## The

# Marxist Quarterly

JULY 1954

CRISIS AND THE U.S.A.

John Eaton

SOVIET CULTURE AND ERITICISM

Thomas Russell

PHILOSOPHICAL PROBLEMS OF QUANTUM PHYSICS

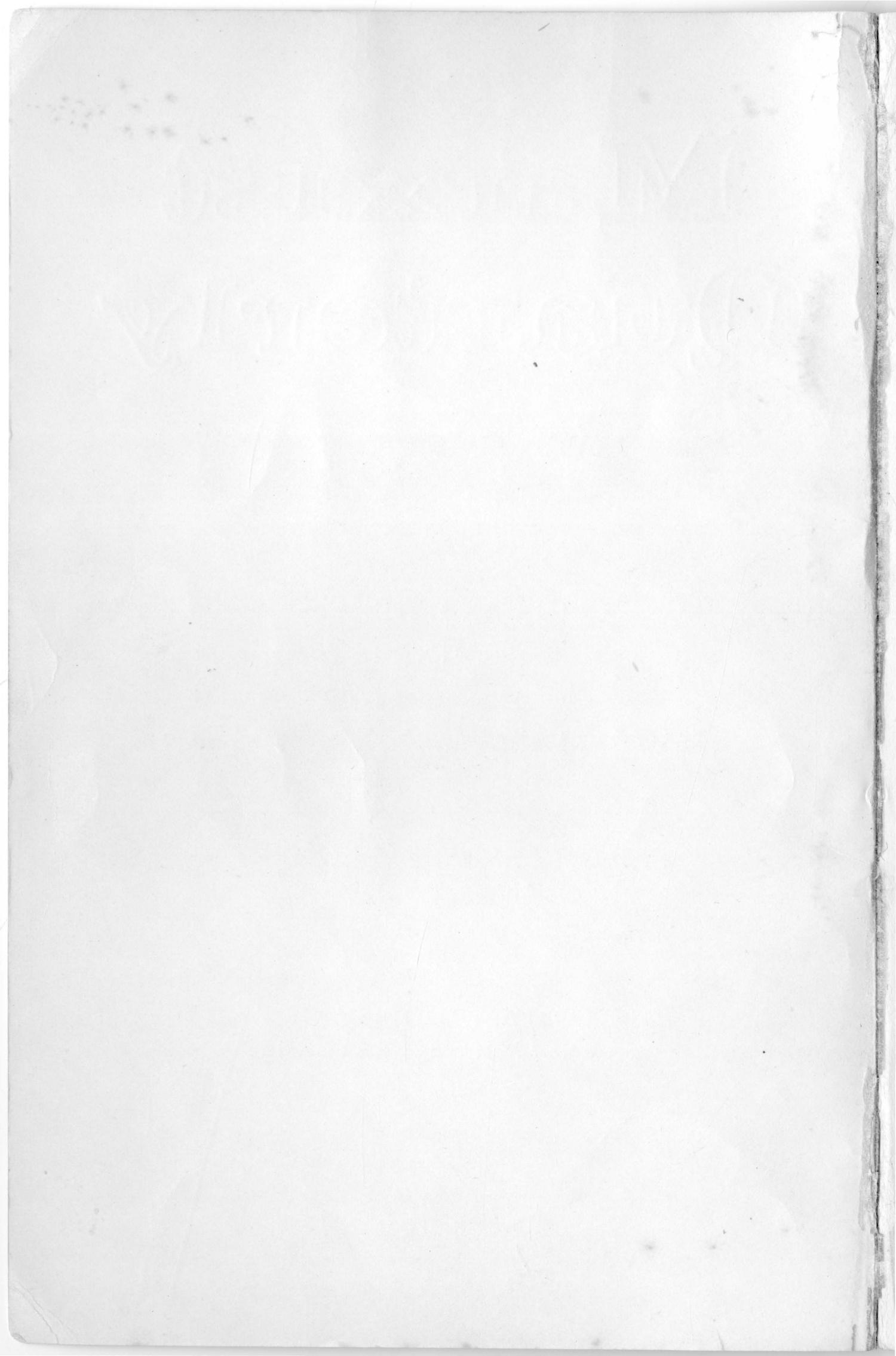
Arthur Suddaby and Maurice Cornforth

THE COMMUNE OF PARIS AND ENGLISH LITERATURE

Jack Lindsay

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# THE MARXIST QUARTERLY

## VOL. I NO. 3 JULY 1954

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## Crisis and the U.S.A.

#### JOHN EATON

Today all eyes are on the economic situation in the U.S.A. A slump there must have far-reaching repercussions throughout the capitalist world. It raises new spectres of ruin and unemployment for millions of people. It serves as a stimulus for the fomenting of war and reaction. It is a challenge to the peoples of the world to act more decisively in the defence of their livelihoods, their liberties and the peace of the world.

The elementary facts of the American situation are that industrial production has dropped from the peak level reached in the summer of 1953, and the decline has been rather more rapid than that of 1949-50; unemployment in four months over the turn of the year increased more than three-fold and huge agricultural surpluses are piling up whilst farmers' incomes show a decline. In official circles this decline in industrial output and employment is attributed to a falling off of Government expenditure and a reduction in purchases for inventories. Government spokesmen and economic advisers have made varying assessments of what is taking place; but never or rarely is it suggested that this is more than a passing affair—perhaps a repetition of 1949 but certainly not of 1929.

Of course, the official pronouncements are careful to err on the optimistic side and are made with the object of inspiring confidence. When they contend that the present recession is due only to the tapering off of arms orders coinciding with a tendency to lighten stocks, they imply that these are readjustments which will shortly be completed and could not cause a major slump. A serious slump could only develop if commercial circles begin to lose confidence in the future and reduce their scale of operations. This contention is widely supported by the theoreticians of capitalism, Keynesian and otherwise, who attribute economic crisis ultimately to psychological factors. The standpoint of Marxists is different. Marxists do not deny the importance of psychological factors in the short-term. Clearly the scale on which capital turns over will be affected by the expectations of profit on the part of the capitalists who decide when, where and how to invest the capital they own and control. But the actual possibilities of making profitable investments are determined by objective conditions, namely economic relationships which are not created by the wishful thinking of capitalists. It will take more than optimism to solve the economic problems now facing the U.S.A. where, despite many circumstances that are different from the past, a deep-

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going crisis is developing of which the causes are in essence the same as those that have again and again caused capitalist crises in the past.

#### CRISIS AS EXPRESSION OF BASIC CONTRADICTIONS OF CAPITALISM

Marx's theory of crisis is inherent in his analysis of the laws of motion of capitalism itself. This fact, namely that crisis is an expression of the essential nature of capital and its process of movement and development, is the most important element in the understanding of capitalist crisis. Crisis is a break, an interruption in the turnover and reproduction of capital. As the turnover or reproduction of capital is its very life process, a break in this process is tantamount to destruction of capital which may be more or less limited or extensive, partial or general. A partial crisis may be limited to one or two industries, or to a certain aspect, for example, interruption in the supply of raw materials; a general crisis engulfs almost all branches of the economy. The inability of numerous capitals to continue their cycles of reproduction constitutes a collapse of the market and the crisis assumes the form of a crisis of overproduction affecting all or most spheres. Capitalist after capitalist finds that the goods he is producing cannot be sold and the check to the conversion of capital from the form of goods into money (sale of products) impedes the commencement of a new cycle of the reproduction of capital.

In its partial form crisis demonstrates the anarchy of capitalist production, but the momentum of capitalist development may, as it were, overcome and sweep aside the crisis. It is, however, the general crisis of overproduction that points to the essential limitations inherent in the capitalist mode of production. In speaking of capitalist crisis it is, therefore, such general crises that must be considered as typical. Like partial crises, general crises occur because capitalist production is anarchic. Capitalism is anarchic in that each capital acts on its own, seeking to get for itself the maximum profit and acting quite without regard to any social plan co-ordinating the separate but socially interlocking branches of economic activity. Capitalism remains anarchic in this sense today in the period of monopoly capitalism no less than in the days of competitive capitalism. The typical independent units—the separate capitals—today are multi-millionaire concerns which often dominate whole industries, but nonetheless they are governed in their activities by their private independent interests and not by a plan shaped to serve the needs of the whole of society. Capitalist anarchy is not, therefore, eliminated by the emergence of capitalist monopolies.

Whilst the anarchy of capitalism adequately explains partial crisis, it only goes a small way towards explaining general crises. A general crisis implies more than a lack of balance due to planlessness. The point about a general crisis is that overproduction is general; all or most

branches of production are simultaneously faced with an inability to sell their products.

It is of the essence of capitalism that each capital (that is, the capitalists directing each unit of capital, each company or group of companies) strives always to reproduce itself on an enlarged scale. This limitless striving for expansion is the condition of survival, the law of existence of capital. This striving for expansion is not eliminated with the emergence of monopolies; it is intensified but adapted in form to suit the private interests of the monopolies. Every opportunity is used to expand the forces of production as if, as Marx puts it, the absolute consuming power of the whole of society were the only possible limit; but this striving for expansion is again and again blocked and frustrated. It meets a barrier in the very market conditions that capitalism creates.

For capital, in striving after more and more profit to turn into more and more capital, and in seeking thus to enlarge its own capital wealth, must limit and restrict the wealth of others, of the workers it exploits, of the smaller capitalists and simple commodity producers, of the middle classes, of anyone whose claims compete with its profits. Inevitably, therefore, the purchasing power of the masses of the people is restricted and held back. This is the necessary counterpart of the progress of capital. If capital is to grow, profits must be enlarged. If profits are to be enlarged, the wages of the workers must be held down and the masses of the people must be starved of spending power. This contradiction between the expansion of productive forces and the restriction of the purchasing power of the masses is an expression of the essential contradiction of capitalism, namely that between the social character of production (the co-operation of very large numbers of workers in production, and their interdependence in the various stages of production) and the private capitalist appropriation of the product (which determines the narrow aims of profit-making which guide the actions of those who direct each unit of capital).

This inherent contradiction in the early days of capitalism in fact was a driving force carrying capitalism forward to conquer ever new fields and speeding the advance of its productive forces. However, the contradiction becomes more and more acute as capitalism becomes more and more the all-pervading system of production and as the sphere in which it operates is relatively more and more restricted. Naturally, this contradiction reaches its sharpest expression today when the field of operation of capitalism has been cut down by the territories won by Socialism. Marx's Capital taken in its entirety provides the scientific elaboration of the economic processes through which the contraditions, that in the early period of capitalism were the stimulus to its development, became more and more the fetters of production as the expansion

of capitalism reached its highest stages. The point is that the production relations of capitalism again and again bring to a halt the expansion after which each capitalist ceaselessly strives:

"Capitalist production," writes Marx (Capital, Vol. III, Chapter XV, ii) "is continually engaged in the attempt to overcome these immanent barriers, but it overcomes them only by means which again place the same barriers in its way in a more formidable size.

"The real barrier to capitalist production is capital itself.

"It is the fact that capital and its self-expansion appear as the starting and closing point, as the motive and aim of production; that production is merely production for capital, and not vice versa, the means of production mere means for an ever expanding system of the life process for the benefit of the society of producers. The barriers within which the preservation and self-expansion of the value of capital resting on the expropriation and pauperisation of the great mass of producers can alone move, these barriers come continually in collision with the methods of production, which capital must employ for its purposes, and which steer straight toward an unrestricted extension of production, toward production for its own self, toward an unconditional development of the productive forces of society."

Crisis tends to develop periodically. The expansion of capital proceeds for a certain period, is brought to a halt and precipitates a period of crisis. Then expansion starts again, is again brought to a halt, and so forth. However, the timing and form of crisis may greatly vary according to concrete circumstances. Today, in the era of monopoly capitalism in particular, war and the impact of vast war expenditure within the framework of State monopoly capitalism profoundly affects the form in which crisis finds expression and the timing of the development of each new crisis. In analysing the crisis that is now developing in the U.S.A. account must be taken of the concrete circumstances that shape its course; but these must be seen against the background of the essential character of capitalist crisis which Marx summarises in his *Theories of Surplus Value* (trans. by G. A. Bonner and Emile Burns, Lawrence and Wishart, 1951, p. 413-4) as follows:

"In the general crises on the world market, all the contradictions of bourgeois production break through collectively; in particular crises (particular as to content and extent) they appear only in a scattered, isolated and one-sided form.

"Overproduction is specifically conditioned by the general law of the production of capital; production is in accordance with the

productive forces, that is with the possibility that the given quantity of capital has of exploiting the maximum quantity of labour, without regard to the actual limits of the market, the needs backed by the ability to pay; and this takes place through the constant expansion of reproduction and accumulation, and therefore the constant reconversion of revenue into capital; while on the other hand the mass of the producers remain restricted to the average level of needs, and on the basis of capitalist production must remain so restricted."

#### ECONOMIC SITUATION IN THE U.S.A.

The rate of expansion of productive forces in the capitalist world has been slowing down now for more than half a century. Mr. Steindl, in a recently published book (Maturity and Stagnation in American Capitalism, Oxford, Basil Blackwell) estimates that the rate of growth of capital in the U.S.A. dropped from an average of over 5 per cent per annum during the latter years of the nineteenth century to 4.3 per cent in the first decade of the twentieth century, 3 per cent in the second, 2.5 per cent in the third and 0.1 per cent in the fourth. Apologists have described this slowing down as a necessary consequence of economic maturity. This, however, begs the question. What is maturity? Marx showed that the difficulties confronting developed capitalism were due to the contradictions inherent in capitalist production relations, which again and again

put barriers in the way of the expansive forces of capital.

Since 1939 American capital has enjoyed a considerable expansion. Analysis of this expansion shows, however, that this has not been a rejuvenation of an ageing economy. The expansion of output of these years has been due almost exclusively to the increase of arms production. The index of industrial production rose (1935-39=100) to 239 in 1943, slumped in 1946 to 170, rose to 192 in 1948, slumped to 176 in 1949 and rose again on the basis of a vast expansion of arms production to a peak of 241 in the summer of 1953 (since when it has fallen back by over 10 per cent). The next important point to note is the rapid increase in exploitation during this period. Although wages increased, output increased far more rapidly, and the worker's share in the product of his labour fell. The increase in exploitation in the U.S.A. in the thirteen years from 1939 to 1952 was almost as great as it had been in the forty years from 1899 to 1939. The following index figures from the New York Labour Research Association's Economic Notes for February 1954 illustrate this point—the Cost of Living Index of the United Electrical Radio and Machine Workers has been used in calculating the "Real Annual Earnings".

	Output	Output per worker	Real Annual Earnings	Relative position of worker
1899	100	100	100	100
1939	373	199	139	70
1947	649	231	133	58
1952	669	269	138	51

It is quite clear from these figures that alongside the expansion of the productive forces of U.S. capitalism the consuming power of the worker has been relatively more and more restricted. It is, however, natural to ask how, on the basis of this glaring contradiction, there have been out of fifteen years only two years in which the volume of production has fallen by any substantial amount. The answer to this question becomes clear if we review more closely the stages through which the U.S. economy passed in this period.

The first stage was that of the war, during which the rapid expansion in output was based entirely on the mass production of armaments. For civilian industry the economic consequences of war resembled those of slump; capital turned over at a reduced rate, was destroyed, and plant and equipment ceased to be replaced for a prolonged period. With the ending of the war and the prospect of an enlarged civilian market, investment and the turnover of capital in the civilian sector began to be stepped up. This sector offered considerable prospects of profit and the vast accumulation of profit during the war period provided the funds for investment in these fields. Moreover, American imperialism, feeling itself greatly strengthened relatively to other powers, began to prepare for an expansion of its influence throughout the world. So the American economy together with the British and other economies entered the phase of the reconversion boom.

The increased capital requirement of the civilian sector was a factor sustaining the market in a manner similar to the recovery phase of the "normal" cycle. U.S. expenditure on new plant and equipment increased between 1945 and 1948 from \$6,600 million to \$19,200 million and, of course, alongside of this there were increased purchases of raw materials and labour power. Other factors sustaining the market for the products of U.S. industries at this time were increased investment overseas\* and the overseas Government expenditure in the form of loans, foreign "aid" and the various other means through which American imperialism implemented its foreign economic policy. This phase of expansion came to a

<sup>\*</sup> Note: Whilst the total of overseas investment is considerable, it is still not large in relation to the vast total of American-owned capital, and the export of capital remains relatively far less significant than it was for Britain at the turn of this century.

halt in 1949 when the index of industrial production fell to 176 as against 192 in 1948.

This crisis of 1949-1950 was, however, temporarily submerged as a result of the internal and external policies pursued by American imperialism. The major internal factor was the vast expansion of war contracts. Government expenditure on goods and services which in 1949 and 1950 stood at approximately \$43,000 million was increased in 1951 to \$63,000 million and continued to rise up to 1953. In the fourth quarter of 1953 it stood at \$83,000 million (annual rate). Nearly all this increase was attributed to military and associated expenditures which rose from \$18,500 million in 1950 to over \$52,000 million in 1953.

In order to sustain the prices of agricultural products in face of the "overproduction" that was developing, the Government bought in farmers' surpluses at agreed prices. As a result huge stocks have accumulated. Stocks of wheat, corn, cotton, fats and oils and dairy products are at or near record levels. Carry-over stocks of wheat, for example, were on July 1, 1953, 562 million bushels, which was more than double what they had been a year before; by July 1, 1954, they are expected to be 875 million bushels. The price support policy pursued by the U.S. Government has, of course, prevented farm incomes from falling as rapidly as would otherwise have been the case, but none the less farm incomes are falling and at the same time the Government is encumbered with huge stocks. In the hands of the American imperialists these stocks threaten to become a dangerous implement for furthering their foreign policies. Already considerable quantities have been sold against payment in foreign currencies and used in turn to effect payment for overseas military expenditure. Further they can be used to bring pressure to bear on the policies of foreign Governments and to undermine the economic position of other agricultural communities.

The home market has also been temporarily expanded at the expense of the future by the rapid increase in consumer credits which have risen from a total of \$10,200 million in 1946 to over \$28,000 million in 1953. In addition the prices of and the market for raw materials have been sustained by the Government's stockpiling associated with their military preparations.

Externally, American policy has sought by many different means to enlarge the sphere of American influence, to create profitable markets for American products, to increase the dependence of other economies on the U.S.A. and to facilitate the penetration of American capital overseas. State expenditure under projects such as "Marshall Aid" has tied overseas countries to the American market, Now this type of "foreign aid" is being more and more replaced by direct military aid. The actual war in Korea was designed to establish American dominance in the

Far East and at the same time provided the excuse for the gigantic arms drive that stimulated an inflation of world prices from which American capitalism reaped huge profits.

American capital exerts a powerful influence in West Germany and has supported the policy of "unifying Europe" with the aim of establishing American dominance. Whilst using tariffs and other import restrictions to protect the American market, a policy of "liberalisation" has been pressed upon the outside world with the object of removing obstacles to the penetration of American economic interests. This policy is aimed in particular at the trade and exchange controls protecting the British Empire, and in the field of currency controls a struggle has long been developing against the British financial interests who are aiming to extend the use of sterling in international transactions. By fostering the financial strength of West Germany America hopes to strike a blow at the influence of sterling.

The Battle Act and the embargo on East-West trade imposed through the agency of C.O.C.O.M. have harmonised with the general aims of America's foreign economic policy. The embargo has not only served to heighten the war fever, it has also weakened the capitalist rivals of America by depriving them of markets and limiting their access to alternative sources of supply which could reduce their dependence upon American sources.

In fact capitalist countries have been made to pay a high price for their dependence upon America. The devaluation enforced in 1949 has enabled America to sell her products at enhanced prices and to buy from overseas at highly favourable prices in terms of dollars. The existing exchange rate between the dollar and the pound is quite unreal in terms of purchasing power and reflects only the strength and dominance in the capitalist world of the powerful financial interests in America that have been able to enforce it. (A recently published O.E.E.C. Report on an International Comparison of the Purchasing Power of Currencies indicates that on the basis of purchasing power the rate of exchange should be 4.6 dollars to the pound, assuming expenditure according to the European pattern of products, or 3.5 dollars to the pound, assuming expenditure according to the American pattern, whereas the actual exchange rate is 2.8 dollars to the pound.)

The internal and external policies pursued by American imperialism in the years from 1950 to 1953 have not removed the contradictions inherent in the capitalist economy on which it is based. On the contrary—as we shall show below—they have intensified them. They succeeded in temporarily pushing back the developing crisis of 1949. They enabled the American monopolies to carry further their plans for world domination. They provided—through the increased exploitation of the American

and overseas peoples—huge profits for the American monopolies but they did not remove the internal contradictions of their economic system. The phase that began in 1950 is now coming to an end and signs of a new crisis are appearing.

In May the Editor of the New York Journal of Commerce, analysing the economic situation in the U.S.A., referred to five "major vulnerabilities" as follows: excessive inventories; excessive plant capacity; excessive private debt expansion; declining farm incomes and saturation of the market for durable consumer goods. His observations are realistic. The weaknesses to which he is pointing are in fact the symptoms of the basic contradiction of the economy, the vast expansion of capacity on the one hand and on the other hand the restricted purchasing power of the masses whose purchases in recent years have to a substantial extent been sustained by drawing on consumers' credit, which—and of this there are already signs—is bound to be curtailed as incomes fall.

The relatively worsened position of wages in relation to output to which we have referred above, is, of course, also an indication of the same contradiction. In broad terms one may estimate that for workers whose wages in 1939 represented one-third of the value produced, wages today (even though they have increased in real terms) represent only a little more than one-quarter. Analysis of the distribution of the national product also points to the same facts. Whereas in 1946 73 per cent of the national product was taken by personal expenditure and  $12\frac{1}{2}$  per cent by investment, in the second quarter of 1953 the corresponding percentages were 62 per cent and  $16\frac{1}{2}$  per cent. Over this period the share taken by Government purchases rose from  $15\frac{1}{2}$  per cent to  $22\frac{1}{2}$  per cent. Military expenditure alone accounted for  $14\frac{1}{2}$  per cent of the national product in 1953 as against 10 per cent in 1946 and 5.7 per cent in 1947.

These figures indicate that the American economy has been mainly sustained in recent years by investment orders and arms orders. The heavy rate of investment has built up in the civilian goods industries capacity to produce a volume of goods far in excess of what the relatively restricted markets can absorb. In the war industries, productive capacity has also been built up to such a point that a marked decline in economic activity has resulted from the mere levelling off of arms orders. American economy faces now a prospect of deepening crisis, from which the American monopolies look for an escape only in war. "Short of another Korea in Indo-China", said the Editor of the *Journal of Commerce* in the statement referred to above, "it will take considerable time before [the vulnerable] sectors of the economy will regain their full driving power."

And these are the terms in which Mr. John Harriman writes in the Boston Daily Globe (April 29, 1954):

"Business today must take sudden adjustment to the possibility of war in Asia . . . Such a war would certainly not repeat the economic pattern of Korea, with its desperate shortages of goods and the resulting spiral of inflation. We have increased our productive capacity too much for us to face that eventuality, except if we stumble into global war on an atomic scale. What we shall see if war should come again, is probably the most enormous opportunity for profit that industry has ever encountered. We shall have an industrial plant keyed to the highest efficiency in armament manufacture . . . and with just enough slack to take up that manufacture with the maximum advantage."

For the people of America and the capitalist world as a whole, for whom war is the worst possible outcome, a solution to their economic problems can come only from a complete reversal of the present policies of the American monopolies.

For Britain too a reversal of present economic policies is necessary. For us the greatest danger is that we may find ourselves serving the American imperialists in a war of their making. This might mean, in view of the extreme vulnerability of our military position, devastation of our people and our economic life so catastrophic as to amount possibly to total destruction. But Britain is in a position to tip the scales of world diplomacy in favour of peace. This means a readiness to act independently of the U.S.A. And this also is necessary if we are to protect our economic livelihood. For the capitalist world the dangers of the developing slump in the U.S.A. are less only than the dangers of American imperialism's drive to war. America accounts for more than half the capital of the capitalist world, and a slump in its economic activity is bound to drag in its wake the economies of other countries unless deliberate steps are taken to mitigate its effects.

Britain, because of her exceptional dependence on foreign trade, is more vulnerable than most countries. Britain's imports and exports in total exceed £6,000 million a year. 12½ per cent of her exports go to and 15 per cent of her imports are received from the U.S.A. and Canada. However, the most serious consequences of an American slump for Britain would come from its effects on purchasing power in countries to which Britain sells, and in particular in "Sterling Area" countries (i.e., Empire countries apart from Canada). 48 per cent of British exports now go to the Sterling Area and economic difficulties in these countries—as was shown by the sharp contraction of the Australian market two years ago—could have very harmful repercussions in Britain.

The specific dangers of an American crisis for Britain and the British Empire are, first, loss of existing markets; secondly, dumping of American products seeking outlets in world markets; and thirdly, desperate competition from other capitalist countries and, in particular, West Germany

and Japan, who will similarly find that their overseas markets are contracting. (84 per cent of Britain's exports are manufactured goods—today mainly engineering products—and her share in world exports of manufactures is today 22 per cent as against 28 per cent from U.S.A., 13 per cent from West Germany and 4 per cent from Japan. Pre-war Britain's share of the total was about the same and Japan's share was 8 per cent, Germany's 23 per cent and U.S.A.'s only 20 per cent.)

In the situation that we face the interests of the British people cannot be met by following the policy of the dominant section of British capitalism who seek to maintain overseas sales at profitable prices by cutting wage costs and social service expenditure, but intend at the same time to maintain arms expenditure and to continue their ruthless and costly exploitation of the colonial peoples. Such a policy cannot be afforded and would not succeed in winning the markets we need. Moreover, it will accentuate the crisis by reducing still further the purchasing power of the masses of the people. For the British people, if the impact of the American slump is to be softened, the following steps need to be taken:

(i) The maximum Government assistance to the development of East-West trade, which is not only a safeguard of peace but also a means of securing stable markets and reliable sources of supply for the economies of Britain and the British Empire countries.

(ii) The development of Empire trade on the basis of equality

and not on the basis of exploitation.

(iii) Support of the home market by advancing wages and the living standards of the masses of the people and increased Government expenditure on social services.

(iv) Nationalisation of big firms in key industries and management of investment policies in the nationalised industries so as

to maintain economic activity at a high level.

(v) Drastic economies in expenditure on arms production and

an ending of the colonial wars.

(vi) Positive action and necessary measures of economic control and direction by the Government to make possible and to guarantee the fulfilment of long-term trade agreements that foster stable and peaceful economic relations between Britain and the rest of the world.

Determined struggle by the British people for such a change of direction in economic as in foreign policy can mitigate the effects of the American crisis and help to open up a new and prosperous future, even in face of the deepening general crisis of capitalism. This is made possible today by the existence of the vast socialist sector of the world, the Soviet Union, China and the People's Democracies of Eastern Europe, and the readiness of these countries to develop trade with Britain and all

other countries. These countries provide a huge field of economic activity which is not subject to the laws of development of capitalist economy, and can, therefore, serve as a stabilising factor of great importance for the economy of Britain and the British Empire.

By contrast the present position of American capitalism is one of special weakness; all the various factors that have sustained the American economy so far are collapsing simultaneously. "Foreign aid" was designed to provide markets for U.S. products, to create an additional demand that would sustain price levels and at the same time to provide an instrument with which to exert influence over foreign powers. However, this policy is meeting with mounting opposition both within America and in the capitalist world, which is learning by bitter experience to "fear the Americans bringing gifts". It has helped to sharpen the antagonism between America and the people of the capitalist world and yet failed to give the American monopolies the degree of domination they desire. The American monopolies seek to substitute military aid for economic aid and to drag the whole world into war; but the American war policies are also policies of domination within the capitalist world and the more they are implemented the more they create antagonism to America throughout the capitalist world.

To sum up; the economic situation in the U.S.A. is integrally bound up with the American imperialistic policy of war and world domination. The internal contradictions are mounting. The purchasing power of the masses is restricted. Agricultural incomes are falling and industrial unemployment has increased. The outstanding volume of consumer credits and fear of unemployment are holding back extension of consumer spending. Accumulation of agricultural stocks blackens the outlook for the farming community. On the basis of the present policies of the dominant monopolies in the U.S.A. the future offers either a growing economic stagnation or the horror of war, together with the restriction of consumption and the inflation of prices, the dislocation and manifold miseries that war involves. The actual course that events in the economic field take will be determined by the struggle throughout the capitalist world and within America against the policies of the dominant American monopolies.

## Soviet Culture and Criticism

#### THOMAS RUSSELL

In 1947 and 1948 A. A. Zhdanov made two important statements on literature and music which aroused the widest interest in his own country and in the rest of the world. In the Western countries these statements were promptly and thoroughly misunderstood, while in the Soviet Union many writers and composers drew mistaken conclusions and proceeded to act upon them in the years which followed.

It is this misunderstanding which has led to the publication of the articles by Ilya Ehrenburg and Aram Khachaturyan, translations of which were printed in the *Anglo-Soviet Journal*, Spring 1954. While these new contributions to the discussion still leave us in need of a fundamental work on the present and future of the arts under Socialism, they have caused immediate repercussions and are provoking a re-examination of the whole subject.

It will be remembered that, soon after the Zhdanov 1948 text was published, Alexander Werth (in *Musical Uproar in Moscow*) rushed into the breach and hurriedly loaded one of the first guns of the cold war with a heavy broadside against those Soviet composers known to have supported the Zhdanov view, while expressing an excessive sympathy for those whose works had been subjected to criticism. His war-time experience in the U.S.S.R. had not enabled him to comprehend the entirely new relation of culture and society in that country, and the years which have passed since have added nothing to his comprehension. For again, giving himself no time for reflection, he hastened to reply, in the *Manchester Guardian*, to the article of Khachaturyan, hoping to prove that Soviet composers had now been convinced by his wisdom to the point of throwing over the Zhdanov principles. Fortunately, he is again wrong.

The articles of Alexander Werth and of his recent American comrade-in-arms, Howard Taubman, in the New York Times, would have little significance in themselves if they did not serve as prototypes for arguments which have been commonly heard in the West since 1948, and if they did not coincide and reinforce the false belief, carefully fostered by the bourgeois press, that art and artists are disciplined and dragooned, not only under Socialism but under the Communist Parties of countries which remain temporarily capitalist. This belief is willingly accepted by those writers and composers to whom any stick is as good as another for beating the Soviet Union. It is more serious, however, when others who have, so far, been unable to free themselves from bourgeois individualistic

conceptions, are taken in by these specious arguments and thereby excuse themselves from shouldering their proper political responsibilities.

Alexander Werth sums up his reading of Khachaturyan by saying:

"In the case of music the rejection of the over-simple Zhdanov doctrine of 'accessible' music, 'people's' music and 'anti-formalist' music has apparently been abandoned" [my italics—T. R.].

Whether this was a printer's error, or whether Werth's haste was such that he failed to realise that this sentence, if paraphrased, would mean that Zhdanov's arguments had now been accepted, is a guess for anyone to make, but as he goes on to assert that the policy "has proved in practice a lamentable failure", we must assume he did not mean what he said.

Conscious, however, that what he *meant* might be challenged by anyone reading the article in question he leaves himself a way of escape by adding:

"No doubt Khachaturyan considers that 'Socialist Realism' continues to be the correct doctrine for Soviet art and music, but he implies that it was pushed far beyond any reasonable limits and was simply used for strangling all talent, inspiration and enthusiasm."

The fact that Werth here admits that Khachaturyan did not deny the validity of socialist realism destroys his main argument.

In Khachaturyan's reply to Taubman (and indirectly to Werth) he says explicitly:

"Some foreign commentators, however, have tried to interpret my article as a call to renounce the fundamental principles of Socialist Realism. To prove their point, some journalists did not scruple to doctor my article, quoting certain passages out of context and omitting others in which the principles of socialist art are clearly and unequivocally set forth.

"The past few decades of musical history have demonstrated beyond all shadow of doubt that the only music of true and enduring value is that written in the realistic manner, and not the abstruse, stillborn experiments of the formalists" (News, No. 5, 1954).

In this statement Khachaturyan reasserts the crux of the Zhdanov position and shows, what should already have been understood, that he and Ehrenburg, far from disposing of the Zhdanov line, are attacking those who have misconstrued it and, even more severely, those who have slavishly accepted their own incorrect interpretation of it. For us in

Britain, as for our friends in the Soviet Union, there is much to be learnt from a study of the mistakes already made.

It is clear that Ehrenburg and Khachaturyan, in their respective surveys of Soviet literature and music, are not satisfied with what they see. The arts in general are lagging behind other developments of Soviet effort in the successful fulfilment of the needs of society. In spite of Zhdanov's guidance of 1948 little fundamental work has been done on the arts in the succeeding period, and, as Ehrenburg points out:

"Tens of millions of Soviet people know how steel is smelted, how selection produces new kinds of apple trees, how builders work on high buildings, yet many readers have no idea how novels are created. The psychology of creation has received scant attention."

This reveals a lack of theoretical work which can lead to lamentable results, and neither writer goes deeply enough into the theoretical basis of his own complaints, although the theoretical problem is inherent in all that they write.

In considering the future development of music and other arts under Socialism the fact must be faced that, as James Klugmann says:

"The more distant the field we are exploring is from the basis, the more abstract its ideological character" (Essays on Socialist Realism).

The time elapsing between any change in the basis and the corresponding change in the superstructure will vary for the same reason. A little thought will show that this is true.

The working class can only take and retain power by changing the bourgeois State in all its forms. Laws, international relations and the armed forces, to take only three clear examples, are the essential and direct means by which the ruling bourgeoisie maintain their power and control their imperialist policy. It would be folly to believe that, without changing the laws, without a new form of international representation and relations, and without a new leadership and deployment of the armed forces, the socialist State machine can be successfully built up. There is, therefore, and there dare be, no time lag before these sections of the superstructure are vitally changed under Socialism.

Indeed, the rapidity with which they are transformed can be taken as the touchstone of the sincerity of a progressive government. The failure of the Attlee administration of 1945, despite its overwhelming electoral preponderance, could have been foreseen by the mere fact that no changes were made in any of these spheres, unless one counts the purging of genuine progressive elements.

The nature of the basis in human terms must be clear. The relations of production, which form the basis, cannot be regarded in an abstract manner, for they apply under capitalism to its major contradiction: socialised production, not owned socially, but in the hands of an insignificant minority. From this contradiction, which leads to the inability of the working class to buy all the consumer goods it produces, arise unemployment, booms and slumps, international competition and the fierce struggles for markets with the increased frequency of wars, and an unscrupulous attempt on the part of the minority to retain its power against the revolutionary forces in the metropolitan and colonial countries, and against the forces of history.

To change the basis and to reconcile these contradictions demands a drastic change in the superstructure nearest the basis, for without this the bourgeois State will never be threatened and the socialist State never built. Without this conquest of power the dream of Socialism will remain a dream.

The reaction of the superstructure on the basis will, at this level, be no less drastic and immediate. The taking over of major industrial and financial enterprises will have no effect, as has been seen in the instance of "capitalist" nationalisation, unless the civil and armed forces of the State become effectively the organs of the working class. But when they have become this, industrial and financial changes will be fundamental and permanent, solidly protected by working-class power from the frantic, cunning and tireless efforts of counter-revolution. And this new basis of production, freed from the restrictions of a dying capitalism, will acquire new qualities which, in turn, will affect the superstructure.

Changes in the Press and in broadcasting will be no less prompt, for here again the reflections of the change will be simple and unmistakable, and these organs will be in the hands of a conscientious leadership, as clear in its mind of what has to be done as its predecessing ownership was clear of its own class purpose. Film producers and writers will soon consciously strive to correct themselves of any wide deviation from the working-class outlook, but this is hardly enough, as the thirty-seven years of the Soviet Union have shown. It will necessarily be some time before the change in the basis is reflected fully and spontaneously in creative cinema, creative writing and, above all, creative music.

It is here that the problem experienced in the U.S.S.R. and revealed in the arguments of Zhdanov, Ehrenburg and Khachaturyan, will be met. The distance of the abstract arts from the basis connotes a certain lack of urgency and while the most thorough political leadership will be directed to agriculture, the heavy industries, diplomacy and, in an unfriendly world, to the armed forces, the arts, for lack of personnel,

may be left to look after themselves. And this leaves the door open to the danger of bureaucracy. It was clear that Zhdanov, in attacking ideological errors, was not unaware of what had made them possible; Ehrenburg and Khachaturyan make no bones about the object of much of their criticism.

After speaking of "imperfections and deformities" which still persist in Soviet society—a society in transition, with capitalism behind and Communism ahead—Ehrenburg says:

"Many are the critics, publishers' readers and chiefs of editorial boards who consider it is not for the writer to describe some of the imperfections that are still with us. These critics and editors are even more down on any representation of the moral conflicts that often cramp and darken the lives of fine people in the Soviet Union."

In his article, Khachaturyan is no less explicit, and only a few of his many references can be cited:

"Problems of composition cannot be solved by official bureaucratic methods. . . .

"It is the composer himself who must be responsible in the first instance for the artistic quality of opera, symphony or song, and not the advisers and editors, the chairmen of boards and the theatre managers. Under the present 'tutelage' system, the composer is 'relieved' of responsibility. . . .

"The place of sensible planning and understanding guidance of the country's musical activities must not be usurped by interference in the actual process of composition or interpretation, by imposing on composers the tastes of musical institute officials. . . ."

This is no movement against Zhdanov, but precisely an attack on those who, because they misunderstood the essence of Zhdanov's statement, succeeded in killing the spirit. They have elevated a few slavishly copied but isolated phrases of Zhdanov into a kind of gospel which the most mediocre can obey, but which an artist of talent will use as no more than an indication of the way forward. While restating that "innovation is not an end in itself", Khachaturyan repeats the words of Zhdanov that "the new must be an advance on the old, otherwise there is no point in it". But the glorification of the orthodox, for fear that anything else may prove dangerous, has always been the keynote of bureaucracy, the establishment of a petty authority which stamps down upon criticism and self-criticism.

We in Britain have often been at fault along these lines when the question of a Soviet formulation has arisen. Many of us have been too ready to accept the points made without a careful and comprehensive examination, and without applying them properly to our own situation.

Emile Burns made a salutary reference to this uncreative attitude when he said at the 23rd National Congress of the Communist Party:

"But we must always remember that the Soviet discussions on scientific and cultural problems are continuous, and that the correct application of general conclusions reached is also under discussion. . . . It is wrong . . . for any comrade in discussing such scientific and cultural questions to take a rigid line of trying to impose some particular views on his colleagues. . . . Particularly on questions of art, music and literature, our Soviet comrades are themselves in constant discussion, and we ourselves must not adopt a rigid attitude—all the more because they are at a different stage and are facing problems sometimes quite different from ours."

This readiness to examine, discuss and criticise all new formulations in our own subjects, is the *sine qua non* of all true creative work, and the absence of it will close the way of progress.

Both the Soviet writers stress the weaknesses of artistic criticism in their country, and it is undoubtedly true that throughout this controversial period it has not been the recognised critics who have corrected the faults of writers and composers, but audiences and readers. They have recognised, with the sixth sense of collective appreciation, that something was wrong. They have seen the difference of approach in other fields of socialist life and the uncertain, individualistic tendencies in cultural activities. And they have stayed away from the concerts and left books unread.

This criterion of the mass of readers or listeners will be anathema to the bourgeois, who sees art in its creation as nothing more than the personal expression of the artist, and in its performance something for an élite. But it is precisely on this ground that the battle is being fought. The greatness of Soviet culture is that it aims at the rapid development of 200 million human beings, and that it has already made seven-league strides in its conquest of illiteracy, its provision of houses, food and clothing, and its present ever-increasing supplies of consumer goods. If one passes through what was once the hopeless wilderness of Siberia and finds opera houses, theatres playing Shakespeare, and an alert, vital population, it can be seen that on the organisational side the same rate of progress has been maintained.

Only creative artists lag behind. Complacently adopting what they

conceived to be the "official" line, ceasing to fight against the weaknesses it was designed to defeat, they have carried it into its opposite and are nourishing those very weaknesses. Without the correction of keen, human examination from the professional critics, it has been left to the mass of the people to supply the correctives which were voiced on their behalf by Zhdanov, as they are now being voiced by Ehrenburg and Khachaturyan. In passing, it is worth noticing the freedom with which these criticisms are put forward in a country where, we are asked to believe, adverse criticism of official policy is an unforgivable deviation.

In this country we have much to learn from these discussions, and we need not wait for the advent of Socialism to take our first steps. Our situation differs fundamentally from that of the U.S.S.R. Lenin makes this difference apparent when he states the following:

"One of the fundamental differences between bourgeois revolution and Socialist revolution is that for the bourgeois revolution, which arises out of feudalism, the new economic organisations are gradually created in the womb of the old order, gradually changing all the aspects of feudal society. . . . The more backward the country which, owing to the zigzags of history, has proved to be the one to start the Socialist revolution, the more difficult it is for her to pass from the old capitalist relations to Socialist relations. To the tasks of destruction are added new, incredibly difficult tasks, viz., organisational tasks."

That was the situation which the Soviet revolution faced, and the present discussions concern one of these "incredibly difficult tasks". This was to create, with no precedent in world history, a new socialist culture, while at the same time fighting for life. The enormous achievement can only be properly estimated in the light of the task itself.

Our problem is a different one, and we have many advantages. Whereas in 1917 Socialism was no more than a theory, it is now an established fact in one-sixth of the world, and a rapid trend in an equally wide area. While it is true that monopoly capitalism is still supreme in the remainder of the world, the question of a socialist culture is one which is valid even in capitalist countries. It has been shown that the abstract nature of culture, its distance from the basis, makes it less immediately responsive to economic changes. But that very fact makes it possible in the battle of ideas under capitalism to use the weapon of socialist realism. While one cannot envisage a change in the judiciary, international representation or the armed forces under capitalism, for their nearness to the basis makes it essential for the bourgeoisie to protect them, abstract ideas and culture generally cannot be disciplined so thoroughly.

It has been said that any great work of art is propaganda for Communism, propaganda in favour of the golden age to come which has lived in the minds of oppressed peoples of the world since, maybe, primitive communism was left behind for the painful but progressive stages of man's history. Such artists as Gorki and Dvorák have shown what contribution can be made to socialist realism before Socialism was born to the world. And today, with the existence and example of the Soviet Union impinging on the outlook of every human being in the world, no artist of any worth can restrict himself to the role of buttressing the walls of a collapsing system, or to running away from its perplexities.

The way to Socialism is the way of the world, and no sensitive composer or writer can turn the eyes of his imagination from the deepest aspirations of millions.

In this situation we cannot make political conformity the only criterion. As James Klugmann says in the essay already quoted:

"It is a mistake to confuse the political outlook of an author or artist or philosopher with the class significance of what he is saying, writing, painting. An artist, for instance, can be a good left-winger in politics, but this does not by any means ensure that his paintings are socialist realist and equally it was possible for Balzac to create some of the greatest works of bourgeois critical realism while remaining politically a royalist."

It must be remembered, too, that in winning the wide mass of the British people for our policy, and without their support we shall not create Socialism in Great Britain, our presentation of culture must not follow the narrow restrictions of a supposedly infallible line, complacently presuming that the artist has no right to his personal variations. All forms of art are means of communication, and must therefore be the personal product of the artist himself. This is not to approve the bourgeois theory in its barest form, that an artist's duty is only to express himself. While this is true as far as it goes, the question of what he has to express is paramount. To be of any value to his fellow men he must express also their unconscious hopes, fears and desires, none the less real for being unconscious, so that, as Ehrenburg puts it, "having got to know Ivanov, he knows himself better".

Our own writers will need more than the rigid guidance of a narrow theory. They will need to know themselves and their fellow humans in the deepest and broadest sense, sharing not only their victories and their confidence, but their weaknesses and doubts. They must be aware of the "imperfections and deformities" Ehrenburg speaks of, and must not always give the impression that all their characters are filled with only the finest socialist qualities, or they will take on the "cardboard" quality of some figures in contemporary Soviet novels. The writer, and the musician and painter too, in their fields, must recognise, examine and admit that they in their own moments suffer the doubts and hesitations, the divergences and deviations which lead some of our friends to fall by the way, while they will be able to reconcile the internal contradictions by successfully pitting their Marxism against these hangovers of a bourgeois background. This struggle will be understood by all progressive people as part of their own experience, and will strengthen them to face their own problems.

The bourgeois artist becomes so deeply involved in his own personal problems that his work communicates nothing to the ordinary man. On discovering this he may, in his own chagrin, make a virtue of necessity and, like some composers and poets of our generation, have his works performed only to intimate friends, or even go so far as to prohibit their performance altogether. This is the final isolation, where the artist deceives himself into believing that he is writing over the heads of the present stupid generation and will only be understood long after he is dead and buried. Zhdanov condemned this when he said:

"If a certain section of Soviet composers favour the theory that they will be appreciated in fifty or a hundred years' time, and that their descendants, if not their contemporaries, will understand them, then the situation is really terrifying. . . . If I, a writer, an artist, a critic, or a Party worker, do not count on being understood by my contemporaries, for whom then do I live and work?"

For whom, indeed? Our composers and writers may not yet have the immense advantages offered to their colleagues under Socialism, to their colleagues in the U.S.S.R., but the lesson is for them too. The power of the artist to influence his time, like the enormous power of broadcasting, can only be based on the mass of the people. At the risk of shocking the bourgeois isolationist, who works for a clique which he regards as an élite, I would not be disturbed if, in communicating with the mass of our people, he had to simplify his language, dispense with his formalist theories, put the brake on some of his experiments and come right down to earth, provided that by so doing he was able to raise the cultural awareness of his people.

That is the aim of the best cultural forces in the Soviet Union and, shorn of its complexities, that is the problem discussed by the Soviet composers in 1948, and argued over ever since. No socialist can fail to see

that what may appear to the prejudiced eyes of conditioned bourgeois ideology as a step back is, in reality, the preparation for the forward leap when a whole population, deprived formerly of all cultural opportunities, now moves towards a richer civilisation. How can we fail to foresee what will come out of the millions of the Soviet Union and the even greater millions of China when a generation or two of peaceful cultural development has sown the seed of a growth without precedent in the history of the world?

This was foreseen by Lenin, when he spoke of the time when any cook would be able to run the State; it was foreseen by William Morris from a combination of his own happy gifts and the teaching of Marx; clearest of all, for he lived under Socialism, it was foreseen by Stalin. In his last work, *Economic Problems of Socialism in the U.S.S.R.*, he states the first part of the basic economic law of Socialism as "the maximum satisfaction of the constantly rising material and cultural requirements of the whole of society", and shows how this may be brought about. He explains:

"It would be wrong to think that such a substantial advance in the cultural standard of the members of society can be brought about without substantial changes in the present status of labour. For this, it is necessary, first of all, to shorten the working day at least to six, and subsequently to five hours. . . . It is necessary, further, to introduce compulsory polytechnical education, which is required in order that the members of society might be able freely to choose their occupations and not be tied to some one occupation all their lives."

Here we have a blueprint for cultural life under Communism which may well render our problems and their discussion out-of-date and academic. Stalin offers us his vision of the full man, occupied in obligatory work for a few nominal hours a day, with the employment of leisure as the main purpose of his life.

With the abolition of classes will go the abolition of many other divisions in society. Ehrenburg gives an example of what happens now, but which would not need to happen then:

"A young man who has played an active part in life, an engineer or a geologist, a worker or a student, experiences something, sees something. Having talent, he uses his experience in a book, which is useful. He then becomes a professional writer and abandons his former way of life. The stream not only of living observations but of experiences is shut off. The second and third books fail because they are written by guesswork . . . and not on the basis of experience."

The separation between the artist and the people he serves is already narrowing under Socialism; Ehrenburg's example is quoted by way of exception. Stalin's forecast would make it possible for the artist again to be at one with society, for each man to be his own artist. "Professional" writers, composers and painters, living upon their creations as upon a commodity, would no longer exist. Then, creative art would not represent an abnormality, however desirable, but a natural activity enjoyed by an increasing number in society. And a new art, rich and diverse beyond our imagining, would play its part in creating a race of men fit to live under Communism.

## Philosophical Problems of Quantum Physics

ARTHUR SUDDABY AND MAURICE CORNFORTH

Since the beginning of the century, when Einstein put forward the relativity principle and Planck introduced the quantum, the old "classical", mechanistic concepts of the physical world have been discredited. The resulting crisis in physical theory was intensified, and the issues became more sharply defined, when the new quantum mechanics was introduced by Heisenberg and Schrödinger in the early 1920s. After that, the extent of the break with the "classical" ideas of the physical world was such that one school of physicists, those most closely associated with the development of the new mechanics, came to assert that the very concepts of causality and of location in space and time must be discarded, and that we could no longer expect to "picture" the physical reality which corresponds to the mathematical equations of physics. Though these assertions were always challenged by a minority of physicists, the majority came to accept them more or less uncritically as a necessary consequence of modern researches.

Very recently, however, the situation in physics has begun to change. Following reports of a discussion on the problems of physics held in the Soviet Union in 1950, a growing number of investigators in different parts of the world have begun to question the established views, and in the past two years some fifty papers on the subject have appeared in the scientific journals.

Meanwhile, the prevailing concepts in physics have been very widely advertised. They have long been the theme of broadcast talks, popular books and sermons on Sundays, in which they are applied far beyond the technical problems of physical science in an attempt to prove that materialism is a fallacy, that the universe contains unfathomable mysteries, that mind and free will reign supreme, and so on, and so on. It is claimed that all these conclusions can be drawn from the recent discoveries of science. Hence the present crisis in physics assumes an interest and an importance far beyond the technical discussions between physicists themselves.

#### NEW TECHNIQUES-NEW PROBLEMS

New problems have arisen in physics because science, with new techniques, has been investigating aspects of nature which were never investigated before. Science has been investigating the processes in the interior of the atom.

For such an investigation three things are needed. (1) First, an apparatus with which to change the state of atoms in a controlled way and to register and measure the results of such changes. It is by changing atoms in various ways that we find out the processes of the atom, and very delicate and exact measurements must be made. (2) Second, a theoretical instrument for expressing, analysing, comparing and generalising the data yielded by the apparatus. This consists of mathematical formulas and mathematical techniques for expressing and generalising the measurements and the relations between them, and making calculations about them. It is known as "the formalism" of physics. (3) Finally, conclusions must be drawn about the real physical processes, interactions and motions which are being reflected in these mathematical terms.

The special difficulties in modern physics arise because the experimental results derived from exploring the processes in the interior of the atom make it evident that the phenomena investigated obey laws in many respects unlike those of the larger scale or "macroscopic" phenomena investigated in the past. Consequently the formulas expressing the results (these are the "wave functions" etc., etc. of modern quantum physics) are unlike the formulas of the older mechanics. Hence many of the old generalisations of physics, together with the old picture of the physical world, have to be discarded, and new generalisations and a new picture created.

#### NEW DISCOVERIES—NEW GENERALISATIONS

We shall not try to tell the whole story of modern physical investigations. We shall simply try to say what are the two most striking results of these investigations which make necessary new generalisations about physical processes.

(1) Energy is found to be given out and taken in, not continuously, as was hitherto believed, but in "packets" which correspond to a definite amount of "action", known as a "quantum". "Action" is essentially energy multiplied by time. The discovery of the quantum was the discovery that the exchange of energy always takes place in such a way that the "action" is a multiple of a fixed number, known as Planck's constant (after Max Planck, its discoverer).

This discovery means that all the old generalisations and laws which treated energy in the old way have to be replaced by new ones when it comes to the theory of sub-atomic processes.

At the same time, the new generalisations (quantum theory) have to be such that it follows from them that the old generalisations will remain true on the macroscopic scale. This has been called the "correspondence principle", and is a necessary postulate of the new physics, since the truth of the old generalisations in their application to macroscopic phenomena is extremely well established. According to the correspondence principle, the fact that energy consists of discrete "packets" will not show itself on the macroscopic scale but only on the microscopic scale—just as in a cinema, for example, the rapid flashing of a series of pictures on the screen takes the form of a continuous movement; to describe what the screen characters do does not require us to take into account the real character of the film, though we must do so if we are considering how the apparatus works back in the projection room.

(2) Light, which for the past hundred years was thought to be propagated in waves, is found to have some properties which can only be explained in terms of the propagation of minute corpuscles, called "photons". Light, therefore, is found to have a corpuscular nature as well as a wave nature. And similarly, electrons, which were thought to be minute corpuscles of negative electricity—small particles with a negative electric charge—turn out also to possess wave-like properties, as shown in diffraction phenomena for electrons, similar to light. Electrons, therefore, are found to have a wave nature as well as a corpuscular nature.

These discoveries cut across the very sharp distinction which physics used to draw between "matter" and "radiation". It was considered that "matter" went about in particles and "radiation" in waves. On this it is worth remarking that, from the point of view of dialectical materialism, the very terminology in which the distinction was customarily expressed was misleading: radiation is just as material as "matter", and it would have been better to say that there were these two quite distinct movements of matter—movement in particles, and movement in waves. But from the same point of view, there was also something dubious about the whole distinction, in so far as a "hard and fast antithesis" was drawn between "matter" and "radiation". Engels said long ago that such "hard and fast antitheses" generally turn out to be invalid. And so it has turned out in this case.

One distinctive feature of "matter", that is, of particles, was assumed to be their possession of mass. But already in the development of the theory of relativity Einstein showed that radiation has mass as well, and this was confirmed experimentally. Then it was found that "matter" can turn into "radiation". (This is continually happening, but in a small way which escapes notice; it happens in a big way when atomic or hydrogen bombs go off.) And now it looks as though radiation can also turn into "matter", which then appears in the form of a pair of new "fundamental particles".

Hence as a result of new discoveries the hard and fast antithesis between "matter" and "radiation", between particles and waves, was already on the way out. It received a further blow when it was shown that a

satisfactory account of atomic processes could only be given by assuming that electrons moved, not according to the laws of classical mechanics, as do bodies of macroscopic size, but according to laws expressing wave-like properties. This wave-like character of such particles finally received experimental confirmation some three years after the first formulation of the new quantum physics. This, as we have seen, introduced a new mathematical "formalism" to describe the emission of energy in packets, a formalism which replaced the classical laws of motion but reduced to the same laws in the case of larger bodies. In so doing, it introduced into the description of the motion of particles features which were incompatible with a hard and fast antithesis between particles and waves.

#### THE UNCERTAINTY RELATION

The new quantum formalism which brought order into the chaos to which the new discoveries had at first reduced atomic physics, soon became established. But it possessed some remarkable new features, namely, it was found to be inconsistent with the formal framework of the theory to specify simultaneously both the exact position and the momentum of a particle. There existed in the formalism an "uncertainty relation" between the position and momentum of particles. The exact specification of the position of a particle introduced an uncertainty as to its momentum, i.e. as to where it was going and how fast; and similarly, the exact specification of momentum introduced an uncertainty as to its position. This uncertainty relation was formulated very exactly. The uncertainty, i.e. the limits of unspecified variability, of the one quantity bears an exact mathematical relation to that of the other.

It'should be stressed that this is something which follows mathematically from the formalism. It is a necessary consequence of the formalism. The uncertainty relation was not "discovered" as a result of any special experiments, but is a mathematical deduction from the formulas in which the results of experiments have been summed up.

Why should the formalism contain such an uncertainty relation? It happens because we are trying to combine expressions about particles and waves in a single formalism. If the motion of a particle could have been treated, as in the classical formalism, simply as the motion of a particle, then, of course, both its position and its momentum could have been exactly specified. But when its motion has also a wave character, then exactly specifying its position as a particle creates an uncertainty in the specification of its wave properties, and vice versa.

A particle can only be represented by a group of waves which is produced by the superimposing of a large number of simple waves of different wave-lengths. Now the position of the particle corresponds to the "peak" of this wave-group; and the more precisely we try to specify

this position, the greater is the spread of wave-lengths contributing to the group, so that the wave-length of the wave associated with the particle cannot then be specified sharply. This wave-length, however, bears a direct relation to the particle's momentum. Consequently, the more exactly the position of the particle is specified, the less exactly can its momentum be specified, i.e. the more exactly we can specify where it is now, the less exactly can we say where it will go next.

Similarly, if we try to specify the wave-length and consequently the momentum with precision, we introduce an uncertainty as to the particle's position, since a small spread of wave-lengths (as demanded by the more precise specification of wave-length or momentum) gives a wave-group which has no sharply defined "peak".

Heisenberg, who first formulated the uncertainty relation, illustrated it with a simple example. This has misled many people in discussions, because they have mistaken a graphic illustration for an experimental proof. Suppose, said Heisenberg, that we want to determine the exact position of a particle. One way to do this is to illuminate it, i.e. to shoot a photon at it. But that very act of determining its position will send it off somewhere else and so affect its momentum. If we get to know its position, therefore, we shall have interfered with it and will be correspondingly uncertain as to its momentum.

Heisenberg concluded that the uncertainty relation implies a fundamental and inescapable limit to the accuracy with which we can measure simultaneously the values of pairs of "conjugate" quantities, of which position and momentum are an example. This limit, he claimed, is due to the fact that we cannot observe a natural process without disturbing it. This *interpretation* of the uncertainty relation as a fundamental limit arising from the inevitable interference of observation with the object observed was given by Heisenberg the name of the "uncertainty principle".

When Heisenberg said this, some people hailed him as a great dialectical materialist who had discovered that scientific observation is only carried out by interfering with what is observed. That, however, was nothing new. In general, we know things chiefly by changing them, not by leaving them alone—and this applied as much in the old physics as in the new. The new idea introduced by Heisenberg was not that we know things by interfering with them, but rather that because we interfere with things in knowing them there is an absolute limit to our possible knowledge. Heisenberg did not argue that interference brings knowledge but the exact opposite—that interference prevents knowledge.

The real situation regarding the "uncertainty" in quantum physics can be appreciated by asking a simple question. If we change the momentum of a particle in the process of observing its position, then why,

knowing exactly the speed and direction of the missile aimed at it, can we not calculate its momentum as it was before we induced the change in it? The answer is, that the formulas now used do not permit us to make such a calculation. The formulas are such that they simply do not allow, as a matter of mathematics, the simultaneous exact calculation of position and momentum. Hence it is simply and solely from the formalism that the uncertainty results, and not from any experiment, nor from any discovery (which is not a new discovery anyway) that scientific experiments interfere with the subjects of experiment. What is new is not interference by the observer, but the use of a method of calculation which does not permit the simultaneous exact specification of certain quantities.

The impossibility of correcting for the interference of the observer only arises if we assume that the formalism gives complete information about the system being observed—if we assume that we can never gain more detailed knowledge of matter than that given in terms of quantum mechanics. Heisenberg himself realised this and explicitly made the assumption that no deeper aspects of matter existed than those treated by the theory. "In atomic physics," he wrote, "we are dealing with entities which are (so far as we know) ultimate and indivisible. There exist no infinitesimals by the aid of which an observation might be made without appreciable perturbation."\*

For this reason we think it necessary to draw a distinction between the "uncertainty relation", which appears in the quantum mechanical formalism, and the "uncertainty principle", which is an interpretation of this relation as implying an ultimate limit to all possible physical knowledge.

## THE "ORTHODOX" INTERPRETATION OF QUANTUM PHYSICS

How, then, is the formalism of quantum physics, which involves the uncertainty relation, to be interpreted? In other words, how can we get back from the formalism to physical reality?

This is the point where considerable trouble arises, and where philosophy can and must help. All theoretical physicists appeal to and make use of philosophy at this point.

First of all, a further important feature of the formalism must be noted, namely, that it is concerned with quantities which can only be regarded as expressing *probabilities*. What it calculates and permits us to calculate are the probabilities of various phenomena. Thus the formalism is such

<sup>\*</sup> Heisenberg, The Physical Principles of the Quantum Theory, University of Chicago Press, 1930.

that the statement it permits us to give of the state of a certain physical system (this state is expressed in the formalism with the aid of "wave functions") does not permit us to deduce a statement of what its exact future state will be, but only a statement about the *probabilities* of its future state. This is because, in the formalism, the more definite one part of the statement becomes, the more indefinite does another part become. In contrast, the classical formalism of "classical" particles would specify exactly and definitely the state of a system at one time, and permit from this definite statement the deduction of an equally definite statement about its future states.

One way of interpreting this formalism has been expounded so vigorously by those who thought of it that it has temporarily come to be known as the "orthodox" interpretation. And, evidently hoping to forestall any objections, some of its upholders have confidently proclaimed that it is "the only possible" interpretation. What is this "orthodox" interpretation? It consists of two parts.

- (1) It is said that we cannot possibly give any consistent "picture" of the physical reality expressed in the formalism. All we are sure of is (a) our own observations and (b) the formalism which is derived from them. Thus for some purposes, and in line with some observations, the formalism treats the movements of matter as movements of particles, and for other purposes and in line with other observations as movements of waves. The orthodox interpretation claims that this is sufficient. Sometimes a wave formalism, sometimes a particle formalism—and all we can conclude is that material movements are such that they can be represented in either of these two ways but never both at once. This is called the "principle of complementarity", which says that there must necessarily be two such "complementary" and co-exclusive ways of representing the movement of matter.
- (2) The principle of complementarity implies the necessary and inescapable character of the uncertainty relation—which, as we pointed out above, is connected in the formalism with the wave-particle duality. From this, the "orthodox" interpretation goes on to assert that there are and can be no causes operating which determine the exact state of a physical system. In any physical system there is always an "uncertainty" as to what will happen in it. Thus the "uncertainty" is taken out of the formalism and placed in the physical reality. What was a mathematical feature of the formalism is said to be an objective feature of the physical world. And then yet another conclusion is drawn. Because the formalism does not permit the simultaneous specification of position and momentum, it is concluded that there is something essentially hazy about physical events such that there is no reality corresponding to what we call exact location of events in space and time.

#### OBJECTIONS TO THE "ORTHODOX" INTERPRETATION

Although this interpretation has been called "orthodox", it has never been universally accepted by physicists, and some very famous ones have consistently objected to it. Thus Einstein has quite consistently opposed it, always insisting that if we cannot express exactly the state of a physical system this is due to the inadequacy of our present knowledge and not to an inherent "indeterminism" in the physical world. Schrödinger, the inventor of wave mechanics, has never accepted it either. Very recently, Louis de Broglie, one of those who played the leading part in discovering the wave character of electrons, has pointed to the dogmatic character of the "orthodox" interpretation.

"The history of science", writes de Broglie, "shows that the progress of science has consistently been hampered by the tyrannical influence of certain conceptions that finally came to be considered as dogma. For this reason, it is proper to submit periodically to a very searching examination principles that we have come to assume without any more discussion. . . . It is certainly of use to take up again the very difficult problem of an interpretation of wave mechanics in order to see if what is now orthodox is really the only one that can be adopted".\*

The fact that the formalism of quantum physics deals in probabilities can be put down to two possible reasons, of which the "orthodox" interpretation recognises only one. But to rule out the other is certainly dogmatic and high-handed, and it is indeed this other which provides the basis for an alternative and, we shall try to show, more fruitful interpretation than the "orthodox".

The one reason, that asserted by the "orthodox" interpretation, is that a fundamental indeterminism exists in nature, so that the state of physical systems can necessarily be expressed in terms of probabilities only, and, by the very nature of things, no exact specification and location of particular events is possible.

If this were so, then it follows that we could never get to know anything more about physical systems than we know already. In quantum physics in its present state we should have reached the limits of all possible knowledge. By no possible means could we ever find out the deeper causes of what we now observe, nor specify more precisely than we do now the state of physical systems.

So the reason why the formalism of quantum mechanics deals in probabilities is alleged to be that in such statements of probabilities we have reached the limits of physical knowledge. But a different reason, and, in our opinion, the correct one, can also be suggested. The reason why no precise statement can be made of the state of physical systems,

<sup>\*</sup> de Broglie, The Revolution in Physics, Routledge, 1954, p. 237.

and why the formalism is in terms of probabilities, is, that we do not yet know enough to make a more precise statement or to formalise our discoveries in any other terms than probabilities.

Hence the one point of view says—this is where we must stop. The other says—this is where we must make the effort to find new methods of investigation to take us further.

#### THE NATURE OF QUANTUM THEORY

Where probabilities have been introduced in the past into the formalism of the sciences, this has always been understood in a quite definite way. If the formalism is such that it assigns only probabilities to certain events, and makes only an indefinite and not a definite specification of the state of a given physical system, that is because the causal factors which exactly determine the occurrence of those events and the state of the system are either unknown or are being conveniently ignored. Thus if, for example, we assign only probabilities to the fall of a spinning coin, this is because we either do not know or are ignoring the factors which in each spin determine how the coin will fall. Again, in the kinetic theory of gases we ignore all the particular causes of all the particular movements of all the particular molecules of the gas.

The exact specification of the state of a physical system is obtained by assigning values to all the variables which together determine that state. In so far as this is done, probabilities do not come into the formalism. If, however, we do not assign the values of all the variables—either because it is not necessary for our special purpose, or because we do not know how to find them—then our conclusions about the system are expressed in probabilities and there is an indefiniteness or indeterminacy about them.

The "orthodox" interpretation in quantum physics denies that the above applies in the case of the processes investigated in quantum physics. It holds that quantum physics represents the terminus of physical knowledge. Yet such an attitude seems strange when the progress of experimental work certainly suggests that a great deal more remains to be found out about the processes in the interior of the atom, and that there are many causes at work there of which we at present know little or nothing. On the contrary, it would seem more reasonable to assume that the probabilistic character of the formalism of quantum physics is due to this formalism ignoring the existence of causal factors actually operative in determining the processes under investigation.

This is the idea which was put forward two years ago in a paper by David Bohm\*, an American physicist now working in Brazil. Bohm

<sup>\*</sup> D. Bohm, Phys. Rev. 85, 166, 180 (1952).

expressed the idea that there existed "hidden variables", i.e., variables the nature of which we do not yet know because we have not yet discovered them, which in fact determine the precise state of physical systems. The "indeterminacy" or "uncertainty" of the account of physical processes given by quantum physics is due to its ignoring these hidden variables.

Commenting on this, de Broglie observes: "It must be confessed that at the present moment the theory of nuclear phenomena, in particular of the forces which maintain the stability of the nucleus, is in a very unsatisfactory state. Besides, a theory of material corpuscles is at this moment sorely needed by us, because we are discovering almost every month a new kind of meson. It seems that physics is in urgent need of being able to define a structure for these particles. . . ."

De Broglie then goes on to point out that the formalism of quantum physics "prohibits the use of any structural image for these particles. It is permissible to believe that a change in viewpoint embodying a return to spatio-temporal images will help this situation . . . The question which finally must be answered is whether the present interpretation is a 'complete' description of reality—in which case it would be necessary to assume indeterminism and the impossibility of representing reality on the atomic level in a precise way in the framework of space and time—or if, on the contrary, this interpretation is incomplete and hides behind itself, as the older statistical theories of classical physics do, a perfectly determinate reality, describable in the framework of space and time, by variables hidden from us."\*

That, we suggest, is a perfectly fair and accurate statement of the position.

Certain objections are made to the conception of hidden variables put forward by Bohm.

The first can be put in the form of a question—Can you prove the existence of these hidden variables? This can be answered by another question—Can you prove that they do not exist? As so much is unknown in the structure of atomic particles and the causation of atomic processes, it seems far more reasonable to assume that factors exist which we have yet to find out about, than that no such factors exist or can exist. Such, at all events, is the view suggested by a materialist approach.

Materialism asserts the objective existence of the material world independent of our consciousness. Matter is that which is given us in our sensations, but exists independently of our consciousness. Hence through our sensations, by observation and experiment, we can get to know more and more about matter, but what we know reflects only

<sup>\*</sup> de Broglie, loc. cit., p. 236-7.

a part or aspect of what exists independently of our knowing it—there always objectively exists more to find out about. Guided by materialism, therefore, we cannot but conclude that many hidden variables remain to be uncovered, and will eventually cease to be "hidden" as knowledge advances. To deny this is simply to deny the objective existence and knowability of the material world, i.e. it is subjective idealism. But precisely such a denial lies at the root of the "orthodox" interpretation of quantum physics.

This is becoming obvious now to many people besides Marxists. Thus once again, de Broglie writes that the "orthodox" view in quantum physics "logically ends in a kind of subjectivism akin to idealism in its philosophical meaning, and it tends to deny the existence of a physical reality independent of observation. Now a physicist instinctively remains a 'realist', and he has several good reasons for this: subjective interpretations always give him a feeling of uneasiness, and I believe that in the end he would be happy to be free of them."\*

A second objection is, however, more serious. It is this. The previous cases of probability formalisms, where the specification of hidden variables was known to provide an exact expression of the state of the system, contained nothing similar to the "uncertainty relation". But the uncertainty relation is not in doubt in the quantum-mechanical formalism—it is a necessary consequence of it, an integral feature of it. By the uncertainty relation, the precise position and momentum of a particle cannot be simultaneously specified. Therefore however many hidden variables may come to light, it will never be possible exactly to specify the exact state of a physical system on the atomic level, because the "uncertainty" will always remain in the specification.

This objection is not, however, really cogent. The formalism which contains the uncertainty relation applies when the specification of physical state is being carried out in terms of the procedures and measurements on which that formalism is based. So long as these are the only ones we know, it follows that the specification must be indeterminate. And as they are perfectly good procedures for many purposes, for many purposes the limitations imposed by the uncertainty relation must remain. But it does not follow that different modes of specifying physical state more exactly must therefore also involve the uncertainty relation. On the contrary, if the hidden variables are specified which exactly determine the physical state, then the specification will be exact and the uncertainty relation will not apply at all.

The objection we are considering received mathematical expression in a theorem advanced by J. von Neumann, by which he claimed to prove

<sup>\*</sup> de Broglie, loc. cit., p. 235.

that the probability laws of quantum mechanics are incompatible with the existence of any hidden determinism. de Broglie, however, has maintained that the theorem does not prove what it sets out to prove, since it "has simply shown that if we assume the conceptions lying at the base of the purely probabilistic interpretation we can no longer escape from this interpretation. Hence there is a kind of vicious circle. . ."\*

Meanwhile, what appears to be a very decisive refutation of this objection has been made by recent mathematical work of a Hungarian physicist, I. Fenyes.† Briefly, Fenyes has shown that in certain circumstances an uncertainty relation is also contained in the probability formalism of other cases, in which, however, it is well known that a different and exact specification of physical state can be made in terms of variables ignored in the probability expressions. He has proved this for the case of Brownian movement. The Brownian movement consists of a perceptible movement of small particles suspended in a liquid due to the action on them of the motion of molecules in the liquid. It is known that the exact motions of an individual Brownian particle are determined by "hidden variables" controlling the movements of the individual molecules, which are ignored in the overall specification of the Brownian movement. Fenyes has shown, then, that a relation similar to the uncertainty relation of quantum physics can be deduced from the formalism of such a movement; so long as the "hidden variables" are ignored, to specify exactly the position of a Brownian particle introduces an uncertainty into its momentum, and vice versa.‡

It seems likely that in trying to go on from this to draw an exact parallel between such processes and the processes investigated in quantum mechanics, Fenyes has gone too far. Nevertheless he does seem to have shown that the appearance of an uncertainty relation in a formalism is simply a consequence, in certain circumstances, of the incomplete specification of the variables determining the exact state of a system, and that therefore there must arise an indeterminacy in the formalism in such cases, which will be eliminated when the hidden variables are introduced.

This suggests that quantum theory, in its present state, is in essence a statistical theory, in which hidden variables determining the exact state of the systems it investigates are ignored. In this respect, quantum theory is a theory of the same type as the theory of the Brownian movement, the theory of diffusion, and similar theories—though, of course, in other

<sup>\*</sup> de Broglie, loc. cit., p. 232-3.

<sup>†</sup> I. Fenyes, Zeit f. Physik, 132, 81 (1952).

<sup>‡</sup> The relation between the uncertainties of position and momentum of a Brownian particle was first discussed by R. Furth (Zeit f. Physik, 81 143 (1933)).

respects it is quite unlike them.\*

Further, quantum mechanics has achieved its successes in application to phenomena on the atomic scale (10<sup>-8</sup> to 10<sup>-10</sup> cm.). It is in the field of the inner core of the atom, the atomic nucleus, on the scale of 10<sup>-13</sup> cm., that physical theory is at present in a very unsatisfactory state. It seems justifiable, then, to feel, with Bohm, that quantum mechanics in its present form may be inadequate to deal with phenomena on the nuclear scale, and that it is here that a different theory, involving the detail at present concealed, may be found necessary. Thus, just as quantum theory, on the "microscopic" scale, corrected inadequacies of the old, classical theory on the "macroscopic" scale, so may new investigations on the "ultra-microscopic" scale correct the inadequacies of the present quantum theory itself.

#### TOWARDS A NEW ADVANCE IN PHYSICS

Now we shall try to reach some conclusions.

(1) Our first conclusion is that the present "orthodox" interpretation of quantum physics should be rejected. According to this interpretation, there is a fundamental indeterminism in nature, and events have neither causes nor an exact location in space and time. Such an interpretation should be rejected, because it is what may be called a closed door theory. It says we have reached the limits of all possible knowledge in the sphere investigated—that now the search for causes and for deeper knowledge of nature has come to an end. For science to adopt such a theory is the end of science.

It is hard to conceive on what grounds such a closed door theory can be justified. For there is literally nothing in the experimental evidence to justify such a theory. On the contrary, experiment suggests that a tremendous amount remains to be known about the atom, for which new methods of investigation will have to be found. At the present time we lack knowledge about individual atomic processes, and our knowledge is of a general statistical character, expressed, therefore, in terms of probabilities and involving uncertainty relations. But unless we are to deny that individual processes really exist outside us and independent of our observations and theories, there are no grounds for asserting that we are necessarily unable to know about them.

In the last analysis, the "orthodox" interpretation is not justified by

<sup>\*</sup> A clarification of the precise differences between quantum mechanics and diffusion theory has been given by W. Weizel of Bonn (Zeit f. Physik, 134, 264 (1953)), who has shown that a possible statistical basis for the quantum laws of motion may be provided by postulating the existence of new particles which he calls "zeros". This work is particularly interesting since it turns out that the properties of the "zeros" are very similar to those of "neutrinos"—particles which were introduced into the theory of nuclear and high energy physics on experimental grounds.

experiment and practice, and has no roots in experiment and practice. It is simply the consequence of an application of idealist philosophy in physics. Hence we suggest it ought to be rejected, quite apart from the future substantiation of an alternative interpretation. We ought not to seek a solution of the problems of physics along such lines, for to do so is simply to close the door to any solution.

We wish to stress, however, that this does not mean "rejecting" the uncertainty relation. On the contrary, the uncertainty relation cannot be "rejected", for it is a necessary consequence of the formalism of quantum mechanics, which is a well-substantiated, correct and very useful instrument. No one, therefore, can "reject" the uncertainty relation without rejecting the physical discoveries of the last forty years. What it is permissible to reject is its *interpretation* as the expression of a fundamental indeterminism in nature and of a necessary limit to all possible knowledge of nature, i.e., the so-called uncertainty *principle*. This "principle" assumes that the formalism of quantum mechanics, a formalism correctly expressing certain statistical aspects of atomic processes, is and must be the only complete and final expression of all that can ever be known about such processes. That assumption, we believe, is absolutely groundless.

Along with the so-called "uncertainty principle" goes the "principle of complementarity". The two are bound together, and the one implies the other. As for the "principle of complementarity", it says that wave concepts and particle concepts are merely two alternative and incompatible ways of expressing certain observations; each is to be used for its special purpose of expressing observations, and it remains impossible to attain any deeper knowledge of reality which will explain why things in some respects move like waves and in other respects like particles. Like the "principle" of uncertainty, this is a closed door principle which says it is impossible to know anything more. It is typically idealist, not only in its proclamation of the impossibility of knowledge, but also because it seeks to "overcome" the puzzling wave-particle dualism by saying in effect that neither wave motions nor corpuscular motions exist outside us but both are merely concepts in our minds. Such "principles" do not derive from any experiments, nor help the progress of physics by suggesting new experiments, nor can they conceivably be confirmed by any experiments.

(2) Our second conclusion is that, instead of the "orthodox" interpretation, we should seek to interpret physical discoveries in terms of causality and the determination of events in space and time. The aim should be, as de Broglie admirably put it, to "represent reality on the atomic level in a precise way in the framework of space and time". We should reject the idealist theory that "no picture" is conceivable

of the objective physical world in its deeper aspects, but, on the contrary, should continue the scientific effort to construct from experiment and verify in practice a "picture" of the real world in precisely the above sense.

This is the materialist programme in physics. Unlike the idealist programme, which leads to dogmas, it can be realised only by doing more work, by conceiving and testing new and bold theoretical

generalisations, by devising new methods of investigation.

At the present time, it would seem that the main problems, through the tackling of which the advance of physical theory is to be realised, concern on the one hand the interrelationship and causation of the wave and particle movements of matter, the problem of the antithesis between "matter" and radiation and between particles and waves. On the other hand, they concern the further investigation of the inner processes of the atom, of the properties of the various sub-atomic particles and of the causes of their movements and changes. Work on both sets of problems will converge in advancement of physical knowledge, and in turn bring more power to mankind in the mastery of nature by wresting her fundamental secrets from her.

# The Commune of Paris and English Literature

JACK LINDSAY

I

I doubt if a single history of English Literature allots even one sentence to the effects of the Paris Commune on our writers; and yet those effects were important in the extreme. The Commune marked a decisive turning point. Not that its effects here can be separated from the inner crisis of British society, the point reached by its class struggle, in 1871. Still, it was the world-event which brought certain aspects of that crisis to a head, definitely posing certain political and cultural issues.

Culturally we can best, perhaps, get at those issues by considering the changing nature of the concept of the People. Lenin in 1913 traced three periods in the historical destiny of the doctrine of Karl Marx, in the role of the proletariat as the builders of Socialism: from the 1848 Revolution to the Commune, from the Commune to the Russian Revolution of 1905, and from 1905 on. Each phase showed a fresh consolidation of the proletariat. And the Commune . . .

"completed the development of bourgeois reforms; the republic, i.e., the form of state organisation in which class relations appear in their most unconcealed form, had only the heroism of the proletariat to thank for its consolidation" (Selected Works, XI, p. 50).

Thus the Commune completed the first phase of the political development of the proletariat as an independent force.

Plebeian democracy is a term useful to define the earlier phases when the proletariat is still imperfectly developed as such a force and when the bourgeoisie are still able to carry on the role of national leadership. In such phases the concept of the People embraces both the emerging proletariat and the radical sections of the bourgeoisie who are still playing a progressive role. But plebeian democracy or the People is never a fixed term; the content varies with the degree of development of the workers into a definite proletariat with clarifying revolutionary aims.

"'Plebeian' democracy was already in a transitory stage in 1792, and Lenin's theory of the revolutionary dictatorship of workers and peasants in the bourgeois democratic Russian revolution could not be divided from the theory of the growth of the bourgeois demo-

cratic revolution into the socialist revolution" (J. Revai, Lukacs and Socialist Realism).

#### II

To understand our writers, then, it is of the utmost importance to analyse clearly and concretely what the term "The People" meant to them. Dickens was the last great writer who was able to gather under it, in a single effective image, both the emerging proletariat and the radical sections of the bourgeoisie—though in his later works he grows ever more aware of the strain of inner contradictions in this union. It is of much interest that in May 1869 he prophesied a revolutionary outbreak in France, though we may doubt that he was equipped to understand the Commune of Paris if he had lived to see it.

On other writers of his epoch we find the Franco-Prussian War and the Commune acting as a violent reagent, crystallising their fears and miscomprehensions of the new social force. Carlyle came out in full support of Bismarckian Germany. George Eliot, who had welcomed the February Revolution of 1848 with an uncompromising repudiation of a society that "is training men and women for hell", now had turned away from history and wanted to "dwell continually on the permanent". Tennyson was confirmed in his reactionary positions, expressing his fear of "the red fool-fury of the Seine", and Browning was diverted from his earlier liberal attitudes into a contorted apology of Napoleon III and of anti-democratic methods in *Prince Hohenstiehl-Schwangau Saviour of Society*.

Perhaps the most dramatic example of the switch-over in writers from a progressive to a reactionary position is to be found in Swinburne. His fine acclamation of the national liberation movements reached its climax in Songs Before Sunrise (1871), and when he heard of Napoleon's over-throw he wrote in September 1870 at white-hot excitement an Ode on The Proclamation of the French Republic. But by June of the next year he was rabidly demanding that Communards be shot down "like dogs".

We see these reactions in more complex form in Bulwer Lytton's *The Parisians*, written during the events of the war and the Commune, in which all the slanders against the workers are repeated and yet the writer unwillingly recognises the proletariat as "the Coming Race" who destroy "for the sake of the common good". He makes a worker declare: "We ouvriers are wiser now; we see that in assailing it [the feudal nobility], we gave ourselves worse tyrants in the new aristocracy of the capitalists. Our quarrel now is that of artisans against employers."\*

<sup>\*</sup> We can trace the swing into reaction in popular poets of the radical tradition with touches of Chartism like Charles Mackay and Robert Buchanan (who first

#### III

But there was more than these negative or confused responses. To the credit of the powerful progressive forces in our culture, there were some writers who gained a rich stimulus from the Commune and its revelation of the constructive energies in the proletariat. Thus, George Meredith, though unable to realise the full consequences of the episode, absorbed from it many vital elements that served him well in his deep-going critique of capitalist society.

In 1848-49 he had responded powerfully though confusedly to the revolutionary situation. A woman friend tells us that in 1850 he constantly had the names of Garibaldi, Kossuth and Mazzini on his lips and

that he had a scaring effect on his respectable acquaintances.

"In 1848-49 Meredith burns with the double idea which stirs the revolutions in Europe: the idea of nationality and the socialist idea. In *Brotherhood* he deplores what man has made of the Lord's gifts, and what he has made of his brother, opposing the nay of his perverse will to the sweet invitations of nature and humanity" (R. Galland).

The fall of Napoleon III and the creation of the Republic aroused afresh the revolutionary emotions of his youth. He responded with his ode *France* (written in December); and claiming that he had been inspired "within the shadow of the Truth", he asked Morley to publish it in the

Fortnightly, where it appeared in January.

This poem proclaims France the revolutionary source of light and progress, and attempts to define the contradictions of 1789. The Revolution, in which men began joyously to mate with the Earth, was both "angel and wanton", and its effects have continually been rent by unresolved inner conflicts, by an inability to actualise brotherhood. The failure to achieve true social unity issued in the dictatorship of the warleader. But now France is reborn in revolutionary integrity and the future is once more open to man:

Now is humanity on trial in thee:
Now mayst thou gather humankind in fee:
Now prove that Reason is a quenchless scroll;
Make of calamity thine aureole,
And bleeding lead us through the troubles of the sea.

in his Drama of Kings hailed the Commune then lost heart and retracted). Some of the Positivists like F. Harrison, though not grasping the true meaning of events, nobly defended the Commune.

The statement is confused, but the quickening of faith in the revolutionary power of the people is unmistakable. A new Meredith emerges.

Behind this new man lies the experience of two months spent at Southampton in 1867 supporting Maxse in his parliamentary candidature, when the novelist gained some direct contact with the working class and its politics. Maxse, a radical idealist, with strong faith in progress and reason, and with a genuine feeling for people, had a potent effect on Meredith; but it was the liberation of revolutionary emotion in 1870-71 that fused Meredith's electioneering experience with aspirations of his youth and gave him a new start, expressed in *Beauchamp's Career*.

This novel stands to the post-1850 world as Felix Holt stands to the world of Radical-Chartism. It gives the direct political theme a new birth in terms of the typical experiences of its world, and brings out clearly the moral that if the novel—or culture in general—is to survive and develop effectively, it must have the courage to realise the nature of working-class demands. Its hero, Nevil Beauchamp, based on Maxse, exemplifies the generation who went to the Crimean War and were driven into confronting the fundamental lie, the outrage and dehumanising process, of Victorian society. It is not a novel of the proletariat, but of the upper-class youth whose honesty forces him to recognise the truth of a society in which the proletariat has been formed. Its strength reposes in the subtle way in which it defines the dilemma of such a character, who has broken his old class-ties but has not found an active relation to the new class. With abounding tenderness and satire Meredith shows both the confusions and frustrations that inevitably attend his hero, and the undeviating faith in man and in a future society of justice and brotherhood, which animate him to the end. The end comes in a gesture of self-sacrifice; Nevil dies rescuing a sailor's son from drowning —as if Meredith meant thus symbolically to express the active political union, aimed at breaking down class society, which determines Nevil's development but which cannot find effective outlet at this phase of history. (He refused to change the ending despite his wife's pleas.)

Against his rebel hero he sets the arch-reactionary Romfrey; and with him he links Dr. Shrapnel, the philosophical radical, in whom elements of the earlier Carlyle are worked out to their logical conclusion of revolt.

Meredith cannot understand and accept the proletarian revolution and its necessary organisations; but in this magnificent novel he draws his main critical position from the existence of the proletariat and its increasing threat to bourgeois relations and values. He suddenly sees in something like its full political significance the pervasive lie, the split personality, of bourgeois man; and his creative method is matured. His next work was *The Egoist*, in which he set out to define the self-divided bourgeois man at length.

"The people are the Power to come. Oppressed, unprotected, abandoned; left to the ebb and flow of the tides of the market, now taken on to work, now cast off to starve, committed to the shifting laws of demand and supply, slaves of Capital—the whited name for old accursed Mammon" (Beauchamp's Career).

Thus Meredith re-achieved the political novel, on the level required for the irreconcilable exposure of bourgeois man. He achieved it within the focus of moral and psychological factors: that is, he made a devastating social analysis, but without showing the political struggle, based in the proletariat, which alone could overthrow the world of the lie and resolve the split personality. However, in *Beauchamp's Career* he added something essential to the cultural critique of capitalism; and the clue enabling him to write that novel had come from the impact of 1870-71.\*

#### IV

There was a poet who like Meredith gained from that impact a creative stimulus which did not however bring him over directly to the proletarian ranks. This poet was Gerard Manley Hopkins, whose work became known for the first time in 1916 (seven poems) and in 1918 (collected edition), though he had died in 1889. Born of a protestant middle-class family, he expressed his revulsion from the Victorian bourgeoisie by turning Jesuit in September 1870, taking vows of poverty, chastity, and perpetual obedience. He was moved to the core by the Commune and wrote in 1871 to his conventionally-minded friend Bridges:

"... I remember that you never relished the intelligent artisan. I must tell you that I am always thinking of the Communist future. The too intelligent artisan is master of the situation I believe. ... I am afraid some great revolution is not far off. Horrible to say, in a manner I am a Communist. Their ideal bating some things is nobler than that professed by any secular statesman I know of (I must own I live in bat-light and shoot at a venture). Besides, it is just,—I do not mean the means of getting to it are."

Though Bridges' horror made Hopkins give up trying to explain himself along these lines, clearly the Commune, coming on top of his personal crisis of separation from the bourgeois property-world, gave an added intensity and meaning to his rejection of existing social values. It provided a point of social relation for the lonely gesture of renuncia-

<sup>\*</sup> The full evidence for this statement is set out in my biographical study on Meredith (to appear autumn 1954).

tion. Thus, from his religious self-dedication, "thinking always of the Communist future", Hopkins developed his new style, in which an extreme tension invades the old verse-forms and old rhythms are realised with a new richness and unity of emotional effect—what he called sprung rhythm. In *The Wreck of the Deutschland*, 1875-76, he unpacks all his sense of stormy crisis, death and renewal, in this matured, dynamic style.\*

#### V

But if Meredith and Hopkins gained a profound creative stimulus of high importance for the movement of our literature towards the full socialist level, did no one recognise at once the decisive implications of the Commune for culture? Yes, John Ruskin.

In 1870 he was near a turning point. He had come to the conclusion that capitalism was essentially evil, opposed to everything creative in man. The early work of Carlyle and the novels of Dickens had played their part in this realisation; and Ruskin was deeply disturbed and moved by the outbreak of war and the sufferings of the French people. He made the all-important step of breaking from the bourgeois audience and turning to the working class. On the first day of 1871 he issued Letter the First of Fors Clavigera, Letters to the Workmen and Labourers of Great Britain, price sevenpence. It opened:

"Friends, we begin today another group of ten years, not in happy circumstances. Although, for the time, exempted from the direct calamities which have befallen on neighbouring states, believe me, we have not escaped them because of our better deservings, nor by our better wisdom; but only for one of two bad reasons, or for both: either that we have not sense enough to determine in a great national quarrel which side is right, or that we have not courage to defend the right when we have discerned it.

"I believe that both these reasons exist in full force, that our own political divisions prevent us from understanding the laws of international justice; and that, even if we did, we should not dare to defend, perhaps not even to assert them, being on this first of January, 1871, in much bodily fear; that is to say, afraid of the Russians; afraid of the Prussians; afraid of the Americans; afraid of the Hindoos; afraid of the Chinese; afraid of the Japanese; afraid

<sup>\*</sup> Hopkins sees the Commune as a release of elemental energy and accepts the tale that nuns were done to death. The tale struck him to the heart as marking his division from the elemental force; in *The Wreck* he brings together the tale of dying (sacrificed) nuns and the theme of elemental fury, to achieve a synthesis of acceptance, the statement of a higher life emerging from the clash. The Wreck is thus fundamentally his poem on the Commune.

of the New Zealanders; and afraid of the Caffres; and very justly so, being conscious that our only real desire respecting any of these nations has been to get as much out of them as we could."

In the following letters he writes with passionate indignation of the state of things which begets the misery of the workers in Britain and the horrors of the war raging in France. And when the Commune comes, though he swallows all the reactionary press propaganda about Red Atrocities, he holds steadfastly to his central understanding:

"And the guilty thieves of Europe, the real source of all deadly war in it, are the Capitalists—that is to say, those people who live by percentage on the labour of others; instead of by fair wages for their own. The Real war in Europe, of which this fighting Paris is the Inauguration, is between these and the workmen, such as these have made them. They have kept him poor, ignorant and sinful, that they might, without his knowledge, gather for themselves the produce of his toil. At last, a dim insight into the fact of this dawns on him; and such as they have made him, he meets them, and will meet."

This is the great moment in our literature when the existence, the necessity of the revolutionary proletariat is recognised. The Commune has given Ruskin this perception. The generalised emotion of repugnance to capitalist ethics with which he began on January the first has become by May an acclamation of the revolutionary proletariat. All honour to Ruskin. That he was unable to sustain the full consequences of his vision, that he accepted the atrocity stories and grasped at the position taken by Carlyle in his *French Revolution* (that the "excesses" of the people were the results of a cruel and distorting regime), that he never understood what organised action in the working class entailed and still clung to the notion of benevolent education from above—all this does not lessen the greatness of the step he had taken. "Communist, yes, I am a Communist, reddest of the red."

He believed the tales, lies without any foundation, spread by the Versailles journalists, that bands of women roamed about Paris burning houses and monuments with sardine tins of petrol, tallow and sulphur. He believed this lie of the *Petroleuses* since it tallied with his own fears of the working class; and yet, in the last resort, he knew and declared that the human future and his own total allegiance lay with the workers, the revolutionary proletariat. In words of terrible love and rage he declared it—words that cannot be read without feeling the very impact of his physical tensions as he wrote. (And his call in the July letter to

scientists not to work for the destructive forces of society has an acute relevance today.)

Here, and in the social criticisms of Beauchamp's Career, we meet the clear and direct emergence of the challenge to capitalist society which the proletarian forces now represented. Fors Clavigera and Beauchamp's Career have thus a noble place in our literature; in a sense they cleave that literature into two and set the new tasks which lead to socialist realism and the proletarian revolution. Not that the working out could be simple or direct. Capitalism still had too many resources, economic, political and ideological; but the positions had been stated—here the basis for a new socialist culture was laid, just as in the later Disraeli and Carlyle we meet the basis of the new imperialist ideology, with the elderly George Eliot's hankering for the "permanent" as the metaphysical background of resistance to the revolutionary demands of the workers.

#### VI

Ruskin was not without his effects. William Morris in 1871 was deep in his plans for organically relating art and life; he had taken the lease of Kelmscott Manor and was caught up in a thousand busy schemes. Then, feeling the need to link his new organic concept of art with some heroic pattern of struggle, he set off to visit Iceland, drawn by his love of the sagas. In 1876 he found himself driven into political activities, and by 1883 he had become a foursquare socialist. Ruskin and Marx played key parts in this development. Morris carried on an active struggle to build a socialist art, and transformed the Ruskinian positions into conscious and stably-based Marxism.

His tremendous importance in British culture has been denied, obscured, falsified in every possible way by the bourgeoisie. The rediscovery of Morris and the understanding of his work and thought are essential first steps in the fight for the true British tradition in culture today; he is the direct link beween our own world and all that was rebellious and virtually based in the people in the Romantic movement.

The Commune had given a new concreteness to Ruskin's conviction of the fundamentally evil nature of capitalism; it had made him turn to the working class as the bearers of the future. Morris, step by step, took in everything valuable in Ruskin's work, while shedding its illusions and limitations, and finally arrived at Marxist comprehension. But not only did he carry on that element in Ruskin's work to which the Commune had given a deepened urgency; he also turned directly to the Commune for inspiration—as in his long poem, *The Pilgrims of Hope*, 1886. Here he sets out the sufferings and aspirations of our working class in half-lyrical, half-narrative form; expresses the total rejection and de-

testation of capitalism and all its works or values; and tells of his hero's conversion to Communism, the daily struggles of the "new proletarian," agitation-work and jail, setbacks and unfaltering hope. The narrator, his wife and friend, go to Paris to fight in the Commune as the culmination of their revolutionary realisations:

O Earth, Earth, look on thy lovers, who knew all thy gifts and thy gain,

But cast them aside for thy sake, and caught up barren pain... Yes and we were part of it all, the beginning of the end,

The first fight of the uttermost battle whither all the nations must wend.

Though not altogether successful in its narrative exposition, the poem has fine and important sections, such as that where the narrator joins the Communists; and it is sustained by a deep pathos which mingles without discord with the note of complete faith in the ultimate Communist triumph. Thus it perfectly expresses the phase of struggle in our people from which it is born:

Hope in the simple folk, hope in the hearts of the wise, For the happy life to follow, or death and the ending of lies, Hope is awake in the faces angerless now no more, Till the new peace dawns on the world, the fruit of the people's war.

The Commune indeed was never far from Morris's thought; it was for him the sustaining proof of the revolutionary purpose carried deep in the hearts and lives of the masses. In a stirring essay written for its celebration, he said of the Communards, "We honour them as the foundation stone of the new world that is to be", and he tells the workers that it would be "well for them to take part in such an armed struggle within Britain".

Morris, while doing the necessary work of stabilising Ruskin's positions in terms of a mature Marxism, could not dominate the cultural situation. British capitalism still had far too many resources. But he had shown the way forward; he had set a multiple series of influences into action; and with each step in the clarification of our world he has reappeared as the great leader into a new revolutionary culture. His influence has kept reasserting itself, in Shaw and Scawen Blunt, in Gordon Bottomley and Tom Mann; and now in the post-1945 crisis of our culture his giant stature is evident. His work comes into its own at last, in the struggle for peace and Socialism.

#### VII

One more work demands our notice. Though not on the level of the writing of Meredith and Hopkins, Ruskin and Morris, it has a great significance—The True History of Joshua Davidson, Christian and Communist, by Elizabeth Lynn Linton, which founds in Britain the proletarian novel, the novel of conscious revolutionary point and purpose.

Mrs. Linton, daughter of a minor Canon of Rochester, was married to William James Linton, wood-engraver and Chartist poet (under the name of Spartacus). A rebellious rationalist, she knew Owen, Kossuth, Mazzini, Louis Blanc; and she sided wholeheartedly with the Communards. Her *True History* appeared in 1872 and had a sweeping success, running to ten editions in a couple of years.\* Its importance lies in the fact that it bridges the gap between evangelical radicalism and social revolution in Britain; its hero Joshua is an authentic type of Christian revolutionary developed out of the uncompromising side of our nonconformity through a staunch class sense of solidarity with the exploited masses.

The novel stoutly defends the Commune and rejects all the propaganda which deceived Ruskin. "Never had Paris been so free from crime as during the administration of the Commune." Joshua goes over to work with the Communards:

"... we all looked over to Paris with an anxiety that was as painful as if we stood watching the struggles of a beloved friend with our own hands bound. There were men whom that time sent mad with hope and fear; and some that I could name are now lying cold in their graves for sorrow at the failure of the righteous cause. The Commune, successful in Paris, meant the emancipation of the working classes here, and later on the peaceable establishment of the Republic, which we all believe has to come, whether peaceably established or not....

"To help in the establishment of organised liberty like the Commune—that seemed the best thing any man loving his fellow men could do; and accordingly, he and I agreed to go over at once."

<sup>\*</sup> The Positivist Frederic Harrison was much impressed by the novel, and Bradlaugh was so moved that he at once bought a thousand copies for distribution, to help in undoing anti-Commune propaganda. (W. J. Linton sold his house at Brentwood to Ruskin, and Eliza sold Gadshill to Dickens.) The persistence of popular sympathy for the Commune is importantly shown by the poem In a Cellar in Soho (in The Dagonet Ballads, 1882) by G. R. Sims of The Referee: "I'm a Communist . . . Paris butchers can't kill in Soho . . ." (An odd pro-Commune poem is At the Barricades by Margaret L. Woods.)

The theoretical understanding is slight and simple; but the revolutionary fervour is genuine. There is still an element of pacifist idealism, but *The True History* is the first novel in English in which unity with the revolutionary movement of the proletariat is assumed as the only basis of a good life and in which the knitting-together of the forces of the proletariat in day-to-day experience is the theme.

"The guns of our forts were silent, the men were fighting in the streets desperate, conquered, but not craven. The Versaillists were pouring in like wolves let loose; Paris was drenched with blood, and in flames. And then the cry of the *pétroleuses* went up like fire that shot against the sky. What mattered it that it was a lie? It gave the Party of Order another reason, if they had wanted any, to excuse their lust of blood. It was their Saturnalia, and they did not stint themselves. The arms, that had served them so ill against the Prussians, served them but too well against their countrymen; and the short hour of a nation's hope was at an end in the bloody reprisals of brothers, that exceeded all we have ever heard or read of in a victorious foreign army,"

#### VIII

The survey here given of the effects of the Commune on our literature is brief and compressed; but the enormous importance of those effects can hardly be doubted. The issue of the revolutionary proletariat has been once for all driven into our culture; and however the bourgeoisie, after a spasm of terrified abuse, may try to forget, the indelible mark remains. In the work of Ruskin and Morris,\* of Meredith and Hopkins, and even Elizabeth Lynn Linton, something new and inescapable has been brought into the creative consciousness.

The lesson of what the Commune did to our culture is thus of particular interest and importance to us today, since the situation which the Commune presented as a new potentiality in social development has become a stable part of our world in the Soviet Union, the People's Democracies, People's China. And in our struggle for a people's culture in our own country, which will help to overcome and resolve the crisis of capitalism, we cannot but gain strength and guidance from a consideration of this earlier event. Whenever writers now deepen their

<sup>\*</sup> It was from his study of the Commune that Morris reached his clear certainty of the murderous quality in the bourgeoisie and made his prophecy of what we now call the fascist type of counter-revolutionary party—his name is the Friends of Order.

Note the heroic element in *Pilgrims of Hope* and *The True History*: here again these works prelude socialist realism and have a deep message for us today.

realisation of the truth of our world and its inescapable conflict, they must come up against the same sort of issue as that which faced Meredith and Ruskin in 1871. We cannot today repeat the particular form taken by the creative response of these men; but we can catch inspiration from their courage, their humanist conviction, their readiness to fight for the social forces to whom the future belongs. By so doing we close the gap of the years between us and them, and take up afresh the broadly-based national tradition which they were splendidly embodying.

#### Book Reviews

#### THE CHRISTIAN DILEMMA

Christian Faith and Communist Faith. Edited by D. M. Mackinnon. Macmillan, 21s.

We are so accustomed to versions of Marxism which are no more than Aunt Sallies set up to knock down again, bearing not the slightest resemblance to the real thing, that it is with something of a shock that we open a book which makes a serious attempt, and from a Christian point of view, to expound and refute the Marxist case. This is the most honest attempt to do this that has yet appeared; but for that very reason the misrepresentations and errors which it contains are the more serious and more deserving of refutation.

This book is edited by Professor D. M. Mackinnon of Aberdeen, and his team consists partly of theologians and partly of laymen, among the latter being Mr Michael Foster and Mr. Crombie of Oxford, Professor Hodges of Reading, Mr. Denys Munby of Aberdeen, and Professor Toynbee.

Professor Hodges leads off with a really admirable, if somewhat defective, statement on Dialectical Materialism. This alone would seriously disturb most theologians, sociologists and literary critics of Marxism. He concludes by admitting that "the picture of a dialectical universe which he (Marx) presents can be correlated with the well-known theories of modern science far more easily than can the Christian doctrines of the world and man".

In his essay on Truth and Truthfulness the Rev. R. V. Larmour has generous praise for Marxism for its concern for the concrete, its avoidance of the static, and its dialectical approach.

"In Marxism", he says, "we have the impression of a thinking that is always vitally concerned with truth, not as the object of a disinterested intellection,

but as that which is derived from life as it is given in the concrete". He goes on to show that the premises of Marxist thought are "not arbitrary ones, not dogmas, but real premises" (quoting The German Ideology). It is the more to be regretted that he succumbs to the usual error that Marxists believe their system to be final, that they impose it authoritatively, and that it is accepted by all in toto and without question or understanding. This is an inexcusable distortion, all the more grave in one as knowledgeable as Mr. Larmour.

Mr. Foster's admirable essay on Historical Materialism still suffers from his earlier confusion of Marxism with Economic Determinism, but he now manages to say that the economic basis does not simply and directly determine ideologies but is "originative". He is fair enough when he ascribes the efficacy of the ideas behind the French Revolution—not to the fact that they were external and universal, but "actually ideological reflections of the necessities of the developing economic structure in Europe at the time". Later he makes the surprising admission that "the Christian should agree with almost all the criticism which the Marxist brings against idealism". He makes an important point when contrasting Marxism with those philosophies which destroy the whole meaning of life by denying the reality of time. He shows that Marxism attaches real importance to history, a fact which "gives a man his task for the future".

Unfortunately Mr. Crombie believes just the opposite; for him a philosophy of history is impossible, a judgment which condemns, as he says, not only Hegel, Marx, Vico and Hume, but also Toynbee, who contributes to this volume. Crombie's

rather jejune interpretation of the dialectic as a wooden belief in thesis, antithesis and synthesis, would indicate that he has not read Professor Hodges' essay. (In fact it will do them all good to read one another's contributions!) Crombie is much better than his own earlier paragraphs, however, when he explains Marxism thus: "Confronted with a piece of history which he wishes to understand, it occurred to Marx to find out how, at that period, the process of wealth production was carried on, what type of social structure would be necessary if production was to be carried on in that way, and what relationships of economic interest and conflict would thus be created within society". He also understands that the Marxist sees the end of class struggle as the goal towards which he strives, for "the people's revolution, by creating economic common one interest throughout the whole of society, brings about a condition in which there is no longer any possible human antithesis . . . so that the classless society inaugurates the great age when man ceases to struggle with his brother, and turns at last to the common enterprise of struggling with man's secular enemy, his environment".

Professor Hughes in his chapter on Social Justice points out that the Marxist's rejection of the corrupt picture of Christ prevalent in Christian circles "may be a disinterested devotion to the truth", and that the passion for social justice has undoubtedly been one of the mainsprings of Marxism. "If", he says, "we think that the only social and political facts are those taken account of in newspaper leaders and diplomatic bags and economic statistics, then we might as well give up being Christians altogether—we have in fact done so already".

If all the contributions were on this level we should have a very great book indeed. Unfortunately there is elsewhere a wholesale surrender to the myths and lies of the Cold War which may be the more persuasive to readers, coming as it does from thinkers who have conceded so much. There is the usual misrepresentation about the seizure of power in Western Europe (which might be corrected by consulting *The Times* for the period), there is the usual

nonsense about terrorism and repression, about nightmare cruelties, prison camps, relentless liquidation and so forth, ending in a pæan of praise, save the mark, "for the militant courage of the Lord Vansittarts of the world!" Even worse is Professor Mackinnon's charge that the campaign for peace is insincere, while another contributor sees the next development of Marxism as the advocacy of aggressive war to forestall the unavoidable imperialist war, a clear case of imputing one's own sins to one's adversary. Mackinnon also tries to make his readers believe that the real humanitarianism in the great reforms carried out in the People's Democracies is only sales talk; and that Marxists do not genuinely struggle to better the conditions of the people.

In all this Professor Mackinnon and his team are merely taking as truth the "social and political facts taken account of in newspaper leaders and diplomatic bags", and as Professor Hughes says, this is to "give up being Christians altogether". But Professor Mackinnon does not prophesy smooth things to the Churches. Asking whether the Church has anything to offer to combat the appeal of Communism he admits that "there is no escaping the fact that at the present moment organised Christianity simply does not possess the forces necessary for such a task", that "our theological understanding of human action is not adequate to the perplexities of the present"; that the Church is morally compromised by the methods of warfare which it condones; that it "is the prisoner of the total situation in which it is involved".

On the other hand in Communism, we are told, we are "dealing with a world-picture and a life-wisdom which command not merely men's assent but their allegiance" (Prof. Hodges); that religion has considered this world "as a field for charity, not as the object of hope", whereas for Communism history has a meaning, and "the abiding power of Stalinism in the present is the sense of hope which it still gives to its devotees", for "Communism restores to earth the hope of which it had been robbed by heaven".

JOHN LEWIS

#### CHRISTIAN ORIGINS IN THE CLASS STRUGGLE

The Origins of Christianity, by Archibald Robertson. Lawrence and Wishart, 21s.

Rationalists did a very good job in the last hundred years or so in reducing the extravagant claims of the orthodox for the historicity of the Gospels. In his Pelican Book on Christianity, published last year, Dr. Carpenter remarks casually: "St. Mark's Gospel is not a biography of our Lord. If it were, it would not be a good one. It was written in order to resolve a theological conundrum." Here the assumed nonchalance may deceive the elect, but it will deceive nobody else. This cool criticism of the historicity of the oldest of the Gospels measures the extent of the victory of the Rationalists in a hard-fought campaign. But the understanding of the origins of Christianity involves more than the determination, so far as that be possible, of the proportions of fact, legend, and myth in the early record. Christianity was a popular movement as well as an attempt to solve theological conundrums and the effort to understand it makes demands too great for the Rationalist school. Very welcome, then, is this scholarly account of Christian origins from one who is able to view the documentary evidence in the light of the class-struggle of antiquity. Archibald Robertson has broken new ground in his readable and instructive book.

When we first encounter the name of Christ in the pages of the Roman historians, Tacitus and Suetonius, it is used to describe the originator of a seditious movement which had spread from Judea to Rome. What is the historical justification for this Roman ruling-class view of Christianity in its early phase? How did this Palestinian disturbance, dealt with on the spot by Pontius Pilate, have such repercussions on Rome and throughout the Empire? Archibald Robertson believes that Jesus was the latest in a long line of leaders of the Jewish revolutionary struggle for social justice and national independence. It will be helpful to summarise, so far as possible in his own words, the account he gives of this movement and of the manner of its propagation throughout the Mediterranean world.

"Until Rome appeared on the scene," Robertson writes, "Palestine was never under one great empire long enough to extinguish in the masses the will to resist and the hope of deliverance" (p. 22). "The revolutionary movement, unlike those elsewhere, was able to organise, to flare up not once or twice but again and again into open revolt, and to produce in the prophetical books of the Old Testament the earliest considerable revolutionary literature which has come down to us" (p. 23). "The Decalogue has been dulled for us by centuries of liturgical repetition. But as originally written it summarised the prophetic programme in a few short slogans, ascribed to the god who in popular belief had delivered the ancestors of Israel from Egyptian slavery. No gods but one; no graven images the instruments of priestcraft; no juggling with the name of Jahveh for magical purposes; a weekly day of rest for all—even for slaves; honour for parents; respect for life, property and family; an end to the sharp practices which cozened men out of house and holding" (p. 29).

In the Hellenistic period "the Jews had ample opportunity in their own country to study the Greek way of life—the wealth, leisure and culture which it provided for the few, and the toil and degradation which it exacted from the many. The Jewish priests and nobles, who a few generations before had submitted reluctantly to the reforms of Nehemiah and Ezra, naturally welcomed Hellenism. But to the Jewish masses the gymnasium and the theatre were luxuries of the rich, dearly bought by the abrogation of the Pentateuchal law with its guaranteed rest day and

ment. They had a means of organisation against Hellenism in their local assemblies or synagogues. These organisations were of vital importance in the history of Judaism and provided a model for the first Christian churches

three centuries later" (p. 44).

In the first century B.C., when the Romans were masters of the world, "the Jews were not merely a Palestinian people, but a propagandist sect infiltrating into every corner of the Graeco-Roman world. In every great Mediterranean city there were Jews, some of them merchants seeking their fortune, but most of them slaves, freed men or petty traders, organised in their synagogues and propagating among their neighbours the idea of a juster social order set forth in the law and the prophets" (p. 84).

Such is the background Robertson sketches for the origin of Christianity. It must be admitted that it explains well its rapid dispersion throughout the Roman Empire and the evident alarm it produced in governmental circles.

In the Gospels much evidence survives of this early revolutionary period in the history of Christianity. But, as was perhaps inevitable in the circumstances of the time, this movement was stamped out and the Christianity which eventually became the official religion of the Empire was a very different thing. This type of religion, of which Paul was the zealous propagator, owed

much to Gnosticism and to the Mystery religions. It could triumph because, on the national issue, it compromised with the Empire, and, on the social issue, it compromised with the ruling class. Once it was agreed that Christ's kingdom was not of this world there was room for both Caesar and Christ. This involved, of course, the transformation of the historical literature of the Hebrew people into "revelation". The record of a social struggle of some 800 years, from the time when Micah protested against those who "covet fields and take them away by violence" down to the time when James, the brother of Jesus, asked: "If a brother or sister be naked and destitute of daily food, and one of you say unto them, depart in peace, be ye warmed and filled; notwithstanding ye give them not these things which are needful to the body; what doth it profit?", became devotional reading for aspirants to immortality. In a vast and complex subject like the origins of Christianity, there is always room for new evidence, for a shift of emphasis, for a new point of view. It is to be hoped that Archibald Robertson's book will not remain the only English contribution to its subject by a Marxist historian; for there is much more to be said. But there can be no doubt that it is a scholarly, candid, and helpful book, stimulating to read and a fine weapon in the ideological struggle.

B. FARRINGTON

#### A BLOW FOR HUMANISM

The Emperor's Clothes, by Kathleen Nott. Heinemann, 18s.

What a pleasure to come upon a book that asserts, without beating about the bush, that the most valuable tradition of thought of the last three or four hundred years is the tradition of scientific humanism, and which defends that tradition from its denigrators with a consistent vigour and a lively wit.

Miss Kathleen Nott calls her book "An attack on the dogmatic orthodoxy of T. S. Eliot, Graham Greene, Dorothy Sayers, C. S. Lewis and others". The sub-title is significant in itself: the bold, but not brash, assumption of a polemical method in an age when polemic has come to be regarded, unless it is bathed in a pious unction, as not quite the thing; the gallant direction of attack against the big, important, "distinguished" figures. The Emperor of the title is the Hans Andersen monarch who proudly parades in a suit of new clothes visible, his tailor assures him, only to the eyes of the innocent.

Miss Nott is mainly preoccupied with literature, but she is too sensible to imagine that literary problems can be pigeon-holed in a special compartment and discussed in "purely literary" terms. Her book therefore is of concern to a far wider public than those who normally read literary criticism; it is with some of the central ideas of the day which rear their heads in many differing contexts that she is dealing. Above all it is the validity of scientific method that she is concerned to defend.

It is not Christianity as such but a certain type of dogmatic theology that The Emperor's Clothes attacks. Above all it is the doctrine of Original Sin that is used by men like T. S. Eliot and Graham Greene as a weapon for the doing down of human aspirations. Man, according to this doctrine—and Miss Nott makes the point that there is very little precision among the theologians themselves as to exactly what it does imply—is inherently and congenitally

wicked, by his nature incapable of solving without divine assistance his own problems, personal, philosophical, social. Not merely therefore is any idea of progress an illusion but in the sphere of ethics mundane considerations such as the practical effects of one's actions are dismissed as irrelevant.

One of the phonier aspects of the moral chaos this leads to is mentioned by Miss Nott as the distinction drawn by the apostles of the new obscurantism between Good and Evil on the one hand and right and wrong (not normally graced by capital letters) on the other. The removal of ethics from the sphere of human speculation and experiment has, of course, the most reactionary results. Miss Nott notes the contrast between T. S. Eliot's "newspaper appeals for the preparation of atomic weapons against Russia" and "his lukewarm attitude towards German Totalitarianism". Eliot and his friends may theoretically deny the validity of Time and take morality out of the realms of the calculable but in practice they live in the twentieth century and are not in fact unconscious of the real issues of the day. The substitution of a respect for Tradition for a respect for History may sound innocent enough, but in practice it comes to mean respect for the privileges of the élite and a contempt for the hopes and fears of ordinary people.

Miss Nott has some good things to say on the attitude to science of reactionary contemporary intellectuals. She recognises that the neo-scholastic reactionaries attempt to discredit science because they fear it and therefore load it with false theories—chiefly of a mechanistic nature—which scientists who understand what scientific method involves never themselves subscribe to.

"Those who blame 'Science' and 'Scientists' for our misfortunes would speak more accurately if they

blamed scientists for not thinking consistently, for not applying their method to all the phenomena they meet, for having too many days off. If scientific workers were in fact consistent, they would realise and also demonstrate that their method is a unifying principle. It is useless to say for instance that you cannot 'measure' the mind. You can observe it. Mechanical materialism and mechanical idealism no more and no less than modern scholasticism are as philosophies, forms hypostasis, of attributing existence to the unknowable. They are therefore essentially attempts to deny this principle of the unity of knowledge which we should have learned and accepted in the seventeenth century."

Such a passage will perhaps give an idea of the general quality of Miss Nott's book. Cf her acuteness as a literary critic her discussion of Eliot's poetry is good evidence ("Mr. Eliot's main interests now lie with a theory about human emotion and behaviour, rather than with the emotion and behaviour themselves"), and she has some perceptive remarks on the whole discussion, initiated by Eliot himself, about "the dissociation of sensibility". That the imagery of Eliot's later poetry has become more and more dependent for its effectiveness on the dogmatic assent of the reader is, indeed, a fundamental critical point; and Miss Nott renders, I believe, a service to literary criticism as well as to everyday ethics when she says: "That Catholic orthodoxy locates sin in the mind, not primarily in conduct, does not imply a recognition of the way in which these passions in fact operate". In other words the abstraction of theory from practice, is fatal in the spheres of both morals and art.

And yet one has from time to time the sense that Miss Nott herself does not quite avoid such abstraction. In the very passage (page 28) in which the last sentence I have quoted appears there is an interesting internal conflict going on between her temptation to abstract "mind" and its attributes from material reality and her sense of the danger of doing so. I do not think it would be worth while arguing the case out here theoretically with Miss Nott, for she is too acute a thinker as

well as too humane a feeler to be unaware of the difficulties of what Marxists call "the relation of the superstructure to the basis" (i.e. the relation between ideas and systems of ideas and the social relationships on which ultimately they are based). Marxists are conscious of the dangers of a crude, oversimplified statement of a direct relationship between ideas and their material basis, but they insist nevertheless that the battle of ideas in the long run only makes sense if it is seen in relation to the historical conflicts of social forces. It is the great strength of Miss Nott's approach that she is acutely conscious of the battle of ideas: it is her danger that she tends to see this battle a little too much in terms of ideas and their validity, not sufficiently relating the obscurantist ideas of her neo-scholastics to their class position. Such a connection is, it must be added, often implicit in the argument and Miss Nott's frequent return to the values of "ordinary people" as opposed to those of the moral and spiritual experts is indeed evidence of her realisation that what is at stake here is a struggle between the mass of the people and those who are in harsh reality the ideologists of their exploiters.

Miss Nott's use of the term "ordinary people" has to it perhaps a flavour nearer to that of G. E. Moore's "common sense" than to that implied in the term "people's democracy". She is rather more interested in psychology than in social struggle. To this she might well answer that she assumes this basic struggle and considers her job the fighting of the battle of ideas. The Marxist will reply that he has reached the conclusion that the two battles are indeed inseparable and that to attempt to fight either—the political or the ideological—in any kind of isolation weakens both.

I make these points not to suggest in any dogmatic sense that Miss Nott's book is "incorrect" nor to play down its very great interest and value, but because I feel there is much here to discuss. The ultimate appeal must be of course to experience, the many-sided experience of the people in their struggles to achieve an ever-increasing control — and therefore freedom — of the world and their destinies. "The

test of the genuineness of humanism", as Miss Nott herself says, "is the experimental attitude towards all human problems". I see this book of hers as a contribution in the sphere of ideas to that great "broad, popular alliance of all sections of the people determined to end the arbitrary power of the rich over the future of Britain" referred to in The British Road to Socialism. Such an alliance will be forged on the basis not of dogmatism but of friendly mutual discussion among democratic and progressive people. Towards the enemies of the human race—the diplomats who threaten to use the hydrogen bomb, the rebuilders of the Belsen State—there can be an attitude only of struggle and opposition: among those who stand for a broad and democratic humanism (a category which does not of course exclude the great majority of religious people) there must be the creative stimulation of friendly argument. Miss Nott's excellent book cannot but contribute to both forms of mental fight.

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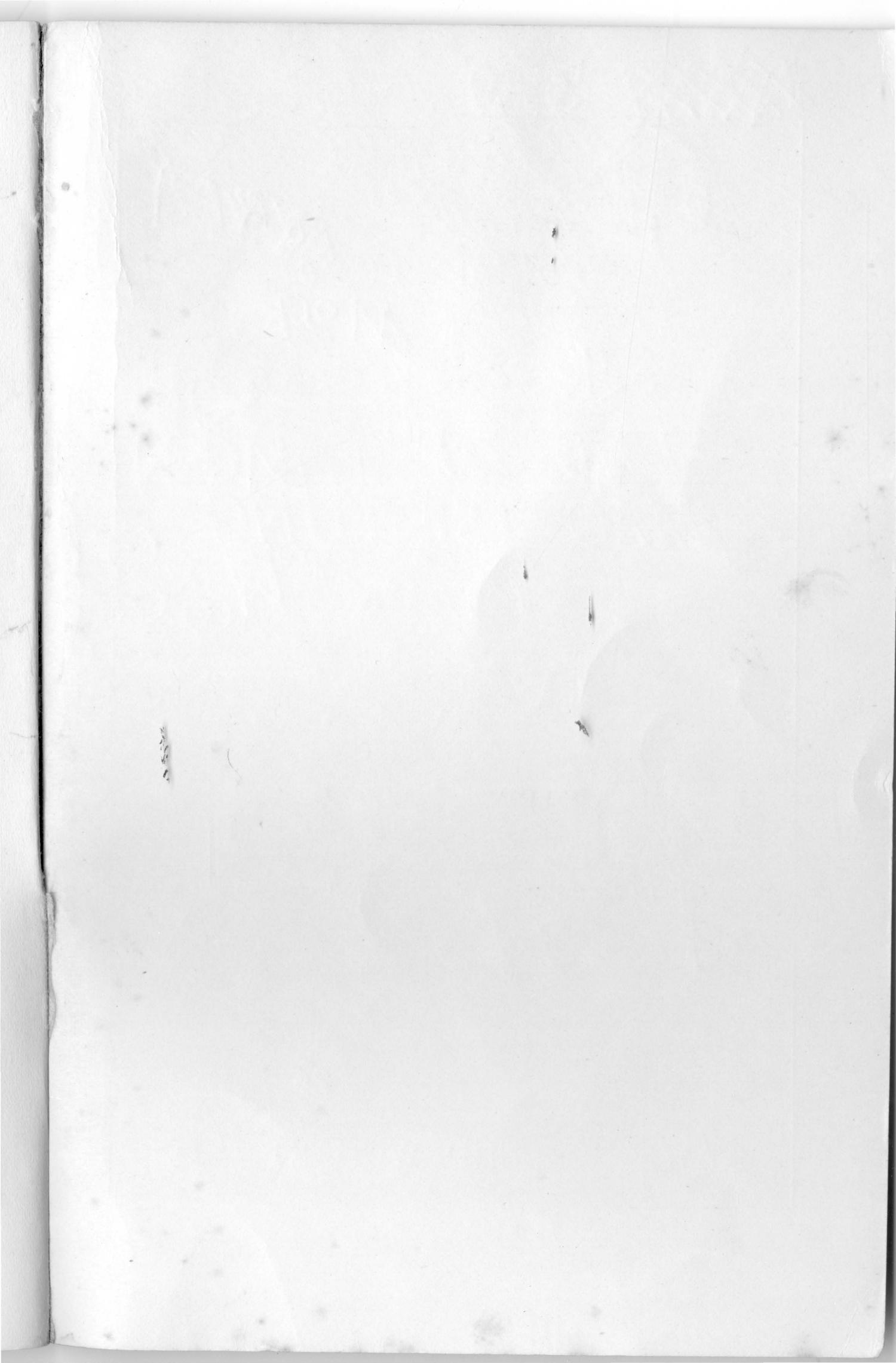
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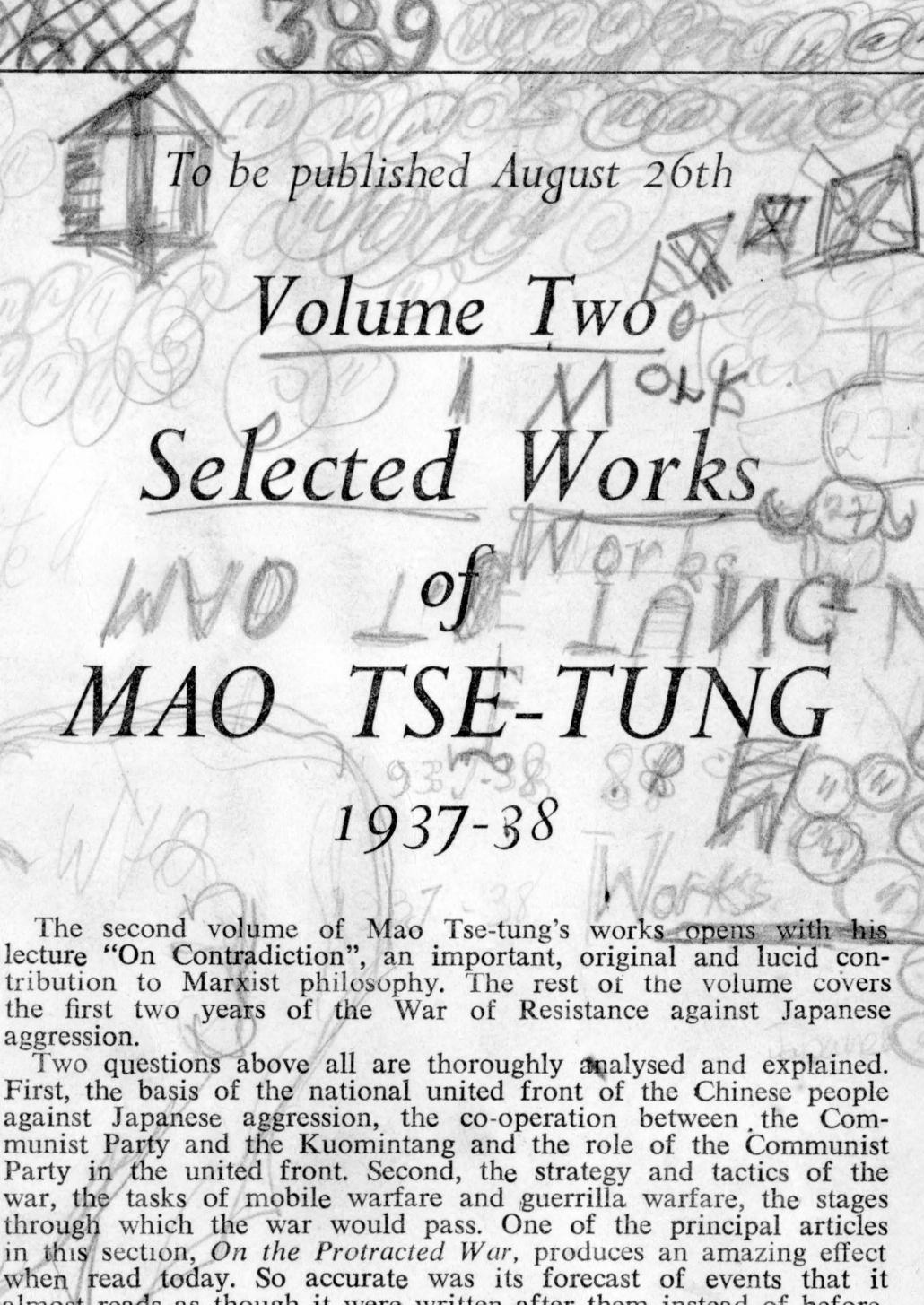
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