analyse the causes for the persistence and growth of the given exploitation by central economies. This debate, it should be noted, did not result in one, shared theoretical interpretation. Several authors put forward alternative and at times contrasting points of view (4). Nevertheless, the theoretical debate in which prominent economic thinkers both from the South and from the North participated, underlined that the mechanism of unequal exchange was central to the understanding of 20th century international trade structures.

Unequal exchange further has been the historical precursor to another, interrelated imperialist trading mechanism, i.e. that of *disparate exchange*. Disparate exchange refers to the, direct or indirect, international exchange of commodities which are qualitatively different in kind, meaning that they represent forms of wealth (being the commodities traded by the South) against forms of waste (i.e. the commodities traded by the North). This mechanism of exchange has existed at least from the beginning of the era of monopoly capitalism, when military companies of the hegemonic power, Great Britain,

started relying on exports of armoured warships to supplement (and at times offer an alternative to) orders placed by the British state. However, it is only in the second half of the 20th century that arms' exports from North to South (initially defined as the 'Third World') expanded and became a topic for international debate. If we take the moment when the now hegemonic capitalist power, the United States, sought to institutionalise disparate exchange as trading mechanism as 'take off'-point, i.e. the beginning of the 1970s, - this point lies many decades after the turning point in the terms of trade between centre and periphery, which as stated was the late 19th century.

In any case, if we do take account of the fact that the flow of arms from North to South (without counter-flows of arms from the South towards the North) necessitates the parallel transfer of other commodities which frequently happen to be primary products; if we further take account of the fact that these parallel flows of commodities too are subject to changing terms of trade, as registered in research on unequal exchange, - then there is all reason to draw on the debate regarding *unequal* exchange, when conceptualising *disparate* exchange. In this chapter I will indeed do so, even while keeping in mind the constantly changing empirical context of international trade. Below I will briefly review the theoretical standpoints on unequal exchange, as formulated by major proponents of the debate on this mechanism, i.e. Arghiri Emmanuel, Charles Bettelheim and Samir Amin. The purpose of this review is to bring out the continuing relevance of the debate on unequal exchange in the present era, and to use the given debate as a reference point for the conceptualization of *disparate exchange*.

2. The Theory of Unequal Exchange: Relative Immobility of the 'Factor' Labour

Arghiri Emmanuel constructed his theory of unequal exchange by questioning the understanding which the classical economist David Ricardo had offered, namely that international exchange is guided by the international *immobility of capital*. A key starting point for Emmanuel's theory published roughly one and half century after Ricardo's, was that capital in fact is free to move across borders and seek profits on investments elsewhere, whereas wage-labourers do not possess this same freedom of movement. Capitalism instead is characterised by a relative *immobility of labor*. Contrary to the position they occupy in domestic markets, where they are free to shift employment between different industrial sectors, and contrary to capital's freedom to travel wherever it wants, wage-labourers on the whole do not have the scope to shift from one country to the next. They are not able to 'jump' between employers located at different geographical points across national borders. This, according to Emmanuel, explains the existence of international wage differentials, and also explains why the remuneration for Northern and Southern products in the international economy is characterized by inequality (5).

Emmanuel's argument is based on a comparison between the mobility of capital and labour respectively, and surely should not be employed to debate whether labour mobility exists at all, or to what extent it occurs. International migration of human beings seeking new possibilities for employment elsewhere, does form a crucial aspect of the capitalist world economy and does facilitate, as is well accepted in the literature, the exploitation of human labour, since it helps create in the economies of in-migration ever

new layers of workers whose pay is low (6). However, this reality of labour migration should not be framed such as to deny the fact that the owners of capital can much more easily shift and relocate their financial resources than workers selling their labour power can. Workers simply do not possess an equally large freedom to move as capital-owners do. Hence, at first sight Emmanuel's theoretical argument seems to hold well: the imposition of inferior wages on workers located in countries with low wage levels is facilitated by the fact that workers are not in a position to challenge the international migration of capital.

The latter is well illustrated by the case of readymade garments' production. For several consecutive decades, the stitching and buttoning of clothes in small factories where women workers are lined up in long rows seated behind sewing machines, has been subject to a process of international 'run and rerun'. Whereas until after World War 'Two', much of this work was concentrated in Western European countries which had undergone industrialisation, subsequently the production of readymade garments has been shifted between different regions of the South, such as the Middle East, South-East Asia, South Asia and China (7). And there is no doubt indeed that the owners of capital investing in the garments' sector over and over again have relocated production, keeping in mind the highly differentiated wage levels internationally. The enormously large variety in wage-levels between countries does seem to explain the behaviour of capital, since it is only 'natural' that capital would take advantage of such inequalities in order to reap a maximum profit (8).

Still Emmanuel's interpretation has been challenged, on the grounds that it ignores the wider context of those economies in which foreign investments are made. In this alternative interpretation of unequal exchange, the existence of differential wage-levels between different economies is not seen as an autonomous and isolated factor, but itself is related to the stage of development of any given economy. More concretely, wage-levels are related to the degree of development of what Marx called the *forces of production*, meaning both the growth in technology, i.e. the material means used for the manufacturing of commodities, and the growth in human knowledge and technical skills developed for the enhancement of production. Hence, even though Emmanuel's views on the immobility of labour versus the mobility of capital were neatly counter-posed to those of the classical economist David Ricardo, who had presumed capital to be immobile, they have not been accepted as the ultimate theoretical interpretation of the changing terms of international trade (9).

3. 'Unequal Exchange': The Issue of Differential Levels in the 'Development of the Productive Forces'

Whereas Arghiri Emmanuel's book on unequal exchange was trend-setting, since it consciously endeavoured to theorise the phenomenon of deteriorating terms of trade from a Marxist perspective, there are others who have crucially contributed to the discussion on the reasons for the South's unequal position in international trade. Thus, both Charles Bettelheim and Samir Amin have partly disagreed with Emmanuel's conceptualisation, arguing that the structural inequality between North and South is primarily due to differential levels in the growth of the productive forces in North and South respectively. Due to the technological progress scored here, the labour of the

workers situated in central economies generally results in a larger number of products per hour than does the labour of workers situated in peripheral economies. Consequently, workers in central economies are paid higher wages. This issue has been well worded by Samir Amin, who for clarification's sake draws a distinction between two basic cases.

In the one case, commodities from sectors with a rather low productivity in peripheral economies are exchanged against commodities heralding from sectors in central economies where levels of productivity, expressed in capitalist terms, are relatively high (10). The products transferred to the North may, for instance, be tea, coffee, or cacao, typically commodities turned out by export-oriented cash crop sectors in Southern economies. Here, the transfer of value from South to North according to Amin is proportionally large. Not only does a Southern peasant receive a smaller reward for his labour than does a Northern producer, the relatively smaller reward reflecting the 'backward' state of technology in Southern agriculture. In fact, the disequilibrium in payments according to Amin is even larger than is the difference in levels of productivity in the export-oriented sectors of Southern and Northern countries. How much lower the reward for the Southern peasant exactly is, is difficult to say. However, there is no doubt, Amin argues, that rewards are much lower in the periphery 'than are productivities' (11).

Amin highlights yet a second case, one that is equally important for an understanding of the issue of unequal exchange. This is the case where the commodity transferred from the South does not herald from a sector with a low level of technological development, but heralds from a 'niche', a sector where, thanks to the import of capital, 'advanced' means of technology have been installed and where consequently the level of labour productivity, measured in capitalist terms, is relatively high. Amin emphasizes the fact that such exports, e.g. exports of oil and processed minerals, in the middle of the 1960s represented the bulk of exports from peripheral countries. And yet, although in this case the level of productivity of the Southern commodity may be comparable to that of the commodity which in exchange is transferred by the North, the respective rewards remain unequal. Here, it appears, it is the general difference in the organic composition of capital located in Northern economies as compared with the organic composition of capital in Southern economies in general, which causes inequality to continue (12).

The argument about the differential levels in the *forces of production*, which was stressed by both Bettelheim and Amin, formed a significant addition to the debate on unequal exchange. It, moreover, is an issue which now has double significance. The historical discussion on unequal exchange remains of much contemporary relevance, amongst others since the problem of changing terms of trade and of unequal rewards for commodities exported respectively by Northern and by Southern economies, has not disappeared, but continues to pester the South, - in particular those peripheral economies which have least succeeded in building their own technological and industrial base. Moreover, the issue of differential levels in the forces of production has special significance for today's debate on disparate exchange, since, as will be explained below, the South's dependence on the imports of Northern arms needs to primarily be explained in these or parallel terms.

4. The Disarticulation of Dependent Economies

The Marxist economist who, among the various participants in the debate on unequal exchange, advanced farthest in offering a comprehensive and integrated analysis of the issue is the Egyptian philosopher-economist Samir Amin. Amin recognized that the publication of Emmanuel's thesis on unequal exchange constituted a turning point in the history of theorising international trade, yet he ultimately marked his clear distance from Emmanuel's position. Thus, in an essay devoted to the theme of 'unequal exchange and the law of value', Samir Amin explicitly argued against Emmanuel's conceptualisation, which he termed an example of 'single factor' analysis (13). According to Amin, the Marxist methodology precisely distinguishes itself from the bourgeois methodology, in that Marxism refuses to compartmentalise reality into separate, isolated elements. In his view, by singling out the issues of differential wages and the comparative immobility of labour, Emmanuel had failed to provide an integrated analysis of the problematic.

In opposition to Emmanuel, then, Samir Amin argued in favour of a comparative analysis, so as to delineate the overall place which exports occupy respectively in central and in peripheral economies. Here, a distinction may be made between the quantitative and the qualitative aspect of the matter. First, historically exports from centre to periphery have occupied a decisive place in the structure of international trade of key European economies. Such is true, for instance for both Great Britain and for France. Yet the importance for these economies of exports towards the periphery has substantially decreased over time (14). For peripheral economies, on the other hand, the flow of exports towards central economies often continues to constitute the mainstay of their international trade relations (15). Here, one can speak of an *asymmetrical relationship* between the centre and the periphery of the world economy. Amin cites elaborate quantitative data to illustrate his point, the implication of which is structural dependence of countries of the South.

There is, however, yet another, qualitative aspect of the matter, which Amin has expressed in the notion of 'disarticulation' of peripheral economies. The exports from, as also the imports into central economies form part of one integrated process of accumulation. That means, in the case of central economies, the effects of international trade are spread over a variety of sectors. These sectors form a web of numerous, interconnected circuits of individual capitals, supplying each other with commodities. The same is not the case for peripheral economies. Since the export sectors of these economies have, more often than not, originally been built to serve the needs of colonial powers dominating these economies, the given sectors tend to be 'disarticulated'. Peripheral economies, in Amin's words, are often composed of sectors which are 'juxtaposed' and 'whose centres of gravity lie in the centres of the capitalist world' (16). And because of their deformed structures, their '*internal disarticulation*', the development of Southern economies tends to be greatly hampered.

In the context of this Chapter I can do no more than briefly summarize the question of the disarticulation of peripheral economies, as posed by Amin. This summary, however, should suffice to illustrate Samir Amin's analytical approach, which

is in line with the methodology which Marx had proposed in *Capital II*. Clearly, for Samir Amin the question of unequal exchange cannot be reduced to a single factor analysis. The issue ultimately can only be fully understood by sketching the contrast that exists between the structure of economies located in the centre of the capitalist world and the structure of economies located at the other end of the spectre, in the periphery. The latter economies contrary to the former have embarked on a path of capitalist development under the impact of external domination, primarily by European colonial powers which for many centuries on end have exploited their natural wealth. Their participation in world trade is shaped by the peripheral countries' colonial experience. Although the discussion on unequal exchange is no longer common currency today, the fundamental issues which it raised to my knowledge continue to be relevant for the analysis of (contemporary) international trade (17).

5. Disparate Exchange: Historical Transition in Trading Mechanisms

Having as concisely as possible stated the interpretation which leading theoreticians have given of unequal exchange, I now wish to initiate my comparative discussion between *unequal* and *disparate* exchange. The first question to be referred to here is that of the historical transformation of the one trading mechanism into the other. As stated in the introduction to this Chapter, although both trading mechanisms emerged at roughly the same point in time, i.e. when monopoly capitalism replaced *laissez-faire* capitalism, - they did not simultaneously become prominent mechanisms of exploitation. Although more statistical research is required before definite conclusions can be formulated, it appears to me that unequal exchange during the first half of the twentieth century gradually emerged as the principal method for the transfer of wealth from South to North. Disparate exchange instead only became a prominent method for the transfer of wealth from peripheral to central capitalist countries in course of the second half of the twentieth century. In this sense, then, we may speak of the historical transition between or succession of two differential trading mechanisms.

Further, the historical transition, in particular during the 1970s and 1980s, was at least partly induced by the circumstance that Southern countries producing key raw materials put up joint resistance to turn the tables, i.e. to reverse the continually negative trend in the terms of trade between Southern and Northern goods. Southern resistance against unequal exchange, paradoxically but in truth, created the preconditions for an expansion in Northern arms' exports. Modern armament systems, such as fighter planes and missiles, are technologically sophisticated products, which can only be bought by states possessing the required financial resources. The sales of these arms' systems to Southern countries and regions is complicated, where international terms of trade are constantly changing at the expense of Southern producers of raw materials and other primary goods. The historic formation of Southern producer *cartels* not just increased the leverage of these countries vis-à-vis Northern states. In as much as price-changes resulted in enlarged financial resources in the hands of Southern states, and in as much as these were specifically allocated towards military means, the new trend facilitated an expansion in the exports of Northern arms.

Further, the given transformation did not occur spontaneously, but was enacted. It resulted from pressure exerted by North countries on countries of the South. Thus, the governments of the United States and of other Northern states undertook commercial promotion activities, advising governments of Southern states to buy the weapons' systems produced by their armament corporations (18). To this end, leading Northern states also created credit mechanisms and offered credit in support of international arms' sales (19). Meanwhile, governments of Southern states displayed a preference to channel increased incomes from commodity exports not towards public education and public health, but towards means of destruction purchased abroad. If instead there would have been a shared commitment by North and South towards solving problems of malnourishment and deprivation, the historical reversal in the terms of trade, which as well known occurred with regard to the world price of crude oil (1973), would not have resulted in an expansion in the flow of armament systems towards countries of the South.

In any case, *conceptually* the given historical change heralds the transformation of one trading mechanism into the other. It means that the emergence of *disparate* exchange is not an isolated phenomenon, but should be situated in a concrete economical and political context. Speaking from the angle of *unequal* exchange, it signifies that reductions in levels of exploitation have not emanated in greater levels of equality between North and South, but in a shift to another mode of exploitation. In short, the analysis and conceptualisation of the trading mechanisms of unequal exchange and disparate exchange as a *historical continuum* emanates in an understanding of the continuation of unequal and exploitative relationships between North and South. Whereas previously, inequality consisted in the parallel transfer of commodities containing unequal quantities of human labour and unequal amounts of value, the inequality now entails the parallel transfer of commodities representing, respectively, social *waste* and social *wealth*. Contrary to an impression created by a singular focus on terms of trade alone - the South never broke the cycle of its dependence on the centre of the world economy.

6. Unequal Exchange and Disparate Exchange: Co-existing Mechanisms of Exploitation

There is, however, yet another way in which the relationship between the trading mechanisms of *unequal exchange* and *disparate exchange* can be visualised. This is not by seeing the two as systems of exploitation which have been employed by imperialism in succession, but as methodologies of exploitation which can be, and are being applied simultaneously. In this case, the two are *co-existing* mechanisms, implying two possibilities. One possibility is that Northern countries make use of *unequal* exchange, i.e. of exchange between commodities each representing wealth in their trade with some countries, while opting for parallel trade representing *disparate* exchange in relation to other regions of the South. This form of co-existence is not to be discarded, but is an option which is actually being applied today, since a section of Southern countries either is so poor as to be hardly eligible for the sale of the expensive weapons' systems manufactured in central economies, or have only recently been incorporated into the world capitalist system, and hence are coveted primarily for the lucrative raw materials they possess. Disparate exchange has not superseded unequal exchange everywhere, but exists side-by-side with the latter.

However, there is a second form of co-existence of unequal and disparate exchange which needs to be considered, being the combination of the two forms of exploitation at one and the same time. To this form of coexistence I wish to draw attention in particular, since the deprivation resulting from it is extraordinarily large indeed. One example of the given, double exploitation, is the case where a country relies on the export of a single or a few raw material that are subject to deteriorating terms of trade. Further, whereas the price of these commodities continues to fall, and whereas the income which the Southern country derives from its exports continues to decrease over time, the same country uses the currency income derived from the given exports to import weaponry, for instance military planes or tanks. In this case the Southern state's income from exports is not just decreasing, but the decreasing income is moreover used to import a commodity which represents a form of social waste ($C (= W)$), and which in view of the technology incorporated and the large outlays of money required for its manufacture, is a comparatively expensive commodity.

Yet another instance may be cited to illustrate the same point, i.e. that the two forms of exploitation, i.e. *unequal* and *disparate* exchange, in practice can well be combined. In this case the commodity exported from the South is not a raw material extracted from the soil, but a technologically 'advanced', industrially processed commodity. A pointed example is that of chips for computers or other electronic goods produced in Southeast Asia. Here, the commodity exported from the South may be a civilian good representing the same level of technological sophistication as the military commodity being imported under disparate exchange. Still, its manufacturing costs are low in view of the comparatively low wages being paid to the workers producing these chips. Here again, two forms of exploitation are combined. On the one hand, the Southern country suffers a loss in view of the poor pay for the exported industrial goods. Yet the same Southern country faces a second loss, because while it surrenders a valuable commodity representing social wealth, it imports a commodity representing the very opposite, social waste.

Clearly, then, the possibility of the combined exploitation, via *unequal* and *disparate* exchange at the same time, needs to be considered in order to understand the consequences of international trade for Southern countries today. The presumption underlying the regime of 'free trade' is that all countries stand to benefit, whatever the place of any given country within the structure of international economic relations, and whatever the nature of the commodity being exported or imported. Yet the conclusion which results from a consideration of the combined use of unequal and disparate exchange is diametrically opposite to the standpoint propagated by advocates of 'free trade'. The coexistence of the two mentioned trading mechanisms decidedly has negative implications for the South. Moreover, these implications are far more alarming, more disheartening in terms of the interests of the South, than the negative implications of unequal exchange alone. In short, even without presuming that the arms exported by countries of the North towards the South are actually consumed in war, - the combined application of the mechanisms of unequal and disparate exchange emanates in the aggravation of existing inequalities and economic injustices in the world.

7. The Issue of the Co-existence of Injust Exchanges

Stated in Terms of the Revised Letter Codes of Karl Marx

It is now time to look at the issue of the co-existence between unequal exchange and disparate exchange in terms of Marx's well-known letter codes (**C** and **M**), and in terms of a revision expressing the wasteful character of arms' production (**C = W**). First, in the case of *unequal* exchange we have to take account of the parallel transfers of commodities from North to the South and from South to the North. Both are accompanied by the transfer in reverse direction of money to pay for these transfers. Thus, the exchange in which commodities are transferred from North to South can be represented by the formula **C – M (1)**, but the parallel exchange where commodities are transferred from South to North too can be expressed via the same formula **C – M (2)**. The point here was, however, that the value contained in the commodities surrendered by countries of the South (**C (2)**) is substantially larger than the value surrendered by the North, since a larger amount of human labour has been spent on producing them than the amount of labour spent to produce the commodities delivered by countries of the North to countries of the South (**C (1)**).

In the case of *disparate* exchange, we have two possibilities. One possibility is that the parallel transfers of commodities **C** from North to South and of commodities **C** from South to North are not accompanied by their payment in money, in which case the exchanging parties have returned to the pre-capitalist method of *barter*, which barter is expressed via the simple formula **C – C**, but which in view of the fact that the North's commodity is social waste, whereas the South's commodity is wealth, should be represented by **C (= W) – C** or by **C (1)(= W) – C (2)**. A second possibility is, of course, that the two transfers are indirectly related to each other, and are both paid for in the form of the general equivalent, money. Here we need to conceptualise two separate transfers, as in the case of unequal exchange, these transfers now being respectively **C (1)(= W) – M** and **C (2)– M**. In both hypothesized cases however, the result in social terms is exactly the same, namely the loss of sources of wealth by countries of the South.

Let's further try to depict in letter codes the *coexistence* of unequal and disparate exchange. Here, as stated above, we have to distinguish between two types of co-existence, both of which have severely negative implications for countries of the South. When co-existence refers to the fact that the North applies unequal exchange in relation to some Southern countries, while applying disparate exchange in relation to other regions, different Southern countries and regions are subject to different methodologies of exploitation. Thus, where African countries exchange their agricultural produce for Northern industrial goods, and see the prices of their commodities fall in comparison with those of the North, it is unequal exchange which is at issue. On the other hand, where Middle Eastern countries catch a high price per barrel of oil, but use the income which the state derives from the exports of oil, in order to purchase arms, the injustice in terms of their people's interests consists not in the low amount of money (**M**) received for the commodity oil (**C**), but consists rather in the fact that the state squanders the money received in order to obtain commodities representing social waste (**C = W**).

It is, however, when Southern countries are subjected to unequal and disparate exchange at the very same time, that the consequences for people living in Southern countries and regions are the gravest. Here, '*co-existence*' refers to the simultaneous use

of two mechanisms of exploitation, to dis-privilege and further dispossess the South. The formulas expressing this case, are the formulas $C(1) (= W) - M$ and $C(2) - M$, referring to two parallel (i.e. indirect) exchanges of commodities, arms against money from North to South, and non-military goods against money from South to North. However, here the difference between $C(1)$ and $C(2)$, i.e. the commodity flowing from North to South and that flowing from South to North, is not just that the first is a waste-product whereas the second is not. No, the difference is also that the value contained in $C(1)$, i.e. the amount of human labour contained in it, is smaller than the value contained in $C(2)$. As there is no doubt that some Southern countries are being subjected to both mechanisms of exploitation at one and the same time (20), it is clear that the differentiation between unequal and disparate exchange allows us, indeed, to effectively address the gravity of North-South trade exploitation today.

8. Disparate Exchange: Differential Levels In the 'Development of the Forces of Destruction'

To understand the *reasons* for disparate exchange, for the one-sided flow of arms and armament systems from North to South, we need to once again refer to Bettelheim and Amin's interpretation of unequal exchange. Previously, we have seen that the two Marxist theoreticians, in seeking to explain the reasons why Southern countries receive an relatively low remuneration for the commodities which they sell on the international market, emphasized the unequal development in the forces of production between central and peripheral economies. Now whereas their analysis is relevant for our present discussion on arms' exports from North to South, -from a philosophical point of view it is unsatisfactory to speak of *productive forces*, when referring to the production and the exports of arms, since weaponry should rather be termed a '*destructive force*'. Nevertheless, Bettelheim and Amin's commentaries on the question of uneven development in the forces of production helping to reflect on and identify the structural reasons for the growth and persistence of disparate exchange, since their commentaries focus on the issue of unequal access to technological knowledge and the means to promote technological innovation.

Within the context of critical economic theory, there are *two* types of technology which need to be addressed in connection with the analysis of the construction of arms. On the one hand, there is the technology incorporated in the end-product, the military commodity itself ($C' = W$). On the other hand, however, there is the question of the technology used to manufacture arms, i.e. technologies incorporated in the tools, the machinery and other means of production ($C(MP)$) entering the manufacturing process of the arms. Historically, in the course of the growth of the capitalist world system, central economies, first those of Europe, then also relative latecomers such as the United States and Japan, succeeded in achieving predominance over other regions of the world through technological advancement covering *both* fields of technology. Thus, historians have drawn attention to the crucial role of fire-arms and other means of destruction (MD) in facilitating the rise of the West from the 14th century onwards, but have also brought out that the drive to discover new methods of arms' production helped pave the way for the 18th century Industrial Revolution (21).

Disparate exchange at first sight would seem to contribute towards reducing the huge technological gap created in the course of the construction of the world capitalist system. Central capitalist economies, more particularly the system's hegemonic power the US, do impose restrictions on the export of military technology, in order to ensure the continuance of their dominance over rivals and (potential) military opponents. They do not readily agree to share with peripheral countries the technology which they avail of for the manufacturing of armament systems. Nevertheless, to the extent that sophisticated weapon systems are transferred from North to South under the trading mechanism of disparate exchange, these commodity transfers inevitably do involve the transfer of technology, and especially the transfer of technology incorporated in the end-product, the military commodity itself. At first sight, then, disparate exchange, to an extent at least, leads to an enlarged access of Southern countries to military technology which access they previously lacked. This, one could say, is a paradoxical aspect of the trading system, when looked at from the angle of the interests of central capitalist economies.

Still, such transfers do not serve to eliminate the *structural unevenness* in the development of military technology, and in the development of the technology to produce arms. For while some technology is transferred as a part of the sale of arms to the South, the hegemonic and other central capitalist economies at the same time constantly aim at military-technological innovation. Northern, as explained elsewhere, states ever since the beginning of the monopoly capitalist era have offered financial support to innovative efforts made by their own armament corporations, for the purpose of creating ever more powerful means of destruction (22). Moreover, even if some Southern states are undertaking conscious efforts to 'catch up', by allocating their own financial resources towards 'military research & 'development'', they do not have an access to capital resources that is anywhere equal to that of countries of the North (23). Hence, *disparate exchange* on the whole does not serve to eliminate the noted unevenness between North and South in the development of the forces of destruction. It contributes towards an expansion in the production of social waste worldwide. Yet ultimately, the North's structural dominance, in particular in the field of arms' production remains unaffected by disparate exchange.

9. Conclusion

This note on the differential levels in the development of the forces of destruction, lastly, offers us a clue towards understanding the character of disparate exchange as capitalist industrialisation engulfs an increasingly large number of countries of the South. When the debate on *unequal exchange* took off, in the middle of the previous century, most parts of the South, including vast countries such as China, India and Brazil, were still overwhelmingly agrarian and had at best laid a meagre basis for industrial growth. The debate on unequal exchange thus took its shape within an empirical context, where exports of industrially processed end-goods constituted a minor portion of the trade flows from peripheral countries to countries belonging to the centre of the world economy. Although in terms of the understanding of some theoreticians of unequal exchange the phenomenon of deteriorating terms of trade did not depend on the specific nature of the goods traded by the South, - in practice these were, indeed, primarily raw materials and other non-industrial goods.

The basis for the trading mechanism of disparate exchange, of the parallel transfer of waste-products from the North to the South along with the transfer in opposite direction of goods representing social wealth, was laid in a period when the empirical context of trade flows between North and South was changing gradually but unmistakably. Today, after some four decades of intense trading in arms between North and South, - raw materials and non-industrial goods no longer constitute the mainstay of goods transferred by Southern economies towards central capitalist economies located in the North. While for some Southern regions – for instance for Africa – dependence on the export of a single or a few raw material continues to be very pronounced, the same is not the case for other regions, - for instance for Southeast Asia and China. Hence, if the definition of disparate exchange were to hinge on the question as to whether the commodities traded by the South were raw materials and non-industrial goods, - disparate exchange would not encompass the full range of trade between North and South involving the exchange of waste against wealth.

However, there is no reason why per definition the issue of disparate exchange be restricted to the trade flows that formed the historical starting point for the debate on unequal exchange. Such would in fact go counter to the thrust of a general theory on waste. In the context of this theory it is appropriate to exclude from the parameter of *disparate exchange* those cases where the trade flow that parallels the transfer of arms be typically waste-products, - for instance poppy, coca and other primary products which are used to manufacture drogues. On the other hand, the exports of industrial goods, the production of which over recent decades have been relocated from North to South – such as ready made garments, automobiles, chips and other electronic components – are exports of goods which do represent forms of wealth, as long as they are destined for civilian use. The transfer of these goods for arms should be included when theorising disparate exchange. Such a conceptualisation in my view is both theoretically sound, and allows us to correctly take account of the economic transformation which by now has taken place in a significant section of countries belonging to the Southern part of the world.

Ultimately, then, it is not the South's transition towards capitalist industrialisation, but the degree to which uneven development in the forces of destruction between North and South persists, which determines whether disparate exchange continues or not. Through industrialisation some countries by now have clearly laid a technological basis for their own indigenous military production. Yet since central capitalist economies, foremost the hegemonic power, the United States, pursue policies aimed at maintaining military-technological superiority, few Southern countries have succeeded in breaking their dependence on external sources of military supplies. The attempt by a number of large Southern states to build their own basis of arms' production has laid to an enormous expansion in the worldwide production of social waste. Yet even sub-imperialist powers, such as Turkey and South Africa, as of today continue to be partly dependent on the trading mechanism of disparate exchange (24).

References:

(1) see Arghiri Emmanuel, *Unequal Exchange: a Study of the Imperialism of Trade* (Monthly Review Press, New York, USA, 1972), p.xxiii: ‘The series published by the United Nations showed a deterioration of the order of 40 percent in the terms of trade enjoyed by the countries producing primary products between the end of the nineteenth century and the eve of World War II. They confirmed the studies by Schloete, Silverman, Imlah, and the Board of Trade, covering a shorter period, 1880-1913, in which a deterioration of about 20 percent was already apparent.’;

(2) Samir Amin, *Accumulation on a World Scale. A Critique of the Theory of Underdevelopment. Volume One* (Monthly Review Press, New York and London, 1974), p.83;

(3) Ernest Mandel, *Der Spätkapitalismus. Versuch einer Marxistischen Erklärung* (in German: Late Capitalism. Attempt at a Marxist Explanation - Suhrkamp Verlag, Frankfurt am Main, Germany, 1974), Chapter 11, p.318; whereas Samir Amin estimated that by the middle of the 1960s, peripheral countries lost 22 Billion US Dollar annually in consequence of unequal exchange, the profits which British companies derived from private foreign investments according to Mandel amounted to about 12 Billion Dollar in the year 1964; and although these figures may not be entirely conclusive, there appears to be sufficient evidence to confirm that the relative importance of unequal exchange had grown much between the beginning of the monopoly capitalist era and the 1960s;

(4) a clear instance is that of Charles Bettelheim, who immediately took issue with Arghiri Emmanuel in appendices to the latter’s book publication – see Charles Bettelheim, ‘Theoretical Comments’ (in: Arghiri Emmanuel (1972), op.cit., Appendix I, p.271); a review of some of the controversies in the debate further is provided by Amin in: Samir Amin, *L’Echange Inégal et la Loi de la Valeur* (Nouvelle Edition Revue et Commentée, Anthropos, Paris, France, 1988) ;

(5) Arghiri Emmanuel (1972), op.cit., in particular Chapter 3, p.123 and p.145;

(6) the main reference point here is generally considered to be Marx’s concept of the ‘reserve army of labour’ – see Karl Marx, *Capital. A Critique of Political Economy. Volume One* (Progress Publishers, Moscow, USSR, 1977), Chapter XXV, p.589, ‘Progressive Production of a Relative Surplus-Population or Industrial Reserve Army’;

(7) for China’s growing share in readymade garments’ exports worldwide, see eg. Laurence Caramel, ‘Textile: la Chine et l’Inde Raflent la Mise’ (Le Monde, Paris, France, December 14, 2004, p.1); Florence Amalou, ‘Le Textile Mondial a la Veille d’Une Revolution Commerciale’ (Le Monde, December 29, 2004, p.8);

(8) see Peter Custers, *Capital Accumulation and Women’s Labour in Asian Economies* (Sage/Zed Books, New Delhi/London, 1997), p.134;

(9) see notably Samir Amin (1988), op.cit., p.20;

(10) the question of productivity in capitalist terms should be clearly distinguished from the issue of productivity defined in *social(ist)* terms; in their social(ist) senses, the designations ‘productive/unproductive’ refer to the qualitative outcome of manufacturing, i.e. whether the commodity represents additional wealth or social waste; the *capitalist* concept of productivity instead refers to the quantitative capacity of labour, i.e. to how many products can be manufactured in a given unit of time; Amin was clear that in the context of the debate on unequal exchange, he meant the latter, i.e. the capitalist concept of productivity – see eg. Samir Amin (1988), op.cit., p.215/216;

(11) Samir Amin (1974), op.cit., p.58; for recent data on the fall in the international price of coffee in 2001/2002, see Martine Orange, ‘La Crise du Café, Révélatrice des Impasses du Tout-Libéral en Matière de Politiques Agricoles’ (Le Monde, June 9-10, 2002, p.2); also UNCTAD, The Least Developed Countries Report 2002. Escaping the Poverty Trap (United Nations, New York and Geneva, 2002) ;

(12) Samir Amin (1974), op.cit., p.57;

(13) Samir Amin (1988), p.20;

(14) Samir Amin (1974), op.cit., p. 292/293;

(15) the asymmetrical relationship according to Amin (1974) is demonstrated by the fact that whereas the periphery does nearly 80 percent of its trade with the centre, the internal changes at the centre have reached the point where 80 percent of the foreign trade of central countries is carried out between these countries themselves – see Samir Amin (1974), *op.cit.*, p.42; also Samir Amin, *Unequal Development. An Essay on the Social Formations of Peripheral Capitalism* (Monthly Review Press, New York, USA, 1976), p.203: ‘if we take the advanced countries as a whole and the underdeveloped countries as a whole, the commercial exchanges they carry on between them represent a high proportion of the income for the latter and a low proportion for the former’; more recently, Serge Cordelier has cited figures indicating the extraordinary dependence of African economies on extra-regional trade; according to his data, cited by Amin, the ratio of extra-regional trade to GDP was 45,6% for Africa as a whole in 1990, whereas for Europe the ratio was only 12,8 in the same year, for North America it was 13,2%, for Latin America it was 23,7% and for Asia the ratio was 15,2% - see Serge Cordelier, *La Mondialisation au dela des Mythes* (La Découverte, Paris, 1997, p.141);

(16) Samir Amin (1974), *op.cit.*, p.286, ‘The Disarticulation of the Underdeveloped Economy’;

(17) striking confirmation of my view is provided by the report of the United Nations organisation UNCTAD on Least Developed Countries (LDCs) for 2002; according to this report, the real prices of primary products, excepting sources of fuel, by the end of 2001 represented no more than *half* of their average annual price level as registered for the years from 1979 through 1981; this reduction in the prices of products, on which Southern countries largely depend as source of external income, according to UNCTAD severely affects those countries defined as ‘Least Developed’ (LDC), in particular African countries – see Martine Laronche, ‘La Crue Préconise de Revoir les Strategies de Reduction de la Pauvreté’ (*Le Monde*, June 25, 2002, p.V); and UNCTAD (2002), *op.cit.*;

(18) see Chapter Twenty below;

(19) see Chapter Twenty-Three below;

(20) the clearest instance is the continent of Africa; evidence on the negative consequences of changes in the international terms of trade of primary commodities for African countries in the decade of the 1990s are cited, for instance by Henk Overbeek, ‘Afrika Heeft Niets te Verwachten van Globalisering’ (*NRC-Handelsblad*, Rotterdam, the Netherlands, August 15, 2000); for an overview regarding deteriorating terms of trade for producers of primary products and raw materials in the late 1990s, see Theo Westerwoudt, ‘Grondstoffen het Kind van de Rekening’ (*NRC-Handelsblad*, 26 augustus, 1998, p.16); also Martine Laronche (2002), *op.cit.*, p.V; as to the consequences of disparate exchange for Africa, various reports by developmental and research organizations based in the North have been published in recent years, highlighting the relationship between exports of raw materials and imports of arms for individual African countries such as Sierra Leone, Angola, Congo and the Sudan, and mentioning data on increased poverty and misery in these countries; for an assessment of the problematic of disparate exchange and armed conflicts in contemporary Africa, see eg. Peter Custers, ‘Disparater Tausch’. Diamanten, Ol und Burgerkrieg in Afrika’ (in *Prokla*, Zeitschrift fuer Kritische Sozialwissenschaft, no.124, October 2001, p.429);

(21) about the role of fire-arms in the historical transition towards capitalism and in the construction of Western world dominance, see e.g. Robert Kurz, ‘A Origem Destrutiva do Capitalismo’ (in Robert Kurz, *Os Ultimos Combates*, Editora Vozes, Petropolis, Rio de Janeiro, Brasil); and Geoffrey Parker, *The Military Revolution. Military Innovation and the Rise of the West, 1500-1800* (Cambridge University Press, Cambridge, Great Britain, 1988); for an example of changes in production technology in connection with arms’ manufacturing, see that of the new methods for smelting iron developed in Great Britain in the late 18th century -William McNeil, *The Pursuit of Power – Technology, Armed Force and Society since A.D. 1000* (Basil Blackwell, Oxford, UK, 1982), p.175;

(23) for details regarding the efforts of selected countries in the South, such as Brasil and South-Africa, to build their own indigenous military sector, primarily structured around the

manufacturing of military aircraft – see eg. Michael Brzoska and Thomas Ohlson (ed.), *Arms Production in the Third World* (Taylor & Francis, London/Philadelphia, 1986).

(24) see Chapter Twenty-Two below.