

## PEACE RESEARCH AND THE INDUSTRIAL REVOLUTION\*

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### 1. Introduction

The beginnings of academic peace research in the early 1960s 'were characterized by a mixture of ideological voluntarism and methodological empiricism. A new value orientation, seeking to break out of the vicious circle of the preponderantly AngloSaxon positivistic social sciences that had stagnated, was proclaimed and with "peace" as its standard. It was no accident that it met with such quick and widespread approval. To avoid premature death by suffocation in fundamental theoretical discussion, which the thus-challenged social sciences sought, peace researchers avoided commitment to a binding peace concept. They consciously evaded the question of peace research's scientific place in the context of the social sciences while battling their way to respectability, armed with methodologically strict, almost incontestable empiricism.

Yet barely ten years were to pass before the dangers of this double-edged research strategy for the coherence of the once "revolutionary" concept of early peace research became clear. As the axis of international politics moved from "East-West confrontation" to a policy of cooperation among industrial nations of both capitalist and communist origin, peace became legitimate foreign policy (Willy Brandt receives the Nobel Peace Prize). The provocative change of emphasis of the peace research of the late 50s and early 60s thus lost its significance for a reorientation of the social sciences - or rather, that standpoint was recognized and assimilated by the political establishments themselves. Peace research

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was henceforth evoked, promoted, and subsidized by the governments. At the same time, as the unavoidable consequence of the early evasion of theoretical clarification and of unreflected empiricism, many social scientists were now able to latch onto the new peace research vogue without contradicting their own theoretical and methodological premises: sociologists, political scientists, "international relationists", and even (though to a lesser extent) economists could sell the old book with a new cover. After all, everyone is for peace, and for empirically backed research too.

Recently, the topic of imperialism has moved to the center of the peace research debate (as the themes for discussion of the International Peace Research Association in 1969 and 1970 demonstrate) in a renewed attempt to draw a dividing line and avoid the deadly embrace of those traditional social sciences which had jumped onto the bandwagon. However, considering the unclarified theory problem, it is not difficult to predict the outcome of this discussion. With the growing consciousness among the social and political ruling elites in capitalist and communistic industrial nations of the need for hierarchical stabilization of the international system (since the military, economic, and diplomatic stabilization of the center or the top of the pyramid seems mainly to have succeeded), the theme of imperialism will become legitimized. Research which justifies the hierarchical dependence-structures will pass without contradiction under the aegis of peace research because it promotes stability.

These necessarily rough and polemically pointed generalizations, sketching the brief history of the discipline, are intended as the basis for the assertion that the fundamental discussion on content and method in peace research is no luxury to be reserved for some future time. This debate belongs in the center of discussion, and not on its periphery. We must demand a reversal of priorities if peace research is to remain true to its own original program, namely to be a critical science: the formation of a theory of peace research and a confirmation of its own substance are its most important tasks. Method

ology and empiricism must and can find their meaning only within the framework of the former area. They must derive from the clarification of substance and theory, not vice versa. As we have suggested, peace research considered itself to be such a critical science at the very beginning. However, it was more a form of political-moralistic dissent which could be relatively easily overtaken and rejected given changed political constellations, than it was a theoretically founded and reflected dissent. But let us consider the claim to critical science as a more fundamental one: namely science as the intellectual instrument for overcoming all forms of hierarchical societal status quos which preserve inequalities; science as oriented toward rational enlightenment about existing relationships, toward emancipation from all forms of indigenous dependency, towards the creation of more and more advanced forms of equality. If we accept this definition of critical social science, then the question as to the nature of the present social systems which must be overcome takes on central importance.

The specific object of peace research is indisputably the present international system: its moral impetus is the search for preconditions for the elimination of those structural elements of the system which engender war and collective destruction. It is not an unfair simplification of the present consensus among peace researchers to reduce it to the following lowest common denominator: the recognition that the latent, or manifest, collectively organized use of force represents a decisive structural characteristic of the international system. The military organization of the international system, armaments, and the military articulation as well as the solution, of social conflicts are not accidents, but rather the essence of foreign policy and international relations. As our point of departure and as the most important guideline in peace research, we can take this consensus about the international system as a "threat" or "feudal, system" (Boulding, Galtung), which must be critically overcome and replaced by an egalitarian barter system. However, a critical science needs more and qualitatively different material than the knowledge of the mechanisms and the techniques of

power politics, characteristic of our present international system, to enable the transition from the aggregate condition A to the aggregate condition B. Above all, it must first ascertain the logic and functionality of those mechanisms and techniques, clarify their origins and their dependence upon those international social structures which condition, produce, and constantly reproduce them. Otherwise, peace research will only deliver irrelevant utopias or cure only the symptoms.

This intended confirmation of peace research's actual object of study - the international threat or feudal system - can be accomplished only through the seemingly round-about reconsideration of the genesis of today's international system. Only if the securing consensus over the reality of the international system is expanded and deepened to a consensus over the structural genesis of the system as well, will peace research be able to free itself from the helplessness and paralysis which presently condemn it to the empirically precise a posteriori analysis of one warlike conflict after another, deducing it from distortions of mutual perceptions or unfortunate incompatibilities. Then, and only then, as we will try to show, can peace research imply a praxis of qualitative change instead of mere curing of symptoms.

## 2. Consequences of the Industrial Revolution

The Industrial Revolution is the one archimedial point from which we can develop a theory of the present international system with any chance of success. In the words of a leading social historian, the Industrial Revolution "has been like in effect to Eve's tasting of the fruit of knowledge: the world has never been the same." (Landes 1969, p. 12.) Or, in another no less unequivocal and apodictic formulation: "The Industrial Revolution marks the most fundamental transformation of human life in the history of the world recorded in written documents." (Hobsbawm 1969, p. 13.) Its pre-history belongs in the center of our analysis as far as is necessary, its history proper - the last two centuries - as far as possible. As history it represents the unfolding structure of the present; and at the same time as an

as yet uncompleted movement, it holds the history of our future. History cannot here be written as the recording of chronological, identifiable events or processes: rather it must uncover the logic of this break in human development unprecedented in world history, the empirical history of which is external to that logic and thus not essential. (Cf. Schmidt 1971, pp. 42 ff.) Just what is this qualitative change of world society through the social revolution is the question that must be asked. We can relatively easily demonstrate it quantitatively by the following random examples (though surprisingly enough they have not as yet been thematized for our problem area)

- The radius of destruction of weapons remained de facto constant throughout all of recorded history. It changed only minimally with the invention of gunpowder; only with the invasion of technology into the military sphere did the curve leave the horizontal and shoot to great heights, reaching a maximum today which can hardly be raised.

- While the number of warlike conflicts seems to have decreased since, say, the 13th century (cf. Mushkat 1970, p. 248), the curve of war-deaths shows a sudden jump in the first third of the 19th century after centuries of relative stagnation: from less than 2 million until mid-century to considerably over 40 million a mere century later. (Russett 1965, p. 12 ff.)

- We can chart an exceedingly dramatic and impressive development in the growth of world population. With certain fluctuations and deviations irrelevant here, it first changed from a slow and hardly discernible growth to that explosion, that avalanche, which is today viewed as a natural catastrophe. (See inter alia the graphs in Desmond 1964, p. 32.)

- Or let us consider the explosive increase in the speed of communication, the "mobiletic revolution" (Russett 1967, p. 23). The transmission of news, transport of goods, personal travel, and, not least, military mobility had remained more or less constant throughout recorded history. Then, with the inven

tion of the clipper ship, the steamboat, the railroad, automobile, airplane, and telegraph and telephone, all distances were rapidly reduced to the physically conceivable"minimum.

- While in the centuries prior to the Industrial Revolution the production of goods (here calculated very roughly) on a world scale rose barely 0.1 per cent per capita, we find in the last one hundred years an increase of 2.6 percent per capita per annum. To put it differently and more dramatically, world production since the Industrial Revolution represents more than man has produced in all recorded history taken together. (Cf. inter alia Dobb 1963, p. 9 ff.) Thus the economic historian can correctly assert "the Englishman of 1750 was closer in material things to Caesar's legionnaires than to his own great-grandchildren. 7"

We could extend such a catalog of quantitative empirical data indefinitely to support our assertion that with the Industrial Revolution (set down here without differentiation, as a kind of catchword) a qualitative break occurred. This was a rupture unprecedented in social, economic, and also intellectual history and thus also in politics; in relationships between groups, classes, and peoples; and international relations, which are of particular interest to us here. A graphic representation of those aspects and any number of other possible variables (urbanization, literacy-illiteracy, book production, scientific discoveries, number of scientists) would result again in practically identical curves with only some short-term deviations and time laps: level, only slightly rising or stagnating until the end of the 18th century, then suddenly jumping, becoming vertical in almost all cases in the last fifty years up till the present.

Let us approach the analysis from that perspective most favorable for examining the problem area of specific interest here - the international system. Somehow, the Age of Discovery - the fanning out of Venetian, Spanish, Portuguese, Dutch, English, and other adventurers in search of exotic riches, faster trade routes, and slaves - lies in causal relation

ship to the chronologically later manifest explosion of all realms of life. This "somehow" must be sought in the successive formation of a West European merchant Bourgeoisie, the economic way of thinking which it exuded, quickly infecting diplomats, royal houses, and statesmen. The growing need for cash among European monarchs - who, allying themselves with the bourgeoisie, had put down the nobles and were preparing the way for the development of territorially integrated and increasingly rationally administrated states - had as a result "that in the 15th and 16th centuries, statesmen, secular and ecclesiastical, thought more of economic factors than they had previously done." (Cambridge Economic History, Vol.IV, p.323.) Here in certain parts of Western Europe in the 15th and 16th centuries the symbiosis of political social power and economic productivity demonstrated already in the Italian Renaissance though initially without consequence begins; economic power becomes synonymous with the development of political and military power, and finally power in foreign policy. Here dynastic group conflicts begin to be transformed into economic conflicts significant in principle to the entire society. At the end of the 16th century, for example, we find the first attempt (on the part of Spain) to incite the population of another country (England) to overthrow their government through embargo - the prerequisite for such strategy being, of course, that Elizabethan England was already socially vulnerable due to its dependence on international trade. With colonial discovery, takeover, and plundering to the benefit of the militarily partially superior (and in many respects administratively more disciplined and certainly more unscrupulous) European invaders and those who sent them, we find the beginnings of world unity and global penetration which was to reach completion by the end of the 19th century.

For the first time, the conflicts among an extremely small group of politically organized units, the new European states, began to be world wars. And so they since remained. Speaking of the Dutch wars of independence (1598-1669), which the Dutch bourgeoisie logically extended to the Hapsburg resources in their colonies and along the trade routes,<sup>2</sup> a historian has pointed out: "Since the Iberian posses-

lions were scattered around the world, the ensuing struggle was waged on four continents and' on seven seas; and this seventeenth century contest deserves to be called the First World War rather than the holocaust of 1914-18 which is commonly awarded that dubious honour" (C. R. Boxer, 1969, p. 106).

At this time the development of the modern rational bureaucratic state also begins, a modern European creation. (Weber 1956, p. 823 ff.) The genesis of this state is not only closely linked to the rise of the early bourgeoisie.<sup>3</sup> At its cradle stood not only the "military-industrial-complex", which has falsely been discovered only recently;<sup>4</sup> this state also developed in the context of the rapidly growing administrative expenses and riches accumulated during colonization.. This modern state - without which no theory of international relations thinks it could exist and which later gave us nationalism, the world wars, and today's pathological threat system - is both product and promotor of the early release of productive forces and their expansive dynamics. Yet it is by no means a timeless, indigenous olitical form existing beyond history or even recenf history.<sup>5</sup>

With the West European expansion in the 15th, 16th, and 17th centuries, world society also begins to grow apart, divided into "poor" and "wealthy" nations, a process which has only recently been recognized in its full significance. At that time the prerequisites were created for the development of underdevelopment in Asia, Africa, and Latin America, as well as for the rapid takeoff of today's developed nations themselves. Even though West Europe as a whole was probably always a wealthier continent than Africa or Latin America even before the Industrial Revolution, we must point out that in the 17th century, say, the order of magnitude was still comparable. Today's dramatic gap between developed and underdeveloped countries remained relatively insignificant into the 19th century; the difference in niveau in culture, the military, political organization, and in economics was actually first created in the course of colonialism, mercantilism, and imperialism and represents the price paid for the establishment of world unity which was determined in its substance by the



expansive West European bourgeoisie. The disruption of African and South American political cultures is just as much a part of this process as, for example, the destruction of flourishing textile industries in India by weaker English competition.<sup>6</sup> As late as 1819 a French scholar could write: "in manufacturing, art, and industry, China and Indostan, though inferior, seem to be not much inferior to any part of Europe" (Cambridge Economic History Vol. VI/I, .p. 4). It would be false to link the process of original accumulation - the prerequisite for the later breakthrough of the capitalistic mode of production - exclusively or even primarily to the riches wrung out of the conquered colonial territory, although they were quantitatively quite significant.<sup>7</sup> It would also be false to place slave trade and plantation economy at the basis of West European capital accumulation, although this important aspect must not be overlooked. (Williams 1966.) It is simply indisputable that the capital resulting from plunder, exploitation and unequal trade, even if considered marginal to the economic rise of Western Europe, as the whole meant incomparably more to the victims of European expansion: namely, the total destruction of all development potential through decimation of their resources as well as through the much more momentous destruction of their own cultures and socio-cultural infrastructures. (Polanyi 1957, p. 159 f.)

Therefore, historical reconsideration of the entire problem of development is of pressing importance. Only by taking the trouble to backtrack can we avoid the misleading path down which much of the literature about developing nations and development economy would lead us: the victory of the bourgeoisie and of the capitalistic mode of production provided a prerequisite for Europe's meteoric rise to master of the world. Europe's rise, however, was equally dependent on an international "vacuum" or the creation of such a vacuum, dependent upon an environment in which it could do as it pleased militarily, economically, and politically. Europe's capital accumulation was one of trade capital; this was based not, or minimally, on inter-European trade, but rather on world trade. The great empires of the 16th century provided the decisive preconditions for the transfor-

mation of money into capital through the new capitalistic mode of production which lives from export-manufacture. (Marx 1953, p. 410. )

For the moment let us set aside the question of why the qualitative breakthrough to the Industrial Revolution in the narrower sense took place in England,<sup>8</sup> for this belongs to the field of comparative European social history. The irrevocable prerequisite for this sudden change toward self-sustaining economic growth - the most important characteristic of the Industrial Revolution - was undoubtedly a worldwide foreign trade, within a formal or informal politically controlled empire. (Fischer 1968, p. 9.) "An increased dependence on the rest of the world seems to be a condition of economic growth for the e-, conomics based on private enterprise" (Cambridge Economic History, Vol. VI/I, p.52). Since these preconditions no longer exist for the "Third World" countries, which were bowled over by the beginnings of this development two to three hundred years ago, it goes without saying not only that the development model of private enterprise offered or dictated to them with either real or assumed naiveness is excluded, but that economic growth in an already occupied, satiated world economy becomes a near hopeless task under present conditions.

The re-examination of th\_t historic structures of the Industrial Revolution in its international context is necessary to the definition of what Johan Galtung, the most prominent contemporary peace researcher, has called "structural violence": that veiled violence latent in all societal structures based on inequality. (Galtung 1969.) This structural violence must be sought not only in the genesis of the modern state, i.e. inner-societally\_ (Krippendorff 1971), but equally much in global societal context since the beginning of the present era. Thus Karl Marx, who left no doubt as to the world historical revolutionary character of the middle class (cf. above all the Communist Manifesto), characterized the worldwide genesis of the capitalist mode of production as "dripping blood from all pores from head to toe". (Marx 1962, p. 788.) To some, this may seem a politically agitational, unscientific distortion of the

truth, yet it is unfortunately all too true. Only the visible calculable figures are known, as for example the extermination of the whole indigenous population in the Caribbean from the arrival of Columbus in 1492, (300,000) until when some 50 years later, only 500 were left (Cambridge Economic History, Vol. IV, p. 319); the number of unnatural deaths due to dislocation, slave transport, hunger, exploitation, and "pacification" crusades are inestimable. At the origins of this world unity, which was the product of economic calculation and which became the vehicle of economic growth and the Industrial Revolution, stood overt and manifest violence that sublimated itself to latent structural violence only after having fulfilled its helping role. Yet it can still be called up again and employed to preserve the structures of dependence.

Since peace research has received such a crucial impetus from the counter-productive possibility of a warlike solution to socio-economic and political conflict, it is obvious that war in its narrowest sense should be included in this analysis. This phenomenon "war" should also support the assertion that a qualitative leap took place in global societal development at the time of the Industrial Revolution. Complementing the logic of the thesis developed here (though necessarily rudimentary in its details), we find that the word "war" has by no means defined the same phenomenon under all historical circumstances: war at the present stage of history is qualitatively different from and thus incomparable to war in ancient China, in pre-colonial India, in the old imperial states, or in the Middle Ages. The decisive turning-point from pre-industrial warfare to modern warfare can be set at the break-through of technology when the military sector took on historically unprecedented significance for economic growth; and, vice versa, when scientific-technical inventions began to be used for warlike disputes between states, inventions which themselves must be understood as unctiorally dependent upon the socio-economic take-over of the West European societies. This symbiosis of technology and armaments is most clearly demonstrated in today's potential for total destruction. However, we usually overlook the fact that this symbiosis is a

recent phenomenon first made possible by the appearance of a revolutionary middle class in history, the modern state, and the use of armaments as an instrument of capitalistic economic growth. (Cf. Nef 1963; Kidron 1970.) Those who study war as a historical continuum and search for highly problematical biological and anthropological roots (which does not exclude a subjective yet objectively helpless condemnation of war), are especially apt to overlook this fact.<sup>9</sup> This qualitative change in war from a subordinate component of political interactions in the pre-industrial era to the central element, the rational operative core of foreign policy and international relations (the deterrence system), in the industrial age found its concrete expression in the changed conduct of war. Friedrich Engels, one of the most important military scholars of his day, had already pointed out the inner connection between middle class emancipation and modern warfare. (Engels 1958, p. 218.) It is no accident that this new form of warfare begins with the French Revolution, the first bourgeois revolutionary state, and finds its first culmination in the strategy of battles such as practiced at Magenta and Solferino (1859), Königgrätz (1866), and Sedan (1870) which concentrated all socio-economic resources on the "decisive battle."

"In Western Europe until the first part of the 17th century, warfare was a way of life for considerable sections of society, its termination was for them a catastrophe, and its prolongation, official or unofficial, was the legitimate objective of every man of spirit. Even in the 17th and 18th centuries, war, elaborate and formal as it had become, was an accepted, almost indispensable part of the pattern of society, and it was curtailed and intermittent only because of its mounting expense. If war could be made to pay, as it did for the Dutch merchants in the 17th century and the English in the 18th, then its declaration was as welcome as its termination was deplored. (Howard 1971, p. 204.)

From this indigenous propensity of the modern state for war and for self-realization through war<sup>10</sup>

emerged not only the strategy of the "decisive battle", but also its ultimate atrophy as manifested in the First and Second World Wars (Wallach 1967).

...although military developments over the past 100 years had established the principle, indeed the dogma of the "decisive battle" as the focus of all military (and civil) activity, parallel political and social development had been making it increasingly difficult to achieve this kind of "decision" ...And once war became a matter of competing economic resources, social stability and popular morale, it became too serious a business to be left to the generals. Operations again became only one factor out of many in international struggle... (Howard 1971, p. 188 ff.)

The symbiosis of politics, economy, and social order with war as the omnipresent possibility and ultima ratio for conflict resolutions characterizes, no matter what the concrete metamorphosis, national systems and the international system of our nearly 200 year old present epoch.

In order to produce relevant findings that will help transform the system, peace research must penetrate these interconnections. These are, both in specific cases and in the general historical structural context, by no means simple but rather highly contradictory and complex.

Let us summarize the argument thus far: we have assumed that peace research reflects a contemporary "crisis-consciousness" and attempts to define this consciousness in scientific terms. Peace research thus rightly concentrates on the question of the transformation of the present international system and those elements supporting it insofar as they involve use of the threat of organized military violence as a solution to social and international conflicts. In more closely defining the crisis-character of the international system, we asserted and illustrated selectively that it is a contemporary phenomenon, the beginning of recent history in this context being set at the Industrial Revolution; and

that the latter marks a "qualitative break" with previous history. The character of conflict specific to the present cannot be understood with the aid of supposedly timelessly valid scientific laws, nor in terms of political categories which originated under pre-industrial conditions. Rather, it must be developed sui generis from the genesis and structural logic of that revolutionary break itself. Thus, beginning peace research with the social history of this Industrial Revolution, with the prehistory and evolution of colonialism and imperialism, with the creation of the modern state in the context of a qualitatively new system of production, with the intimate intermeshing of modern technological destructive potential with skyrocketing economic development (its prerequisite and at the same time its function) is only seemingly a detour.

### 3. Defining the Industrial Revolution

Having reached this point, we must develop a more concrete definition of the substance of the Industrial Revolution. Until now, we have only referred to its consequences for the system of international relations. We must add that any definition must necessarily remain a limited one, developed for the purposes of our specific subject matter only - a definition projected and conceived in terms of the subject of study, the international system.

A more or less orthodox chronological history would begin the Industrial Revolution in England in the final third of the 18th century, pointing out staggered phases of several decades each in the course of its expansion to France, Germany, Italy, and in its own specific way to the United States. Such a history would differentiate, to a certain extent with good reason, between revolutionary social changes in the 16th and 17th centuries, the rise of the bourgeoisie as a revolutionary class, the appearance of an occasionally also religiously motivated economic attitude, etc., on the one hand, and the substitution of machines for humans in production, of manufacture and industry for hand craftsmanship, of mechanical energy for animal power on the other (the latter being the true characteristics of the Indus

trial Revolution). This kind of differentiation would, and will, become relevant for us only in dealing with the concrete analysis of the history of the international system, and in proving how its sociopolitical and military conflicts have depended on the inequalities and contradictions developing at an international level in this process.

For our purposes, it will be necessary to stress the unity and inner logic of these two different streams within one process, which manifested itself as colonial expansion, the formation of the modern state, the rise of a middle class which broke through the static system of European feudalism, as an economic way of thinking, and finally as the revolutionary liberation of the forces of production. (Cf. inter alia Nef 1967; Kulischer 1928; Haussherr 1955.) It will not be necessary to go into the "actual causes" of these upheavals in this connection, or why they occurred in Western Europe and not in Asia, for example - questions which in the final analysis can only be answered hypothetically and with (legitimate) speculation. In order to understand truly the essence, to get at the roots of the driving forces behind the development of the international system, we must stress the dialectical relationship between territorial discoveries outside Europe and the European bourgeoisie, between world trade and the accumulation of capital among companies doing trade, between colonialism and the formation of the modern state, between the control of markets outside Europe and growth in European production, between the global policy (Weltpolitik) of individual European countries and the Industrial Revolution. Neither the Industrial Revolution in its narrower sense nor the birth of the revolutionary middle class in the widest sense are conceivable without their intercontext, the opening up and potential conquest of other continents.

The Industrial Revolution as a part of the bourgeois revolution tends, therefore, to become identical with the capitalist revolution. Our historical present is a creation of capitalism; its various manifestations, not least on the level of international or world politics are functions of the capitalist mode of production. This capitalist mode of produc

tion is in turn dialectically intermeshed with a new ideological orientation, "the economic way of thinking", which is in turn the product of this innovative mode of production and finds its specific expression in the principle of maximization of profits as the orientation point in social behavior. There is no doubt that at various moments in history under the most varying social circumstances - e.g. in classical' Rome - there have been enormous concentrations of wealth, of capital. However, wealth in the capitalist system, as distinguished from all other forms of wealth, is not an end in and of itself, accumulated for purposes of luxury, splendor, and consumption: it is surplus value generating surplus value in the early stages of accumulation, indeed, admonishing renunciation of all such indulgences. "Accumulate, accumulate, accumulate! That is Moses and the Prophets", as Karl Marx put it. (1962, p. 621.) Bourgeois wealth - based on trade, colonial exploitation, or revolutionary forms of agricultural production - is invested that it may productively multiply. 'It was the Industrial Revolution in its narrow sense, i.e. the introduction of capital into manufacture and then industrial production itself, which made first England, then Europe, the "workshop of the world" and thus initiated the divergent development of world society into the rich and the poor nations. Profit maximization was the motive - by no means unconscious - of those who financed the adventurer-discoverers of the 15th, 16th, and 17th centuries, those who founded colonies, who created race problems in all corners of the world with their slave trade, who sought and defended more direct trade routes, who built fleets, created nation-states and nationalism, who calculated with wars and world wars to secure and increase what had been accomplished and could even earn money on the preparations, through armaments industry. Profit maximization was and is the vehicle of progress in the capitalist mode of production. Its concrete manifestations present themselves to us among other mediated forms as world or international politics and as industrial revolution.

In the meantime, in the course of the last 200 years, these and other manifestations or forms of capitalism have asserted their independence. An ana



lytical effort, as always laborious, is necessary to comprehend them as still being a function of the basic laws of the bourgeois-capitalist revolution. This is especially true of the historically unprecedented skyrocketing rise of economic growth which was causally linked to the liberation of the productive forces. To have made the quantitative increase of Gross National Product the axiomatic criterion of success among almost all contemporary political classes and elites - regardless of their different ideological orientations as nationalist, "communist", "democratic", or "unallied" - demonstrates more than anything else the universal success of capitalism. A sluggish or stagnating GNP is interpreted in East and West, North and South as a political failure, as proof of an unhealthy society - or as a criterion of progress and cultural standards. The attempt by the People's Republic of China in the course of its Cultural Revolution (which was without historical precedent and therefore dramatic and moving, nonetheless most likely condemned to failure, given the present international context) to question quality and the social relevance of increased production has largely been either completely misunderstood or condescended to as naive Utopianism. A statement like the following one by President Nyerere need not sound "false", i.e. utopian, just because it openly contradicts the realities of foreign determinations of the Tanzanian economy and the physical proximity of a Portuguese colony, or, more important, because it goes against the once specifically capitalistic, now universalized dogma of economic growth as the natural goal of every policy, especially the policy of an "underdeveloped" country:

Inherent in the Arusha Declaration, therefore, is the rejection of the concept of national grandeur as distinct from the well-being of its citizens, and a rejection too, of material wealth for its own sake. It is a commitment to the belief that there are more important things in life than the amassing of riches and that if the pursuit of wealth clashes with things like human dignity and social equality, then the latter will be given priority... With our present level of economic activity, and our present

poverty, this may seem to be an academic point; but in reality it is very fundamental. So it means that there are certain things which we shall refuse to do or accept, whether as individuals or as a nation, even if the result of them would give a surge forward in our economic development. (Nyerere quoted in Jenkins 1970, p. 41.)

In the last few years, for the first time, we have taken the first cautious steps towards developing a new consciousness of the problems posed by a further dimension of the capitalist-initiated dogma of growth which takes the form of ecological threats to industrial societies (cf. Ehrlich & Ehrlich 1970; Foster 1971), and the consequences for the future of the international system, for poverty, underdevelopment, and T;rarlike conflict, the outlines of which are only now becoming visible. The probability that the world's physical resources are simply not sufficient to raise the poor societies to even approximately the material level of today's industrial nations means that the extreme discrepancy between North and South will remain a permanent fixture of the international system, even if the wealthy - above all the capitalist - industrial societies should today declare an economic policy of zero-growth - which is of course completely out of the question.

The fourth of the essential characteristics of the Industrial Revolution, expounded here for the purpose of our discussion, is the internationalism which has been referred to repeatedly. Internationalism was essential in more than one sense: First, one has to recognize the inner connection between the capitalist social revolution and the existence of a global, non-capitalist "vacuum" which represented the prerequisite for its full development. Precisely this vacuum was missing for geographic (Cipolla 1969) or perhaps political reasons in the premature forerunners of capitalism in the Italian city-states as compared to the Spanish-Portuguese, Dutch, and the English world empires. Second, it is the capitalist mode of production itself, oriented toward profit maximization, by definition expansive, which is and must be internationalist; it thus transcends the state and the na

tion, although it must on the other hand assert itself as a nationality to the outside world and at home must organize itself as a state." (Marx & Engels 1953, p. 33.) National encapsulation and internationalistic self-realization - the basic contradiction which above all led to the two great-World Wars of this century - are structurally connected through the concentration of economic, military and organized political violence in the metropolises. The history of the world becomes the history of Europe (including the US); the history of Europe becomes world history of the bourgeoisie, or in other words: "this bourgeois society, the true hearth and public square of history". (Marx & Engels 1953, p. 33.) It is the Industrial Revolution (in the narrow sense of the word) which creates the technical, physical prerequisites for universalization of the capitalist mode of production and thus globalizes its inherent self-contradictions - internationalist dynamics and national political organization, accumulation of capital and wealth in the hands of a few, and world-wide social poverty. (Polyani 1957, pp. 76, 130.) Economic crises while by no means always the direct cause of international political conflict (cf. inter alia Böhme 1968, p. 20 ff.), nonetheless constitute the basic structural framework for national and foreign policy oriented toward avoiding such crises. This, again is a specifically modern phenomenon: "Crises have occurred in the true sense of the word only with the event of industrialization and market expansion that have characterized the capitalist countries in the last 150 years." (Flamant & Singer-Kerel 1970, p. 7.)

Attempts, typical of the 20th century, to rationalize the international system through international law, to legitimize the sovereign nation-states as the subject of a binding universal code of law, including attempts to create a world organization based on parliamentary principles (League of Nations, United Nations) - all derive from the bourgeois-capitalist conception of order.

Having reached this point in the outline of an analytical framework for peace research, we might now meaningfully begin again at the beginning - i.e. undertake a detailed qualified historical analysis of

the structure of the international system as it developed in a multitude of phases, self-contradictory and yet coherent. We would again trace the rise of the middle class and the development of the capitalist mode of production in Western Europe as they manifest themselves in foreign policy and the international system; but this time we would place special emphasis on the inequalities and staggered developmental phases which generated conflict. We would then not merely distinguish between the various phases - the age of discovery, early colonialism, mercantilism, informal free trade empire, imperialistic colonialism, imperialistic anti-colonialism, etc. The European conflicts at the turn of the 19th century, the "hundred years' peace" (1815-1914), and the two World Wars would not be written off as the "same old world conflict", but interpreted more specifically and exactly as they exist in direct connection with the sporadic and unequal development of capitalist industrialization in England on the one hand, and on the continent and in the US on the other. We could try to demonstrate that the social tension and the upheavals which manifested themselves in the various frustrated revolutions in Europe, each with its own reverberations outside Europe (e.g. Latin America independence) can be traced directly back to the attempt of the elites and ruling classes - which were partially feudal, partially already bourgeois, partially bureaucratic - to catch up with the English. It was Great Britain which had established a tremendous lead in the race for economic power; and by imitating them, the competitors introduced a capitalist-industrial revolution from above - with particularly spectacular success in Germany and Japan.

The collapse of Czarist Russia should also be interpreted in this context of world capitalism. Above all, however, the rise of the socialist Soviet Union and its survival as an organized contradiction to the imperialist international system would be seen as the result of the failure of socialist revolutions in the capitalist metropolises themselves. Thus its existence to this day would be viewed as an indirect manifestation of the only half-broken vitality of capitalism on a world scale.

We would have to show that the dramatic post-war period of decolonization, US leadership, and the rise of Third World nations to subjects of the international system demonstrate the flexibility and adaptability of the capitalist industrial states to changed conditions. But at the same time, a new expression of organized contradiction of the capitalist world system in the form of revolutionary China has entered the scene and thus impeded its political manageability.

In short: we could try to isolate the various forms of the international system from its spontaneous, naive beginnings to the structured, manipulated "UN formation" (the previously-mentioned "feudal" or "threat-system") without losing sight of its historical structural unity as the evolution, development, and self-realization of capitalism amidst all these differentiations and converging contradictions.

#### 4. Concrete Applications

This line of analysis will be developed at a later time. Here we shall conclude by mentioning examples of preliminary interpretations of three problems of particular interest to peace researchers. These should demonstrate why they, like a multitude of other subjects for study, and topical conflicts, can be deciphered only in the framework of the concert of the system outlined here. This approach implies the analytical preparation of the counter-strategies and practical solutions tailored for political practice - which defines, indeed, the scientific identity and the credentials to praxis of peace research, about which all peace researchers agree in principle.

As the first problem area, I have chosen military armaments and the international arms race. This is a phenomenon which has, after all, provided the moralistic, naive impetus for peace research and the peace movement itself in the past. As the second problem area, I shall choose the developing countries, or rather the relationship between underdevelopment, poverty, and the use of force. This is a subject which has only recently, and therefore all the more intensely, come to the attention of peace research.

As a third area, I shall isolate a specific case which for years has been unsolved and will remain so for many years to come, and which harbors to a particular degree the potential of a world war: the Arab-Israeli conflict. One could, of course, have chosen Vietnam, Bangla Desh, Biafra, or South Africa just as well.

1) Armaments and the arms race appear to be as old as political history: the cliché "si vis pacem para bellum" has become a permanent fixture of so-called common sense. Should the historical critical approach of peace research require further substantiation, it would lie in the following assertion: only a careful review of history will cure us of the false consciousness and the paralysis in political action which is fixated in such stereotype beliefs.

We have already mentioned the specifically new role which military organization and armament played in stimulating the development of capitalism, -at least in continental Europe. The thesis that the modern bourgeois state bore the scar of the military-industrial complex at birth will have to be critically examined and differentiated, but should nonetheless lead to a more concrete and more operational understanding of the relationship between states, class dominance, economy, and technology in the capitalist system. Thanks in great part to the revolutionary studies of Richardson, we began to know much about the quantitative course of arms races, as well as the perceptual aspects of arms races which can lead to ever-intensifying hostile attitudes and eventually to war.<sup>12</sup> We also know about the (US) armaments sector and its inner-social and economic intermeshing, due not least to the alarm signalled by liberal economists since the 1960s. What by contrast are almost completely lacking are analyses of the social processes through which armaments stabilize and support themselves domestically, and analyses of the function of armaments for "progress" as it was inaugurated and later defined by the capitalist revolution.

Last but not least, we lack analyses of the socially stabilizing function of armaments and the mili

tary apparatus in those countries - like the Federal Republic of Germany - where the military-industrial complex plays no quantitatively important role.<sup>14</sup> This foundation would enable us to grasp military autism, i.e. armament as removed from its original socio-economic basis and following its own inner logic.

On the one hand, there is no doubt that armament has a different function in a system with a centrally-planned economy (like the Soviet Union) than in the capitalist system. On the other hand, there is no doubt that with regard to the growing militarization of the international system, including arms trade with the Third World (cf. SIPRI 1971), such "socialist" armament scarcely distinguished itself functionally or technologically from capitalist armament. Doubt does exist, however, as to whether such "socialist armament" is or has become just as inherent to the socialist system as capitalist armament is to the capitalist system. The hypothetical answer within the interpretational framework developed here would run as follows: technologically intensive armament in the Soviet Union, linked to industrial potential and potential for growth, is a function of the threat to this first non-capitalist system, a threat which has existed from the moment the USSR/Russia broke away from the capitalist world system. This kind of armament was forced upon the USSR, and has in the meantime gained a degree of independence which has not yet been satisfactorily analysed. In the capitalist system, on the contrary, armament and economic growth, armament and the technological development have determined one another ab initio; they are dialectically linked, even where this leads to potentially self-destructive autism. Accordingly, one should compare the beginnings of armament and the formation of the modern state, of the arms race as motivated by domestic and power politics in the capitalist system on the one hand,<sup>15</sup> with the beginnings of Soviet and now Chinese strategic armament on the other hand - or the obviously externally-induced arms race of the nations of the Third World.

To be sure, one could at first sight present convincing reasons as to why one should let "history remain history", and in view of the acute threat

through A, B, and C weapons, why peace research should concentrate its efforts on developing mechanisms to prevent the outbreak of warlike conflicts, channelling them through armaments control mechanisms. However, one could object - and I feel one must object - that such preventive measures have already been practiced and been institutionalized more or less competently, more or less successfully by a technologically schooled and qualified group of expert-diplomats; and they will continue to be perfected without ever being able to get at the roots of the problem. Such a practice-oriented peace research would at best have servicing functions; more likely still, it would not even equal the intellectual qualification of the practitioners, of the international threat system, but merely follow in their footsteps. If critical peace research is to overcome the system itself, it must begin farther back in order to reach the more ambitious goal. It must start earlier in order to go farther.

2) The same is true in principle of the problem of underdevelopment (the growing gap between rich and poor societies in general) and true of the increase in violent conflict in poor countries in particular. McNamara, while still in his capacity as US Defense Minister and thus perhaps as the first authority, asserted that such a connection exists between the increase of violent conflict and poverty in the nations of the Third World (McNamara in Newsweek, 18 May 1966). Taking a broad scope and with a different cognition interest, Istvan Kende implied that a Third World War had already broken out. (Kende 1971.) However, as Galtung has pointed out, peace research can claim the Third World problem area as its own, not only because of the topicality of actual outbreaks of violence: it must try to get to their roots in social inequality whether or not such inequalities lead to violent conflict in any given case. In this sense, the development of underdevelopment in the context of the international system represents a central theme for peace research. (Galtung 1969.)

Two aspects in particular must be analyzed here: First, this historically unique phenomenon, underdevelopment, must be interpreted in the context of the



development of the capitalist world system itself and not as some regrettable backwardness amongst the peoples of Asia, Africa, and Latin America, as compared to the technological breakthroughs in Europe and America. Export of know-how - technical, administrative, as well as political and economic organizational imitation - is only feasible between structurally similar societies. This we have seen from the relationship between England, where the Industrial Revolution (in the narrow sense of the word) took place, and the European continent and the United States. The development of these European societies and the English "breakthrough" in particular are, however, themselves intimately intermeshed with the subordination of nonEuropean societies. More important, or rather more concretely, the capitalist model of development, examined in its historical origins, itself demonstrates the necessity for open territories for expansion as the precondition for the possibility of a "take-off". From a historical viewpoint, these relationships have today been clarified to a great extent; the consequences, however, remain unclarified. This would not only prohibit the structural transferal of this capitalist model of development, which as a rule is abstracted from the international context and reduced solely to alleged internal processes of accumulation, to the rise of a bourgeoisie of trade and industry as a stimulus to development, to the accumulation of capital through a surplus-value (Mehrwert) producing working class, etc. Also, it would logically mean that the capitalist world system qua capitalist system is structurally incapable of bringing the developing countries up to the level of productivity of the capitalist metropolises and their standard of living. Until now, peace research has scarcely concerned itself with this global economic analysis; even where it has begun to focus upon imperialism as a socio-political structural problem, it remains essentially static, socio-economically void of substance. (Galtung 1971b, p. 81 ff.) The preconditions for removing violent conflicts between Third World societies, can be sought through only roundabout analysis of the reproduction mechanisms of the capitalist world system, and by overcoming this system at its centers.

If, however, the as yet unsatisfactorily-founded conjectures should prove true, namely that the world's existing physical resources are insufficient to guarantee those living today (not to mention the expected increased world population) even approximately the standard of living of the developed industrial nations, then the demands for far-reaching change of the capitalist mode of production (which, mentioned earlier, has subjugated even the non-capitalist Soviet Union, etc., to its pressure for uncritically forced economic growth), will not be sufficient. This implies, moreover, the - likewise historically unprecedented - necessity to transfer production capacity away from the developed centers. Indeed, it implies for them a negative economic growth.

Second, underdevelopment and the political conflicts which it produces will necessitate in peace research a reflection over the problem of violence, a reflection which instead of merely covering up the problem with well-meaning pacifism, can differentiate between progressive and repressive violence in this concrete case. The clearer it becomes that underdevelopment and the capitalistic system, and thus violent conflicts in the Third World and the capitalist world system, are causally related, historically as well as structurally, the more unavoidable such reflection will become. Such a differentiated reflection on the legitimacy of the use of force in any given case as a solution to social conflict must get to the roots of the previous identity of peace research itself.

3) Finally, I would like to sketch the interpretational framework developed here for the example of the Arab-Israeli conflict. Here I shall be orienting my remarks to the so far (with reservations) most productive attempt of conflict or peace research to subdivide this conflict into operational parts, and to move on to synthesizing conclusions as to possible solutions - Galtung's article "Middle East and the theory of conflict" (Galtung 1971a).

Galtung rightfully assumes that the founding of the Israeli state on Palestinian territory "can only

be understood against a background of century-long traditions of Western colonialism (and that) Zionism would have been powerless if it could not operate within this. tradition. The establishment of Israel should be seen as a consequence of Western imperialism, not only as an instrument for continued imperialism" (p. 175). The principal weakness of the analysis which then follows - unlike most others, clear and coherent - is that the historical opening remains purely rhetorical and is not developed as the cardinal, archimedial point of the conflict. As Galtung himself says: "Now the question to be asked is not whether what happened in the past was a 'mistake' or not that is now an .academic question - but what can be done in the future to rectify the situation." (p. 176.) This is precisely not an academic question. The founding of Israel must be traced back to the transformation of the Arab societies under the impact of capitalist expansion. One would have to go at least as far back as the prevention of indigenous modernization, above all in Egypt, which in the 1830s under Mohammed Ali (Hobsbawm 1962) and again in the 1870s (Mommson 1961) showed signs of developing into a kind of "Arab Japan". In the greater context of the systematic weakening or even destruction of indigenous industrialization, the annexation of the Arab states into the economic strategic network of the imperialist societies of Western Europe, of the playing-off of the first anti-colonialist national movements against each other during World War I - against this background, the Balfour Declaration with all its consequences appears as but one pebble in an immense mosaic. The antagonism, which in the meantime crystallized around states - with Israel as a bridgehead - is, correspondingly, still functionally derived from the expansive interests in domination and control on the part of the leading capitalist countries, in recent years above all of the US.

That this policy proved counter-productive, since it opened the gate to the Soviet Union in the Middle East, complicates the situation and points out the constant possibility that conflicts can take on a tactical independence of their own - without, however, touching in substance upon the strategic perspective. Even those Arab states still militarily

linked with the Soviet Union, above all Egypt, are "condemned" qua nation-state development to evolve a bureaucratically organized national bourgeois social order and to develop economies which must muster considerable resources for a socially unproductive, parasitic military apparatus. On the basis of this development model, they will necessarily have to remain underdeveloped as socio-political appendices of the capitalist world system (Tibi 1969), independently of temporary military alliances. (El Rabadi 1970-71.)

At the level of organization, or rather confrontation of states as outsiders have dictated it to the Arab people in this specific form (the historical as well as future alternative, Arab unity, has been perverted to become a kind of sentimental, manipulable hope), there is no solution to the conflict worthy of the name "solution", as Galtung rightly and with great precision in the language of conflict resolution has pointed out.

This approach evades, it does not grasp, and indeed is not able to grasp the level of social conflict, the class analysis which enables us to see Egypt not as Egypt, Jordan not as Jordan, or Israel not as Israel, but rather as internally divided social groups which are held together more (Jordan) or less (Israel) painstakingly as stable entities. To be sure, the loyalties of these groups and classes appear predominantly nation-state oriented. But it would be historically shortsighted and thus theoretically false, as well as politically self-defeating, for a peace research oriented toward long-term solutions not to insist on the historical analysis, and hence on the strategic strengthening of non-state, inter-social loyalties. "We can and we must restore the class struggle to its old dignity", as Isaak Deutscher has put it.<sup>16</sup>

The history of our present shows that bourgeois internationalism has always established itself through the state and hence must always bear the consequences of its own potential for military conflict. In contrast, non-bourgeois, non-capitalist internationalism contains the preconditions for overcoming the nation-state and the conflicts inher

ent in that system.

The example of the Soviet Union, or that of the Sino-Soviet conflict, demonstrates that such internationalism cannot move beyond preliminary stages, as long as it remains a process on the periphery of the international system. Thus, the solution to the Arab-Israeli conflict will in the long run not be found in the Middle East. There it will at best and most probably end in an imposed peace in the context of fragmentation and underdevelopment. Rather, such a solution can be achieved only through change in the historic and current center of the capitalist world system.

## 5. Final Remarks

I would like to break off this train of thought at this point. Of course, this analysis is in great need of expansion, deepening, differentiation, and better factual proof and naturally of correction, in its concrete execution on all points. Nor shall the implicit conclusions for peace research as a critical practice-oriented science be explained beyond what has already been presented.

In view of the lack of theory in peace research emphasized in the beginning of this article, together with the overemphasis on empiricism and "value-free" methodology, and in view of subjectively well-meaning uncritical pluralism of approaches amongst peace researchers themselves, it seemed to me both necessary and timely to redefine the scope of peace research and thus simultaneously to expand it and to narrow it down. There seems to me no doubt or question as to the quantitative growth of peace research in the foreseeable future. However, without such a limited expansion and expanded limitation, its qualitative growth is highly dubious.

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## NOTES

1. Landes 1969, p. 5. Or one could take the calculations of Leith 1931 (p. 4) which show that more minerals have been consumed since 1900 than in the entire history prior to 1900; that world gold production from 1910 to 1930 was just as great as in the 400 years since the European discovery of America; that world copper production in 1929 was double the entire world copper production of all of history up to the 19th century, etc.
2. Hakluyt's advice to the Hapsburg's enemies: "Strike him in the Indies, you strike him in the apple of his eye."
3. Illustrated by Horkheimer using the example of Italy and Machiavelli (Horkheimer 1967).
4. Compare for example Sombart 1913.
5. Compare Krippendorff 1970. As a useful anthology, Eisenstadt 1971.
6. The level of socio-cultural development of non-European societies was thoroughly equatable or similar to that of the West European societies up until the threshold of the Industrial Revolution. This was worked out as a universal historical process for the first time by Wittfogel 1924.
7. Compare the summary of the literature and some data in Mandel 1967, p. 76 ff.
8. Compare Hobsbawm 1969. In my opinion, he is most comprehensive on this topic.
9. As, despite impressive research efforts, does Wright 1964.

10. Compare also the heroization of war as something specifically modern: Nef 1963, p. 307 ff.
11. In my opinion, still the most convincing attempt: Wittfogel 1932, p. 466 ff.
12. The literature on this topic is so abundant and so well-known that specific references are superfluous.
13. Nef is still the only example.
14. Brandt 1966 is still the only analysis of its kind. Cf SIPRI 1971.
15. Since Kehr 1930, it is well-known that the construction of the German navy - decisive for the outbreak of World War I - was not undertaken because of a foreign threat to Germany, but rather because of domestic, social-political reasons. Lately, compare Berghahn 1970, p. 34 ff.
16. At a teach-in at the University of California, Berkeley, 1967. In Horowitz 1969.

## SUMMARY

Having quantitatively grown so fast, peace research urgently needs to clarify its research object and to dissociate itself from other approaches. A discussion of theory is not luxury. The international system, with its threat of total or partial destruction which provides the general framework of peace research, must be recognized as a phenomenon of recent history. It is the product of the Industrial Revolution and the capitalist mode of production. Retracing this system to its historic genesis enables us to expose the roots from which the decisive conflict potential of modern times - the modern state, the arms race, the discrepancy between rich and poor countries, non-capitalist countries as components of the capitalist world system - have developed.

Unless we reduce historically conflicts of the moment to their recent contemporary structure rooted in the capitalist revolution, peace research will only be able to cure symptoms. Today we are historically still in the epoch of the capitalist revolution of the (European) 17th and 18th centuries. It must be transcended, overcome, if we are to create conditions for the possibilities of circumstances in which conflicts are no longer warlike, i.e. mediated by states but rather articulated and carried out as social conflicts by the agents directly concerned.