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Editorial

E publish in this issue an article by Mr. Rutland Boughton on "The Science and Art of Music." In the September Modern Quarterly, Mr. Max Kenyon will comment on this article, and in a subsequent issue we hope to deal with recent criticisms of modern music in the Soviet Union. In that connection, Alan Bush has raised in the columns of the New Statesman and Nation the question of the personal integrity of those Soviet musicians who have acknowledged certain faults in their work. He finds it inconceivable that these colleagues of his should be no more than helpless victims of intimidation. The same question arose during the controversy over the Soviet writers a year ago. On this particular aspect of the question an interesting light was thrown by the visit of some of the leading writers of the Soviet Union to this country, where they engaged in frank and vigorous discussion on these issues with British writers, most of whom were exceedingly critical. Those of us who were present at these discussions could not but be impressed by the confidence, gaiety and humour of the Soviet writers. It was difficult to believe that they were playing a part and that in reality they were terrorstricken victims of totalitarian oppression. Many who had been sceptical of freedom of expression in Soviet Russia, were very much impressed with the openness and sincerity of their Russian colleagues when they actually met them. So was Mr. J. B. Priestley, the President of the Writers' Group of the Society for Cultural Relations, who writes an interesting introduction to a small brochure just issued by the S.C.R. entitled Soviet Writers Reply. In this little pamphlet we have the personal replies of a number of well-known literary figures, Leonid Leonov, S. Marshak, N. Tikhonov and many others, to questions on the conditions of their work and on their aims and methods put to them by British writers. Their replies to J. B. Priestley, Rose Macaulay, Marjorie Bowen, Phyllis Bentley, Mrs. Cecil Chesterton, Sylvia Townsend-Warner and Alan Moray Williams are illuminating, not only for their content, but for the confidence and sincerity of their tone, and for an entire lack of a merely apologetic and defensive note. So much of the misunderstanding of Soviet Russia, of the Eastern democracies and also

¹ Soviet Writers Reply, with introductions by J. B. Priestley and Konstantin Simonov. Published by the S. C. R., 14 Kensington Square, W.8.; price 2s.

of Marxists in the West is heightened by the tendency to regard individuals either as inhuman or sub-human, instead of being perfectly normal and decent people. Professor Levy has frequently pointed this out in his lectures and broadcasts, and now once again, in estimating the significance of the discussion on music, we hope it may be possible even for those who profoundly disagree with recent Soviet pronouncements at any rate to recognise that they are dealing with sincere and intelligent people whose personal integrity cannot be seriously questioned. The reading of Soviet Writers Reply should help to bring the discussion on to a level where alone it can be fruitful. The initial attitude of exasperation and contempt which is so common completely precludes rational consideration of the issues involved.

The Special Centenary Number has pushed our original programme three months back, so that the articles appearing in the present issue were originally intended to appear in March, and articles which were expected to appear in this issue will not now appear until September. This includes an important article by Mrs. Joan Simon on the Social Background of Education.

An *Historical Miscellany* is in preparation and will appear during the autumn.

The number of discussion groups is growing, and there is room for many more. New groups have been started in Birmingham and St. Andrews. Readers in Birmingham will receive full information from Mrs. Jane Willetts, 71 Princess Road, Birmingham 5. If there are any St. Andrews readers who would like to be put in touch with the local Secretary, will they kindly communicate with the Editor.

We have received a special request from the Marx School, Melbourne, for Vol. I, Nos. 1 and 2, of *Modern Quarterly*, which are now out of print. If any reader can spare copies, would they kindly send them to the Editor at 40 Claremont Park, Finehley, London, N.3.

Marxism and the Platitudinists

By Douglas Garman

"Still her old empire to restore she tries, For, born a goddess, Dulness never dies." POPE.

HAT we are living in a period of revolutionary change, that I this period was detonated by the Socialist Revolution in Russia, that the Revolution was led and directed by Communists and that Communist activity is based on the practical application of Marxist theory, are truths so frequently reiterated that they are in danger of becoming platitudes; and nothing is more harmful to clear thinking than truth that has become platitudinous. To express original truth is to issue a challenge to one's audience and to oneself, since, being of its nature dynamic, it can only win acceptance as a result of conflict, in which previously accepted notions or attitudes are modified or overcome. Both its expression and its acceptance, therefore, involve change; and change not only in the sphere of mental activity, but also in that of behaviour and practice. Even a lie may well be less harmful than a platitude, since it is at least likely to stimulate contradiction. But platitudes, precisely because they contain elements of truth that have become commonplace, have achieved such currency as a medium of intellectual exchange that the credulous are all too easily lulled into accepting them without examining their implications. And therefore, unlike truths, since they exact neither action nor change, and though at all times and on all topics they necessarily constitute a large part of the stock-in-trade of intellectual intercourse, they also afford a special opportunity to the counterfeiter, whether deliberate or unconscious.

Thirty, even twenty, years ago the series of propositions at the beginning of this article were certainly not platitudes, at least in Britain. To the majority of people, whose beliefs about current affairs were determined then as now by the headlines of the penny papers, the films and the speeches of demagogic politicians, the events that were taking place in Russia had little bearing on "the British way of life." The Revolution, far from being the initial stage in the building of a planned economy, was merely a state of anarchy resulting from a combination of barbarism, destitution and military defeat. The Communists were "Bolshies," "Reds," "paid agitators,"

"hirelings of a foreign Power"—scum that by some chemical miracle had floated to the surface of a cauldron of terror. There was no inkling that they were a new kind of working-class party, trained by long years of arduous and dangerous class struggle and the discipline of a new world outlook for the precise purpose of furthering the Revolution and, when the conditions for it were ripe, assuming leadership of it.

But though this travesty of the greatest and most significant event of our generation was accepted by the majority of the British people, and though it is they who have most suffered from the terrible effects of accepting it, the responsibility for its currency was not theirs. It cannot even be fairly attributed to the penny-aliners, the petty politicians or the variety of religious spokesmen who did so much to propagate it. History, if it recalls them, will judge them lightly, as men who had to work hard for their living without the leisure to consider how they were earning it; and if it condemns them it will not be to hell, but only to the limbo reserved for the ignorant and the well-meaning. No, the main onus of responsibility lies firmly on the shoulders of that much smaller number of men and women who, in any class society, are the real formers of public opinion. For this minority, who alone are provided by capitalist society with the training and leisure to be informed of what is new and unplatitudinous, did nothing to dispel this lying phantasy. And the reason they did nothing was not only that they were politically opposed to the Revolution, but that for the most part they were ignorant of its causes, its nature and its significance. To these opinion-formers, Marxism, which would have enabled them, even had they rejected its conclusions, to appraise the Revolution rationally, was a closed book.

This persistent neglect of Marxism by our "intellectual leaders" is one of the most shameful phenomena of the long and gloomy twilight of liberal humanism in Britain. Politics, of course, explain it in part; and in this respect, recognition of the dubious achievement of the Fabians cannot be withheld. "Their fanatical hatred of Marx and all of us, because of the class struggle," was as clear to Engels in 1893 as it is to-day, when their leaders shamelessly vie with American Congressmen in witch-hunting Communists. But despite their successful "infiltration" and "penetration" of Liberalism, the Fabians were never more than a minority within the minority of intellectual leaders. And what is much more damning evidence of the general degeneration of intellectual standards in

Britain is the fact that, for nearly fifty years after Marx's death, when in every other civilised nation except the U.S.A. his doctrines were being seriously debated in academic and intellectual circles, the success of the conspiracy of silence in Britain was ensured, not so much by consciously political motives, as by the plumb ignorance of the conspirators. Even in the 'twenties it was still possible to take an honours degree in the humanities at any university in England without the implications of Marxism having caused the feeblest ripple in one's mind.

But if official culture in its decline was deaf to Marxist theory, it was not immune from the real social movement from which this theory is derived. As Marx and Engels had written to the young leaders of the illegal German Social-Democratic Party in 1879, expanding an idea already expressed in the Manifesto thirty years earlier: "It is an inevitable phenomenon, rooted in the course of development, that people from what have hitherto been the ruling classes should also join the militant proletariat and contribute cultural elements to it." And already in the 'eighties this phenomenon had revealed itself in Britain, "rooted" in the same causes that were producing the Great Depression. Such intellectual leaders as William Morris, Arthur Balfour¹ and the youthful Shaw, to mention only three, began to study Marxism with varying seriousness and varying results. And though this early dawning was to pale in the artificial sunlight of British Imperialism's noon-day. by the 1930's it had begun to glimmer once again as the result of new developments. The high-tables and senior common-rooms of Oxford and Cambridge (which, in spite of the alleged democratisation of education, were still, as they largely remain to-day, the timid mouthpiece of the ideas of the capitalist ruling class) might manage to shrug off the Russian Revolution as merely another and more distasteful example of H. A. L. Fisher's "play of the contingent and the unforeseen." But when, having just won a completely unforeseen World War No. 1, the contingency of World Crisis No. 1 threatened to transform "this other Eden" into a "tenement or pelting farm" for the chronically unemployed, even dons and senior civil servants began hesitatingly to ask themselves:

¹ In 1885 the two delegates from the Fabian Society to the Industrial Remuneration Conference might have learned from the future Conservative Prime Minister that it was "absurd" to compare the work of Henry George with that of Karl Marx, "either in respect of its intellectual force, its command of reasoning in general, or of economic reasoning in particular" (Edward R. Pease, *History of the Fabian Society*, p. 45).

"Were we not weaned till then?
Or sucked on country pleasures, childishly?
Or snorted we in the seven sleepers' den?"

And of those who answered as honestly as the poet, "'Twas so," some bestirred themselves to seek other answers to the problems of our time than the palpable nonsense they had been talking and teaching for half a century. A few, like Professor Keynes, struck by the fact that "professional economists . . . were apparently unmoved by the lack of correspondence between the results of their theory and the facts of observation," and sympathising, if a little aloofly, with the ordinary man's "growing unwillingness to accord to economists that measure of respect which he gives to other groups of scientists whose theoretical results are confirmed by observation when they are applied to facts," followed him into that new school of bourgeois economics which, in 1944, was to light the will-o'-the-wisp of full employment in capitalist society and, in 1947, to organise the catastrophe of the American Loan. Others, however, more determined perhaps to solve "the great puzzle of Effective Demand"-or, as the "ordinary man" would say, to cure the great social evil of unemployment—were prepared to pursue it to where it had lived on "furtively, below the surface, in the underworld of Karl Marx," a realm which Keynes admitted he could never bring himself thoroughly to explore.

Thus gradually the study of Marxism began to extend outside the small core of convinced Communists who had kept alive and developed the tradition of the 'eighties; and this extension was facilitated by the rapid increase, during the same period, in the publication of English translations, not only of the works of Marx and Engels, but also of Lenin and Stalin. Nor was this development confined to England. In all countries, and in many much more rapidly than here, Marxism began to attract an increasing number of serious students, a considerable proportion of whom found themselves compelled to take the further step of active participation in the working-class movement. Not all of them, however, were able to fulfil what Marx and Engels considered to be the "first condition" for doing so, "that they should not bring any remnants of bourgeois, or petty-bourgeois, etc. prejudices with them but should whole-heartedly adopt the proletarian point of

view." And it is not surprising, therefore, as Marxism increasingly became one of those subjects on which "decently educated people" were expected to express an opinion, that a number of books should have been published to enable them to do so without being at the pains to study the subject at first hand. Mr. Cole, not yet a professor, but as prolifically well-intentioned as ever, undertook to explain What Marx Really Meant. The Master of Balliol wrote Karl Marx's "Capital," trusting perhaps thereby to dissuade his students from reading the original work. At the London School of Economics Professor Laski laid the basis of his reputation as a resolute left-winger (later to be enhanced most disingenuously by Mr. Churchill during the 1945 Election) by enlivening his exposition of the liberal theory of the Constitution with references to Lenin's State and Revolution. Somewhat later Mr. Gollancz, still serving his novitiate as the self-appointed guardian of Our Threatened Values, added to his notoriety as the most successful publisher of detective fiction by founding the Left Book Club, and even found time, not yet having been admitted to his present intimacy with God, to speak on the same platform as Mr. Pollitt. While Mr. A. L. Rowse, with the oracular dictum that "to be a good historian in our time one needs to have been something of a Marxist," has recently borne witness that his acute sensibility to political and intellectual fashions is not newly acquired.

Since it would appear to be characteristic of liberal ideologists that in spite of their pacific protestations they are invariably more impressed by the arts of war than by those of peace, it is not surprising that this pre-war interest in Marxism was tremendously stimulated by our alliance with the Soviet Union. As a result, it has to-day become a battle-ground on which every publicist with any pretensions to having a contemporary outlook feels impelled to fight; or, at least, to assume an attitude of belligerence. Unable any longer to neglect the immense practical achievements of Marxism, and alarmed by its growing influence not only on working-class but also on middle-class opinion, bourgeois opinion-formers of every complexion are increasingly constrained to take cognizance of it. As the Archbishop of York noted in his *Diocesan*

¹ This and the following quotation are from J. Maynard Kenyes, *The General Theory of Money, Etc.*, first published in 1936.

¹ In the letter already quoted, Marx and Engels, Selected Correspondence (p. 376).

² In view of the Government's threatening attitude to those who have been associated with Communists, I hesitated before naming these gentlemen. But since in their riper age they may all be considered to have "worked their passage," as Mr. Churchill would say, they will scarcely be endangered by references to what may now be regarded as the aberrations of impetuous middle age.

Gazette for January of this year: "Recently, on the Continent, I was greatly impressed by the confidence of members of the Communist Party; they have faith in a classless society free from social injustice, poverty and ignorance, and are pressing forward their plans for it." But his conviction that they will fail-because "they ignore the facts of sin and man's inability to reach perfection by his own power"--though it may comfort the dwindling body of convinced Christians whom he is so substantially paid to represent, avails little against the growing doubts of the agnostic majority. To stem their advance a heavier barrage is needed and every conceivable type of artillery is pressed into action, ranging from the antiquated blunderbuss of the Bishop of Truro (who recently described Communism as being "closely akin to the New Testament conception of anti-Christ, whose god was the State"), through the antiquated muzzle-loaders of liberal metaphysics (sterile arguments about "absolute" freedoms and the "inalienable rights" of the individual), to the intricate weapons of the logical positivists, who revive the most naïve mysticism in the guise of an up-to-the-minute science.1

But it is not the arguments of such opponents that to-day constitute the main danger to clear thinking on the subject. Since for the most part they make no pretence of having examined the theory of Marxism, their opposition to it carries no more weight than any other a priori declaration of principle. The real danger comes from the Philistines who, having acquired a superficial acquaintance with Marxism-often, it would appear, at second or third hand-claim either to have disproved it on theoretical grounds; or, more disingenuously, profess to accept or reject at will elements of what is essentially a self-consistent and coherent methodology. It is they who, by cluttering up the professedly progressive journals with their writings, give rise to the maximum of confusion, though both schools equally proclaim the immense practical and theoretical importance of reaching clarity as to the meaning and significance of Marxism. And this confusion is due, not in the main to evil intent on their part—though I think it is demonstrable that they are intellectually dishonest-but to the fact that they are content to discuss Marxism not in terms of truth, but of platitude, as distinguished in the opening paragraph of

this article. That they are *able* so to discuss it is because Marxist notions have acquired considerable currency: that they are *content* to, is because they are essentially celectics, a class of philosophers who, in the succinct definition of Liddell and Scott, "select such doctrines as please them in every school."

To attempt to substantiate this general charge by detailed reference to the wide variety of statements about Marxism by distinguished bourgeois ideologists from which it is derived would far exceed the scope of an article. Their volume is already considerable, and is daily increasing. Scholars as eminent as Lord Lindsay and Professor Toynbee, Catholic apologists like Miss Barbara Ward and Mr. Christopher Hollis, Social Democrats like Professor Herman Finer and the Prime Minister are only a few of those who, during the last few months, have attributed to Marxism ideas, concepts or beliefs which it would be quite impossible for them to substantiate by reference to the writings of Marx himself or of any of his most distinguished followers. Why they should do so-short of wilful fraudulence, which one hesitates to accuse them of—will be considered later. But first it is necessary to consider the nature of the attributions themselves; and this Mr. Kingsley Martin has made possible by conveniently collecting into a single article¹ a selection of the more common half-truths, mis-statements and confusions which may fairly be taken as generally representative of the Philistine, or platitudinous, view of Marxism. There are two additional reasons for choosing his article for refutation. In the first place, its title, "Marxism Re-viewed," proclaims that he has made a considered approach to his subject; in the second, during his long editorship of the New Statesman, Mr. Martin has established a solid reputation for being inspired by good, and often genuinely liberal, intentions.

His article opens with the disarming assertion, similar to that of Mr. Rowse quoted above, that just as "modern biologists are all Darwinians, in the sense that they take the broad factor of evolution for granted," so "serious students of history and sociology must be in some degree Marxists"—a proposition which, incidentally, if it were given effect would mow swathes in all the academic schools of sociology in Britain to-day. The virtue of this opinion, of course, lies in "in some degree"; for he goes on to explain that by this he means that they "must accept the broad truth of some of Marx's generalisations, even though they differ on many points

¹ Cf., for example, the dogmatic assertion by one of the founders of this school, Wittgenstein, that "What solipsism means is quite correct, only it cannot be said"; a notion which, for sheer nonsense, can be matched by innumerable statements by his followers—and, for that matter, his predecessors.

and find that the laws he laid down were over-simplified." And he identifies as the "central Marxist proposition" the broad truth that "long-distance trends of history have been determined not by individuals or by ideals but by economic and social forces." He begins, then, by vulgarising Marxism, for Marx never invited anyone to "accept the truth" of his or anyone else's generalisations without submitting them to the test of critical analysis and experience. Indeed, Engels might almost appear to have had a prophetic eye on Mr. Martin when he long ago gave warning that "our conception of history is above all a guide to study, not a lever for construction after the manner of the Hegelians . . . only too many of the younger Germans simply make use of the phrase, historical materialism (and everything can be turned into a phrase) in order to get their relatively scanty historical knowledge . . . fitted together into a neat system as quickly as possible." There is, however, this difference between Mr. Martin and the "younger Germans," that whereas the latter did apparently borrow the correct phrase from Marx, the former does not even do this. Instead of historical materialism or the materialist conception of history, either of which adequately describes the Marxist approach to history, Mr. Martin prefers to speak of economic, or historical, determinism-phrases which have been repeatedly rejected by Engels, Plekhanov, Lenin and Stalin, for the very good reason that Marxism is not economic determinism. To assume that it is and then, having revealed the inadequacy of this theory, to claim that one has disposed of Marxism, is a recurrent feature of the platitudinous method of argument. Unfortunately for the Philistines, however, it not only leaves Marxism untouched, but at the same time reveals their ignorance of it: for the dialectical conception of action and interaction, which is at the heart of Marxist methodology, is directly opposed to the merely mechanical notion of one-way cause and effect which is characteristic of economic determinism.

In a summary form this conception is to be found already in the third of the *Theses on Feuerbach*, which Marx jotted down in 1845 and which were to prove a notable turning point in his intellectual development. "The materialist doctrine that men are products of circumstances and upbringing and that, therefore, changed men are products of other circumstances and changed upbringing, forgets that circumstances are changed precisely by men and that the educator must himself be educated. . . . The coincidence of the

changing of circumstances and of human activity can only be conceived and rationally understood as revolutionising practice."1 But it is only by serious and patient study of Marx's historical writings themselves, as well as of those of his ablest followers, that the full significance of this idea can be grasped. And Mr. Martin is again typical of the platitudinists in that he gives no evidence of such study. Otherwise, as an intelligent and educated man, he could scarcely have the effrontery to ask his readers to accept as examples of Marxist historical interpretation such twaddle as the following: "The religious wars [of the sixteenth and seventeenth centuries] followed naturally2 on the break-up of the medieval peasant community, the ideology of which was Catholic; Christendom gave way to the new nationalism, in which kings claimed to represent national aspirations against the demands of Pope and Emperor." "Britain became a Protestant nation, not because Henry VIII wanted a divorce that the Pope refused him, but because his power rested on his popularity with the new middle class." "In the next two centuries, the middle classes [the Whig aristocracy?] steadily gained power . . . civil rights were generally extended as the era of free competition developed at the expense of dying feudalism and monopoly." No explanation of how the "new middle classes" came into existence—unless one is supposed to unravel one from his description of the Reformation as "the ideological expression of an inevitable national development due to technical and economic factors, such as the discovery of America and the inventions of printing and gunpowder." No mention of capitalism as a mode of production; no reference to the specific form of the class struggle; no faintest whisper, even as a concession to intellectual honesty, of the Marxist theory of the bourgeois revolution. But instead, a petty bourgeois dream picture of history "naturally" unfolding, under the aegis of the "middle classes," (the New Model Army would doubtless have subscribed to the New Statesman), as this "breaks up" and that "gives way" and the other is "generally extended" under the "inevitable" impulse of "technical factors," both of which had in any case been discovered in China centuries earlier without producing any such developments.

Yet this travesty of Marxism, the whole startling result of Mr. Martin's determination to "examine a little more closely this

¹ Marx and Engels, Selected Correspondence, p. 473.

¹ See Karl Marx, Selected Works, Vol. I, p. 471.

² I have taken the liberty of italicising certain words and phrases in the quotations from Mr. Kingsley's article, since many of them might otherwise strike the reader as being pointless.

famous generalisation about the economic interpretation of history," suffices to bring him to "the point at which the difference between the Marxist and the nineteenth-century Liberal is so immediately important for us." But his confusion is perhaps even more egregious at this point than at the earlier one, for he proceeds to misrepresent the Liberal as well as the Marxist. "According to the Liberal, these middle-class freedoms are fostered because men believe them to be good in themselves," he writes. But no selfrespecting nineteenth-century Liberal would possibly have made an admission so damaging to Liberalism. He believed the freedoms he fostered to be absolute, not middle class, and would have disowned Mr. Martin's Liberalism as being as platitudinous as he goes on to prove his Marxism to be. For to assert that, "according to the Marxist theory," when "monopoly capitalism leads to a period of contraction [Of what? Of bourgeois intellectual standards?], the capitalist class will find itself forced to reduce the worker's standard of living and to withdraw from him those democratic rights which would enable him to resist this process," is doubly to miss the Marxist boat. In the first place, because Mr. Martin's failure to differentiate between bourgeois and proletarian democratic rights obscures a distinction that is crucial to an understanding of Marxism; and, secondly, because the capitalists have never extended to the working class the only democratic right which would enable it "to resist this process"—the right, that is to say, already proclaimed in The Communist Manifesto, to "constitute itself the ruling class, to win the battle for democracy." Moreover, his deduction from his own false premiss, that "in general terms therefore the Fascist danger has always been understood by Marxists," is equally incorrect, since "the Fascist danger" only arose when competitive capitalism was supplanted by monopoly capitalism; a distinct stage in the evolution of capitalism whose implications, even in general terms, were not fully grasped until they were laid bare by Lenin. Nor does Mr. Martin's pedantically empty distinction between class conflict and class war save him from the crowning blunder of scolding Marx for having "assumed, far too easily, that the emergence of a working-class State would be a true democracy in which political freedom would be genuine because the economic domination of the ruling class would have disappeared." This is not only not Marxism, it is either shameless ignorance or impertinent falsification; for no well-informed person would pretend to expound the Marxist theory of democracy

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without having studied, at the very least, Lenin's State and Revolution; and no honest person who had done so could conceivably suppress all reference to the "dictatorship of the proletariat" or to the "withering away" of the State. Indeed, the most elementary understanding of either of these concepts might have saved Mr. Martin the humiliation of taking a bottom place in that Marxist Dunciad, the famous third section of the Manifesto, in which the German or "True" Socialists get such a merciless drubbing.

But Mr. Martin's ineptitude is irrepressible. No sooner has he sunk up to the eyes in the bog of "true democracy" where so many "true Liberals" before him have disappeared for good, than he ventures onto equally treacherous ground by presuming "to test" Marxism "as the basis of prophecy." To the orthodox Marxist view that "ideas are derivative, and not in themselves the determining factor in history," he adds the distorting gloss that "Economic determinism does not mean that the individual is powerless to affect events, but that he can only do so within limits." Now this would be a reasonable, if rather trite, statement if he were talking about historical materialism. But as a "test" of Marxism it is utterly irrelevant to assert that economic determinism is only determinism "within limits"; and it is not surprising that it leads him to the demonstrably unsound conclusion that "To be effective, ideas must flow with the current of the age." Such intellectual fluidity might pass muster in a Cambridge undergraduate aspiring to be elected to the Apostles, but it is altogether lacking in the clarity one has a right to demand from a contributor to a serious political quarterly. For both Bismarck's and Marx's ideas were effective but, since they were usually diametrically opposed, it is difficult to see how they both can be said to have flowed with the current of the age. On the other hand, if Mr. Martin should maintain that he is using the words in a different sense, how is one to explain the fact that his ideas, which unquestionably often flow with the current of the age, are so frequently ineffective? Clearly, economic determinism is an awkward concept to handle, which may explain why in the next sentence he jumps to a quite different "test." "Secondly," he continues, "these social forces produce in any form of society an emergent class which struggles against the existing order." But his argument, though different, is no less opaque. For, in the context, "these social forces" can only apply to ideas, and this would be contrary to economic determinism as well as to Marxism; while in the very next sentence he proceeds: "If we put this in

Marxist terms, there is always 'a thesis,' that is, an existing social compromise; an 'antithesis,' which is the new concept of the oppressed and struggling class, and a new [?] 'synthesis' to be obtained when the existing struggle is resolved." No wonder Plekhanov warned amateurs against fooling about with the famous "triad,"1 since it leads to such un-Hegelian as well as un-Marxist nonsense. For if a synthesis is the result of a "concept's" struggle with a "compromise," one might conceivably describe a political discussion between Mr. Martin and his Assistant Editor, Mr. Crossman, as "synthetic"; but it is utterly incomprehensible how "these Marxist terms" can be twisted to the conclusion that "Thus Christendom gave way to the nationalist middle-class State, which in turn must yield to the working-class State of the future." Search Marx's writings with a toothcomb, and nowhere will you find him substituting such vague euphemisms as "Christendom" and "the nationalist middle-class State" for his precise definitions of the feudal and capitalist modes of production and their respective political superstructures; while to describe the revolutionary process to which Marx attributes the supersession of one form of class power by another in terms of "yielding" and "giving way" is so gross a misrepresentation that one would have supposed even the most confirmed platitudinist would have hesitated to father it.

Yet it merely serves Mr. Martin to introduce his final "test." "Thirdly," he writes, "Marx insists that the course of this struggle [the struggle involved in 'giving way' and 'yielding'?] is determined by technical advances. . . . Such technical changes produced the middle-class nationalism of the sixteenth century. . . . To-day, the Marxist argues, new technical changes . . . make collectivist planning and international organisation the inescapable alternative to chaos." Once again this is the merest vulgarisation of Marxist theory. In the first place, it completely slurs over the distinction and the connection, both fundamental to Marxism, between changes in the forces of production (technical changes) and in the relations of production which, as Marx explicitly pointed out, being necessarily property relations, are therefore class relations. In the second place, it obscures the more involved, but equally important, distinction and connection between the mode of production and the ideological superstructure; where, as Marx noted in a classic passage, "a distinction should always be made

between the material transformation of the economic conditions of production which can be determined with the precision of natural science, and the legal, political, religious, aesthetic or philosophic—in short, ideological forms in which men become conscious of this conflict and fight it out."

For Mr. Martin to suggest, therefore, that "From these generalisations, the Marxists have been able to make many striking prophecies" is to dismiss Marx's tremendous achievements of intellect and scholarship as of no account. For if a few blindly fluttering non-sequiturs escaped from the muddled head of a busy journalist were, in fact, a sufficient basis for the profound and scientifically based predictions of Marx, the immense labour that went to the writing of Capital was so much waste of time. His ideas would have been equally, if indeed not more, "effective" had he been content passively to wait for "the current of the age" to wash up the Editor of the New Statesman and Nation. Small wonder, then, that the one "prophecy" which has seriously impressed Mr. Martin is not Marx's prediction of the inevitably deepening crises of capitalism, nor of the growing intensity of the class struggle, nor of the victory of Socialism, but the infinitely more superficial, though none the less remarkably accurate, forecast of the character of the 1914-18 World War which Engels made in 1888. But this owed much more to "the General's" common sense and knowledge of military science than to his profound grasp of Marxism; though, of course, it has just the kind of "news value" to commend it as material for a snug little gossip amongst literary people.

Since, however, Marxists have consistently disclaimed any pretensions to being prophets and have been content to study as precisely as they can what the *Manifesto* describes as "the real movement going on under our very eyes," it is permissible to skip Mr. Martin's hypothetical and sketchy account of the Marxist analysis of the interwar period, and leave him to the untroubled contemplation of his sensible warning on this topic: "The philosopher-historian . . . if he is wise will carefully refrain from detailed or short-term prophecy, because the emergence of genius (a separate biological accident) and the pace at which the events will develop are unpredictable."

Unfortunately, however, Mr. Martin at once turns from the path of wisdom and launches himself into "the intense inane" of untrammelled speculation about the future of Western civilisation.

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 $^{^{1}\,\}mathrm{See}$ his brilliant polemic against Mikhailovsky in In Defence of Materialism (pp. 99-100).

¹ Preface to the Introduction to the Critique of Political Economy (1859): see Karl Marx, Selected Works, Vol. I, p. 356.

"Technically," he asserts, whatever that may mean, "technically, it seems possible that the problem [of achieving One World, with capital letters] could be solved either by greater private monopolists or by socialists, and neither I nor anyone else can say for certain which will win." But having assumed for a moment the serene impartiality of the "philosopher-historian," who, unlike Marxists, is, of course, concerned with explaining, and not changing, the world (and mindful perhaps of M. Benda's biting aphorism of twenty years ago, that "On a pu voir que le délire de l'impartialité mène a l'iniquité, tout comme un autre")1 he almost immediately relaxes his "objectivity" and nearly comes down on the side of the communist. At least he goes as far as admitting that "the communist is probably, but not certainly, right in believing that the inherent difficulties of capitalism will lead after many upheavals and great social misery to a socialist world state. But"-and one cannot forbear pausing in admiration of this little word, the hallmark of every truly platitudinous Philistine—"but there are many routes to this world state, and it is by no means certain that after the completion of this revolution, those who rule will still have in mind the objects for which their followers will have fought and died."

And here we take leave of Mr. Martin's article, for its concluding paragraphs—apart from the startling claim that "To me the result of re-viewing Marxism is clear enough"-reveal nothing but the shuddering bewilderment of the middle-class intellectual at the thought that he will one day have to make up his mind on which side he stands; an exhibition of feeling which makes the weekly perusal of the New Statesman such a painful experience for the tender-hearted. But it still remains to be answered why these men, whom Mr. Martin has here been chosen to represent, so kindly, so well-informed on so many subjects, even, within narrow limits, so eagerly progressive; why, whenever they encounter Marxism, whether to pat it on the head or to attempt to stab it in the heart, why are they so invariably reduced to flagrant misrepresentation and insipid eelecticism? Surely it cannot be that they seek wilfully to mislead the opinion which they are professionally dedicated, as well as handsomely paid, to inform? One prefers the more objective explanation that, in spite of their learning, their training, and frequently of their very real gifts, they too are subject to the Marxist "law" that ultimately men's consciousness is determined

by their social being, by the material conditions in which they earn their living. And what these conditions were and, for a dwindling majority, still are, was recently described by the Dean of the Platitudinous Faculty, Professor Gilbert Murray, in a passage as naïve as it is touchingly nostalgic. Speaking in another capacity, in his Presidential Address of 1946 to the Society for Hellenic Studies, he said: "I belong to the old peaceful world, which could afford to be cultured and liberal and to support a class whose interests are in the pursuit of the higher values, and who, while they lived for the most part industriously and moderately, were not in any feverish anxiety about salaries and wages." What he complacently overlooks is the fact that, in capitalist society, the price of these higher values has always been paid, not by the industry and moderation of Professor Murray's class, but by the exploitation of the workers of Britain and of the Colonies; and though, as a platitudinous Liberal, he may perhaps be forgiven for this ignorance, that excuse is not open to Mr. Martin and those like him who, however platitudinously, at least claim to be expounding Marxism. If they elect to turn their back on the class struggle, by refusing to take their stand firmly in the ranks of the working class, where there is plenty of scope for their idealism and their ability, that is their look out. Only they should not be surprised if history re-echoes Cromwell's caustic question: "It had been well that men of honour and birth had entered into these employments, but why do they not appear?" And if, when professing to discuss Marxism, they distort it because they are either too lazy or too timid or too ignorant to grasp the implications of the class struggle, which is every whit as exacting in the ideological as in the political sphere, they must not complain when the workers regard them as pusillanimous hangers-on of their class enemy. For the workers, too, are in pursuit of the higher values. But they know from bitter experience that in order to achieve them they have, first of all, "to constitute themselves the ruling class" by waging the class struggle to the end, not in the misty realms of "true democracy," but in the real world of capitalism. And they can hardly be expected to show undue concern for those middle-class intellectuals who, in no "feverish anxiety about salaries and wages," insist on appropriating to themselves the epitaph Ford Madox Ford wrote for an earlier generation: "We were fitted neither for defeat nor for victory; we could be true to neither friend nor foe. Not even to ourselves!"1

¹ Julien Benda, *La Trahison des Clercs*, p. 228: "It may be seen that a passion for impartiality leads to iniquity, just like any other."

¹ In his novel, Some Do Not (p. 199), recently re-issued as a Penguin.

The Science and Art of Music

BY RUTLAND BOUGHTON

USIC, like the other arts, has two aspects. It is a language of emotional expression and communication, and it is a craft whereby are revealed sound-aspects of the thing called Beauty.

As the idea of Beauty varies among men, and at different times, I propose to confine the thought of it here to the objective aspect of works which exploit and emphasise the nature of musical material. That material is sound which is mentally satisfying independently of the emotional expression with which it was associated in its origin. Such sound is based upon laws of acoustics and architectonics. The difference between music and noise is the difference between orderly and disorderly air waves. Musical sound becomes musical art when its acoustical basis is associated with laws of architectonics in the expression of emotion.

Architectonics are, according to the small Oxford Dictionary, laws of architecture. It is not without significance that architectural laws were given a name partly derived from the art of music of which they govern the development; and we shall have occasion to observe analogous details in those two arts.

The vital impulse which brings music into being is emotional. The laws which govern its growth, and make possible the perdurance of a minority of works beyond the age of their direct emotional importance, constitute the quality we call Beauty.

The instinctive use of music for purposes of emotional expression preceded knowledge of its physical nature, and, what is especially germane to this article, preceded attempts to organise it as a craft.

The emotional sounds which accompanied primitive dances can have been only approximately musical. We had audible evidence of that recently in the broadcast from South Africa of a Zulu war-dance. Folk-music was definitely musical, though not a conscious craft. A certain degree of craftsmanship entered into folk-piping and folk-fiddling, but that was pipe-craft or fiddle-craft, not music-craft. The earliest folk-music, arising in an instinctive urge to emotional expression, was not made according to any known laws or, in its first stages, even recognised rules; but once made, a certain dogmatic tradition helped to secure its preservation

and govern its growth. In folk-music with words—choral dances, choruses, and songs—the words indicated a certain degree of conscious expression; but the rhythm, melody, and occasional harmony remained instinctive. To such a degree was the music instinctive that folk-singers have often been unable to remember their tunes unless they could also remember the more consciously made words with which the tunes were associated.

So far as emotional expression was concerned, primitive music was probably adequate to the needs of the people who made it. The emotional discharge in savage dances and folk-music must have been as satisfying for its occasions as the most fully developed forms of musical art for ours. Folk-music was an advance on the more primitive music not merely because of its artistic growth but also because it expressed the more constructive and varied occasions of agricultural as compared with nomadic life.

As early as the ninth century of Christian civilisation attempts were made to develop a system whereby music could be preserved in writing; but not for another four hundred years was there any significant development of music as a craft; and by that time there existed instinctively made works proving an advanced sense of rhythmelodic form, and even some simultaneous use of differing melodies. Therefrom issued the sense of harmony. Such music proved the need for an expression which combined the melodic ideas of individual men with the rhythmic and harmonic sense which united them in social emotions. Those combinations were presently used by craftsmen who gradually analysed the harmonic effects and defined rules of counterpoint. The harmonic rules were in fact based upon acoustical laws long before there was a science of acoustics, and the octave and twelfth were felt as concordant long before their mathematical basis was known. So the organisation of music upon an instinctive scientific basis was made possible, and a monk of Reading composed, or, more probably, recorded and revised, the secular round, "Sumer is icumen in." That work proves the existence of two streams of music-making—the popular folk art and the clerical craft. As emotional expression the secular art was the more effective though its development was strengthened by the experiments of sympathetic craftsmen.

During the earliest period of music-craft its emotional values were inevitably regarded as of lesser importance, though they gradually reassumed creative control as musicians became more skilled and craftsmanship itself became a subconscious effort.

(That, of course, has been the experience of composers in all ages.) But ecclesiastical musicians were actually instructed to avoid emotional expression. Church authority tried to censor those factors which were most expressive in folk-music—the major scale, which had been evolving independently of the craftsmen, and above all the element of rhythm, the factor which made music most vital, definitely relating it to physical aspects of human life. Popular polyphony was called "heterophony"; its natural development was regarded by the Church as musical heresy. Plain-song, which derived from an undeveloped scale sense and ignored the natural rhythms of the human body, was the official musical language of the Church. The result was, of course, that Church music was dull and weak as compared with the more instinctively made secular music.

By the sixteenth century the secular pieces made by the craftsmen themselves were more emotionally expressive than their sacred pieces, even when a more skilful craft was applied to the latter. Compare the music of Palestrina with the music of his contemporary, Monteverdi: Palestrina was the more exquisite craftsman, but because his work was shackled by ecclesiastical rule (a rule which, incidentally, he tried to dodge), his capacity for emotional expression was exceeded by that of Monteverdi the opera-composer. We find the same sort of difference a hundred years later in the works of the English composer Purcell. He was free of the pedantic limitations that had fettered Palestrina, but his raggle-taggle operas, written for the harum-scarum Court of Charles II, evidence a considerable emotional impulse, while his anthems are more respectable for their craftsmanship.

It was in the music of Bach at the beginning of the eighteenth century that a scientific basis for music was fairly established and consistently applied to its original purpose of emotional expression. As a science, it was still largely instinctive and subconscious, for the physics of music were not adequately explored for another hundred years; but the Forty-eight Preludes and Fugues of Bach were the triumphant statement of a scientific subdivision of the octave whereby the semitonal scale became possible, and a rain-bow range of musical colour made available the more subtly to express human emotions. By that time acoustical laws were more fully felt and applied in the acceptance of the Harmonic Series as governing the development of harmony; and it is interesting to note, as further evidence of the manner in which the art has

preceded the science of music, that the growth of the harmonic sense has been associated with the gradual addition of the higher partials as recognisable chord components. The craft of harmony has evidently depended upon an extension of the aural capacity.

Architectonic laws attained in the music of Bach the fullest statement and revelation within the monothematic form.

The most fundamental law of architectonics is the law of repetition. To follow musical phrase endlessly by differing musical phrases results in a vague effect without formative suggestion or expressive emphasis. The repetition of a phrase is vital to its recognition as a leading constituent of a musical work as the repetition of doorpost to sustain the lintel; and that very form of repeated column and superposed arch has its musical counterpart in one of the forms most used by Bach—the aria form, in which two exactly similar sections of music are interconnected by a differing section.

The law of repetition has been instinctively used from the earliest times when it was proved by a single recurring phrase. It has developed in forms of sequence (the same phrase repeated at a different level) and by varying and extending its detail, to its finest exposition in the hands of Bach, Beethoven, and Wagner. In the fugal forms achieved by Bach it gives manifold and changing expression to a single idea; many voices are united to develop a central emotion in a variety of ways. That social form is filled with separate and even conflicting details; but within it acoustical laws work to ensure a sufficient harmonic compromise, resolving differences (discords) in the concordant conception of the whole.

Bach was the first great master to use a fully developed musical craft for the expression of emotions deeper, more widely ranging, and more explicitly social than had been possible in the pre-scientific period. Even in the music of such composers as Monteverdi and Purcell the personal emotion is restricted and uncertain while its social expressions were confined within the feudal and bourgeois experience. Not only were they without the scientific substructure available for Bach; they were also without the passionate human background of the Reformation, which was still urgent in Bach's time, though its economic reality was clouded by the terminology of Lutheranism. Monteverdi had been the servant of men who had retired from reality into the world of culture for culture's sake. Purcell had staggered to and fro between Court lasciviousness and

bourgeois respectability, with here and there a humorous but cynical tribute to popular vitality.

Bach was greater than any music-maker before him (and, as many think, greater than any since his time), not only because he was the most skilful exponent of a complicated art, but also because he gave expression to the feelings of men who were still active in the defence of Christian civilisation. Those are two aspects of the same fact. The polyphonic complications of his craft were a natural evolutionary form expressing the social emotions of men consciously engaged in opposing the betrayal of civilisation by an enemy who had penetrated even into the Church-into the very body which, in their view, had been organised to maintain that civilisation. The censored forms of ecclesiastical musicians were of no use for the expression of their emotions. Bach had to use the popular and complicated form foreshadowed by "Sumer is icumen in." The round had grown into the fugue. The folk-song had developed into the aria, while preserving its more primitive and popular shape in the chorale; the choral dance into choruses wherein the folk-song shape was glorified by dancing figures of intermingling voices and instruments, and in a few examples by the original rhythm of the physical dance itself.

That such music was made late in the history of our civilisation and after the subversion of the fraternal conception implicit in Christianity, does not affect its expressional significance, though it made of Bach a rebel in expression while remaining a conservative in craft.

Petrie, in his Revolutions of Civilisation, showed how music is naturally the last of the arts to be fully developed. We can appreciate the reason for that. Men must first have architecture that they may be fitly housed. Sculpture follows to declare the purpose of and pride in the building, painting to give more detailed ideas of pride and purpose, and further to hint at the aims of the living. Literature relates experience and desire more explicitly to the growing reason. Finally, music enforces that reason with all that can be expressed of emotional will; and the more social the will the more complex and powerful the expression. Given a reasonable social life, a sympathetic craftsman will be obliged to express social emotions, his personal reaction to those emotions in a lesser degree and in minor forms of art, for its major forms involve association with other craftsmen. A personal fancy may be carved on a wooden spoon or played on a single fiddle, but sculpture on

public buildings and orchestral symphonics are works wherein the public is creatively as well as receptively concerned. Bach was not infrequently self-expressive, and for a short time he was the servant of a feudally exclusive art; but for the greater part of his career he was a public servant of the Protestant Church, which had proclaimed the popular will to free men's minds from the Roman decadence. In that last capacity he was necessarily concerned to utter the mass emotions of his time, and while inevitably incorporating his own personality was none the less forced to increase the objective aspects of his art.

Objective elements in art, in their inception the result of mass feeling, come to be regarded in course of time as characteristics peculiar to certain artists. Thus Bach's musical response to objective nature—his music for wings, waves, and light—the expression of a will to draw external nature into the human heart—have been regarded as personal to him; but they were part of the mental growth of his age, and their parallels are to be found in Dürer and other German painters, and even in Bach's own musical forerunners. They formed a part of the passage from superstition to materialism.

Protestant artists inclined to cease from the futile effort of spinning webs from the spirit world of their own lonely minds, and adventure into the real world, where they mingled with other men, with beasts and trees. Later on that adventure was less convincingly essayed by Catholic musicians, for the Roman Church has always known how to readjust itself to an invincible tendency. Thus Haydn ventured into the same objective sphere; but his objectivity omitted the human relation, whereas in Bach the expression had not merely been of the nature world without, but of the effect of that world upon human feeling.

In Italy, where the counter-revolution had been successful, we have already seen how Palestrina was penned in a conventual, and Monteverdi had reacted into a feudal, art. As Protestantism was influenced less by the people and more by the bourgeoisie in Germany the multi-melodied music of Bach was superseded by Italian and chiefly feudal forms.

Polyphonic music is essentially a music made for those who perform it; for listeners only in a lesser degree. Listen to a Bach organ fugue. So long as there are only three parts, one on the pedals, the others on separate manuals with differing tone-colour, a listener can follow the three interweaving voices. The same fugue

played on the mono-coloured piano sounds less clear when the three parts are in simultaneous progress. When we hear Bach's works for chorus and orchestra the further complications reduce still further the detailed and therefore the synthetic capacity of the listener. But the actual performers enjoy one of the finest musical experiences: they realise themselves as separate personalities, but hear and feel other personalities meeting them, acknowledging relationship, and moving away in a discipline of beauty to give place to yet other personalities, each throwing a variation upon the central theme; while now and again, and especially at a climax, the whole mass becomes fused in a simultaneous harmonic statement which means much to the emotions of the performers, but to listeners arrives rather as an island in a turmoil of waters.

But Italian musicians had become the mere servants of retiring feudalists or the growing bourgeoisie. They made their music as servant for master, performer for patron, as music-maker for condescending listener. So different forms had to be developed—forms more suited to smaller and sheltered groups of players and singers, and suited to those keyed instruments by means of which the musical thought could be dominated by a single performer. This emphasis on the soloist certainly extended the executive means of music, though it weakened its emotional content. Harmony superseded polyphony as the basis of musical art, dance-rhythm became anæmic as it passed from country green to lordly palace, melody shrivelled into phrase or was dissipated in arabesque, while the general rhythmelodic progress was broken by cadenza conceits.

Haydn's was music of a transitional period, and had occasional reactions to polyphony and folk forms. Mozart was the great master of the homophonic, the harmonic style. Acoustics govern the new style even more than the old. The harmonies of polyphony are comparatively accidental, resulting from the clash and appeasement of jostling voices. An harmonic style inevitably involves a more personal choice of chords, and the very deliberation seems to have resulted in a diminished harmonic sense. Mozart's harmony is less varied than Bach's.

The architectonics of music had also to be presented in another way, and one curiously corresponding to the change from Gothic to Renaissance architecture. Bach's music disclosed the multifarious aspects of a single idea. He wrote double fugues; but even in them the second subject is planned as accessory to the first.

Moreover, even in his arias, containing a middle part contrasting with the two chief pillars of his structure, the contrast is defined less by subject-matter than by variation of mood. But Mozart raised his second themes to a level of equal importance with his first. He asserted the law of repetition, not only to make his phraseology intelligible and integral, but also to confirm the interrelation of the different sections of his works. Between his chief themes come episodes of lesser and contrasting value, often being passages which transfer the interest from the content of the music to the mere skill of the performer. During his development as composer (as distinct from performer) the will to display gave place to the will to create, and the element of arabesque in his thematic material was developed in such a manner that the decorative detail grew constructively from the chief themes. So Mozart's works gradually surpassed Haydn's in architectonic mastery, though at first his emotional expression was less vital because of Haydn's reluctance to forgo his folk origins.

Mozart's earlier works were the work of a youth, and their emotional impetus trivial as compared with the works of Bach, and even of those works of Haydn in which he reverted to the moods of country life. Mozart's deficiency in that regard is no less obvious in his early operas; but through the musical tissue of his later operas we can trace his increasing objective interest in human character and with that, of the growth of his expressive capacity. That growth affected his instrumental works as well. It was associated with an increasing rebellion against his clerico-princely employer. Mozart could become a skilled craftsman within the feudal atmosphere; but did not become a great composer until he entered into relation with the greater world wherein was an undercurrent of revolt; and it was directly from that position that the next still greater master moved forward.

Beethoven started from the forms developed by Haydn and Mozart, but from the outset he applied architectonic laws with greater freedom to suit an emotional content of increased revolt. He incorporated forms of folk-music so that his phrases often grew into tunes. He also incorporated polyphonic methods without rejecting the homophonic style he had inherited. Haydn and Mozart had sometimes reverted to polyphonic methods; but for them it was rather a craftsman's tradition than occasioned by the social need for such expression, much like the remains of Gothic tradition in the Renaissance period of architecture. Beethoven's

use of instrumental polyphony was curiously associated with the idea of Prometheus and the French Revolution. Finally, he declared himself in the more definite terms of vocal music: "Be embraced, O ve millions."

The second great master in the story of European music appears as a rebel even in his earliest works; and he finally shattered the sonata form so carefully built by his predecessors as a fitting shell for the expression of a narrower human life. Beethoven reasserted folk-melody, and violently reasserted folk-dance rhythm. He tore his way into polyphony, though he never became so skilled a master of it as Bach. He emphasised dissonance to such an extent that to this day musicians are puzzled to account for the false re-entry of a chief theme in the Heroic Symphony. Was it a slip of the pen, a miscue due to his deafness, or an intentional cacophony? The whole question of dissonance in music is one which needs a careful analysis, for men have only to be unaware of its expressive value to reject it as unpleasant or to admit it in all sorts of odd connections. We must return to the subject presently.

Beethoven's use of dissonance seems to have been an essential part of a personal revolt, and he used it more vehemently than his predecessors had done, but did not increase its range. It was like his rebellion against political evil and conventional form, an instinctive reaction. He died shaking his fist at the sky, but in so far as he had expressed himself in conscious terms he was a mystic, an idealist

in relation to the millions he would embrace.

He was followed by lesser men who played with their art as with a splendid toy, but did little to carry further its capacity for human expression. Weber, Rossini, Schumann, and Mendelssohn were masters of their craft, and well able to exploit such of its matter, as had already been discovered. Schubert was something more, developing the folk-song in petit bourgeois terms, and bringing it into relation with the instrumental possibilities of his time. But none of them were men capable of revealing such deep human experience as we feel in the works of Bach, Beethoven, and the later Mozart. The bourgeois world which made rebels of them could not offer incitement for fresh musical growth until it produced another rebel, and one even more conscious of his creative position.

Wagner started as an opera-composer, weighed up his position and found it wanting; made an early success with Rienzi, a work with a popular background in both story and style; and became so conscious a political rebel that he was actively involved in the Dresden rising of 1848. During his subsequent exile, he examined the relations of his art to the world of his time and stated his conclusions in a series of prose works. They are now ridiculed, partly because of their pseudo-philosophy, but chiefly because they constitute an indictment against the parasitic and exclusive lives of musicians. And Wagner weakened his life-work by a careerist recantation, so that Engels was justified in severe criticism of a man who had given artistic expression to the very feelings that moved Engels himself to action. So a distortion of Wagner's musical and dramatic significance became a weapon in the hands of the Nazis. But the dramas of Wagner are too important in the history of art for that distortion to be allowed to continue. He committed the crime of sacrificing his principles for the sake of his career, but that was after most of his works had been made in the creative faith of his earlier life. And he left behind him notes for an essay from which I need only quote the following:

"You believe that with the foundering of our present conditions and the beginning of the new, the communistic order of the world, history, the historical life of mankind would cease? Precisely the opposite: for then will actual, clear historic life begin.1

Even Schumann the recluse had written a couple of revolutionary songs, as Wordsworth had written revolutionary poetry; but neither of them enlarged the powers of their material as the powers of music were enlarged by Wagner when he instinctively expressed the social emotions of a revolutionary period in which he had been politically conscious and an active participant.

Architectonic laws were admitted by Wagner on a larger scale than before to suit the needs of his extended dramatic form. He found the opera a thing of disconnected bits and pieces, and made of it a unity. It is not merely that the acts of his dramas are musically continuous, but that each vocal and instrumental section is part of an organic whole. The formal relations of the thematic material in symphonic music became in Wagner's hands also dramatic relations. Symphonic conventions had prevailed in the operas of his predecessors even when they made nonsense of the drama; Wagner's use of his thematic material in a dramatic

¹ Wagner, *Prose Works*, Eng. trans. by Ashton Ellis, Vol. VIII. Mr. Ernest Newman, who is probably the chief living authority on Wagner, tells me that those notes may have been written before the Bayreuth period. Even so, the fact that Wagner did not destroy such evidence of his earlier, freer thought is not without significance.

relationship presents the emotional values of music in a more direct and consistent manner. And Wagner not only used his themes to reveal the inner development of his dramatic ideas; he balanced them with increasing architectonic assurance, so that Walther's Prize Song binds the third act of *The Mastersingers* as securely as Beethoven's folkish tune binds the finale of the *Ninth Symphony*.

An extension of acoustic law was explored by Wagner's harmony and orchestral colour; for inasmuch as the sounding difference between one instrument and another depends upon differences in the combination of notes of the Harmonic Series, orchestral colour is clearly a development of harmony itself. Chordal harmony in Wagner's hands ranged more widely as a direct result of dramatic necessity. His instinctive use of varying dissonances, some of them previously unrecognised, extended the field of musically expressible emotion. His increased and adventurous use of dissonance was not due to the jaded sense that needs to be stimulated by the spicery of discord, but from a need to express more subtle differences in human character.

In the reasonable and unreasonable use of dissonance we reach what is, I believe, the essence of the crisis in modern music. The emphasis in post-Wagnerian music has lain on dissonance without dramatic significance, dissonance for dissonance's sake because consonance is so tame. Well, a continuity of consonance is dull indeed; but if the original and vital value of music is to be maintained we cannot consider dissonance apart from its expressive power, and apart from our aural and emotional reactions to it; and it is certainly a fact that the non-dramatic prevalence of cacophonous sound in the music of our time is associated with an increasing bewilderment among the musical public. The sincerity of many modern composers is as indisputable as the confusion of the lay music-lovers. The problems involved should not be beyond solution.

A mood of complete agreement and identity is at once felt in the unison. The agreement of compromise is perfectly expressed by the compromise of the major, and more doubtfully by the minor, common chord. But the interest we have in life and in one and another is quickened just in those matters wherein we are in disagreement, while the most exciting and dangerous moments arise when disagreement becomes passionate and fierce. So we realise that while moods of agreement are comparatively limited in the

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matter of musical expression moods of disagreement cover a very wide range of dissonantal combination. So long as music has no clear dramatic relationship, discords merely indicate a degree of discomfort which (unless we enjoy it) must sooner or later be relieved by concord. The significant fact is that until such dramatic relationship was fairly established by Wagner the range of dissonance was extraordinarily narrow. Palestrina needed it merely to restore the rhythmic sense of which he had been deprived by pontifical order. For Bach it was incidental, almost accidental, in the clash of his many parts. Like the earlier masters, Mozart and Beethoven continued to use it to emphasise their consonances. But its growth in Wagner's hands was the direct result of his interest in the world outside. What had been almost entirely subjective when applied by previous composers became objective also. Harmony, when unrelated to living expression, is a thing-in-itself; for a personally-minded composer it is a thing-for-me; but when it is an inevitable part of social expression it becomes a thing-forus-all. So long as music is regarded as a mysteriously isolated art composers have an excuse for imposing their own more exquisite or more vulgar sense of hearing, and enjoy a take-it-or-leave-it attitude to any possible audience; but music having social implications cannot disregard the capacities of performers and audiences, though, of course, the specialist may well be capable of leading less specialised music-lovers through experiences previously unknown. Wagner did just that. While he was objectively concerned with dramatic ideas, his use of music was such that, however new the merely tonal experience, his audiences were also aware of an inner drama and became emotionally identified with it. That surely is the reason why musico-dramatic art has existed, even in the illogical form of opera. There is a certain identification of ourselves with some characters in a spoken drama, though we become objective to its villains; but when dramatic art is associated with a true music we are not merely moved to sympathy with its admirable characters, but are responsive to the emotional impulses even of those of whom we think we ought to disapprove. That may have been the reason why some respectable people were especially annoyed by Tristan and Isolde!

Why since Wagner has the art of music developed so little? Why to-day do we seem to be faced by a choice between academic and crazy expressions in music?

Wagner said that after so full an emotional capacity as had been

proved by the music of Beethoven its future must take a dramatic form. Some musicians have ridiculed that idea as a mere expression of Wagner's own predilection, and because pleasant music has been written since Wagner's time. But the later history of music proves the truth of the suggestion.

Not only music, but all the arts reach a certain degree of expressive capacity, after which they stagnate or decay unless they are consciously applied to the expression of human life. Vernon Lee, in her studies of Renaissance art, showed how that moment arrived in the art of painting. The technic of painters having been fully developed, all subsequent indications "show how intimately dramatic imagination depends in art upon mere technical means, how hopelessly limited to mere indication were the early artists, how forced along the path of dramatic realisation are the men of modern times."

It is an historical fact that since Beethoven's time composers of instrumental works have tried to give a dramatic significance to their music, hinting at objective content by means of titles and programmes. But, as human expression, works like Schumann's Carnival and the Fantastic Symphony of Berlioz are half measures. They evoke without satisfying enquiry.

Instrumental music satisfies the desire for a certain kind of musical experience in which the material world is ignored. To suggest anything of the extra-musical world as germane to the appreciation of the music, while withholding a definite application, is to pawn the dream quality of music and be paid in a clipped coinage.

The untitled pieces of Schubert, Schumann, Brahms, Chopin, and Debussy have a dream value. Their fancifully titled pieces have no more, and have even that in a less degree if conscious thought aroused by the title disturbs the dream flow. The queries they evoke must be answered in more material terms. It was a matter with which Beethoven had experimented in his *Pastoral Symphony*, and the very experiment resulted in a poorer music than in his other symphonies.

The problem is even more acute in lengthy instrumental works with planned programmes. The symphonic poems of Richard Strauss and other composers expose the difficulty. In such works we may listen to the music as such and be brought up short at moments when its logical flow is broken by the need to emphasise an extra-musical detail, or we may bear in mind its proposed

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programme and so abjure the listening faculty itself. We hover between subjective and objective: a synthesis is not clearly or continuously effected.

Unsatisfactory though such efforts were during the historical period from Beethoven to Wagner, they were significant of the fact that composers were being "forced along the path of dramatic realisation." Something was added to the thematic and harmonic detail of music because there is an infinite variety in human personality; but little of historical evolutionary significance, because personal expression necessarily exists in a comparatively narrow subjective world. The lyrical genius of Schubert was capable of developing melody beyond the folk form re-established by Beethoven, but his amusing and characteristic modulations are will-o'the-wispish, leading nowhere.

But as a result of Wagner's application of music to the drama there was at once an enormous expansion of rhythm, melody, harmony, modulation, tone colour, and architectonic form, and even a limited expansion of polyphony which he was the first to apply with clear dramatic significance. The ensembles of Mozart's operas depend on polyphonic skill, but are not really significant because they are repetitious and confused in audible result; and they are based less upon dramatic need than upon an operatic tradition which demanded increase of dynamic effect for climax. The contrapuntal music in *The Mastersingers* is the natural musical expression of the objective association of burghers, apprentices, and the Mastersinger himself in his character of lover.

Now compare the Wagnerian synthesis with what has happened in music since Wagner's time. Its larger forms have accepted Wagner's musical discoveries, with but rare appreciation of the social implications of which they were the creative expression; or they have been associated with the less defined dramatic form of the ballet and the as yet inchoate musical art of the film; or they have been thrown back into symphonic forms wherein architectonic skill is undermined by emotional vagary.

Efforts to develop details of music apart from the need for social and dramatic expression have resulted in inflations, depressions, and even denials of their nature.

Rhythm, arising in the natural working of the heart, lungs, and limbs, has been denied by misplaced and tortured accents, or monotonously insisted upon to the detriment of music's later and finer features. Both those diseasy malpractices are employed in the

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pretentious works of Stravinsky, and by the more modest composers of the dancing halls. Such jerks are significantly suitable when human beings are supplanted by puppets, as in *Petrouchka*, or when modern townsfolk despire to an imaginary condition of primitive life, as in *Sacre du Printemps* and jazz; but have no value as an expression of what is creative in the life of to-day.

Melody—honey-sound—seems to be the least easily definable element in music though it is the most obvious. A good tune we call melodious, and we speak of a melodic phrase. In each case we seem to mean such phrase or tune as can be happily reproduced by the human voice. Certain it is that the outstanding melodies of the world flow within a limited and vocal compass. Beethoven's, Schubert's, and Wagner's tunes do not greatly extend beyond the compass of folk-tunes. The sprawling horn-opening of Heldenleben may be a fitting melodic expression for the Self as Hero, but that is an inflation rather than a development of melody. In fact melody still seems to be chiefly significant as a modest expression of single personality; and the cloying sweetness of overmuch melody in large works may possibly be due to an over-emphasis of the personal line in what should be a social expression. Nevertheless, music without melodic details is as unconvincing an art as society without personalities; and it is clearly no rational development when Stravinsky scribbles meaningless noises around pseudo-folktunes, and Schoenberg runs away from honey to enjoy bee-stings from what is sweet and simple into the hierophonics of atonality.

As for post-Wagnerian polyphony, it parades the decay of craftsmanship itself. Allow one line to jostle indiscriminately with other lines, and any fool can do the mixing. The contradictions of discord and concord can only be resolved by men who respond with a certain delicacy to a wide range of aural strain and easement. A confused polyphony in which there is no relation between consonance and dissonance is the first sign of lack of musical skill, and as expression can have no more significance than that of a jostling mob. To express what is constructive and expanding in modern life will involve a polyphony as multimelodic as that of Bach, and even more complicated inasmuch as the human experiences of to-day are more complex than those of the Reformation period. The extra complications will probably involve a greater aggregate use of discords than is found in Bach's music, but novelties of dissonance will not be its aim.

This matter of prevailing dissonance in modern music is, I

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believe, the most urgent sign of the widening gap between composer and public.

To primitive man dissonance was probably a matter of indifference, and consonance a rare accident. The Zulu broadcast already referred to pave evidence of that. Consonance was a discovery, and resulted in a sense of audible case reached in the unison and octave; and the octave was apparently the harmonic basis of music in Greek civilisation. However, the instinctive use of less perfect consonances has been recorded by students of primitive music; and it is certain that the social use of music during our own civilisation has been based upon consonance, even as society itself depends upon organised agreement. Personalities are important and dissonances inevitable, though allowable only when they can be merged in an ultimate approximate consonance. Upon that basis, harmonic art was developed. Using at first the perfect consonances of unison and octave, then the near consonances of fifth and fourth, the early musicians of Christian civilisation gradually added the even less perfect, but still aurally tolerable approximate consonances of the third and sixth as the basis of their harmony. Dissonance was first made acceptable when a consonant note failed to move in time to its next position, and dragging behind the other parts for a moment resulted in the effect technically called a "suspension." The aural easement resulting from consonance following dissonance (the resolution of the suspension) introduced a new joy into music, and discords were readmitted into the art of sound. The peak of that period was reached in the music of Palestrina, who used dissonances only when they were sandwiched between consonances, or as "passing notes"—that is, when as over the drone of a bagpipe the melodic passage touches notes that are dissonant to the drone, the effect of discord being minimised because it comes upon an unaccented beat. But Palestrina also employed discords in an exactly contrary manner to that, to define the clerically forbidden element of rhythm. Bach experimented slightly with dissonances for the sake of their own values, but for purposes of expression used them much as Palestrina had done, though more freely and often without consonantal preparation, and he always followed them, sooner or later, with a consonantal solution. So did all the great masters who have followed him.

The reason for the consonantal basis of great musical art has been explained by one writer as due to the fact that the listener "perceives" concords with greater ease; but the perception is one

of feeling rather than of recognition. That idea is supported by the historical development of harmony. The extension of dissonance has evidently been associated with an increasing awareness of the higher notes of the Harmonic Series, the consciously unrecognised extra notes that accompany all musical sounds, unless they are deliberately excluded as with a tuning-fork.

Discords give a sense of tension, express the feeling that there is an emotional knot that has to be untied, and all great works of musical art end concordantly. It is worth noticing that Beethoven who used discords so fiercely made an extra point of emphasising his final concord. Nevertheless, it is a fact that the development of later musical art has been associated with an enormous expansion of dissonance; and in the music of Wagner, with its most conscious and direct application to the objective world, discords became most frequent and varied while retaining relevance to the music as a whole. Let us examine one or two of the connections in which he used it.

The opening music of *The Rhinegold* seems especially significant for our purpose. It is first related to the broadly flowing river; then to the simple subhuman minds of the Rhine maidens, to doubts connected with their watch over the gold, and danger resulting from its possible capture by the ugly humanity of Alberich—the character interpreted by Shaw as being forced to forgo the joy of life and therefore intent to find means of governing the lives of others.

For the river music Wagner made what is probably the longest passage existing in musical art constructed upon a single concord. A few passing notes flow over it as ripples on the surface of the water, but for more than a hundred and fifty bars of slowly increasing rhythmic interest there is only concordant harmony. When the dramatic interest shifts from river to maidens, the harmony changes from one concord to another, and persists till one of them asks, "Are you watching alone?" For the slight doubt that accompanies the question, the harmony moves to another consonance, but one dissonant to the bass drone of the river. Even that slight dissonance melts when the answer comes. A bar later comes the first effect of real dissonance—the minor seventh, the least poignant and historically the earliest of definite discords. That is the musicodramatic result of a playful and idle question which is answered only by a dive into the water, and a reversion to the original rhythmic, concordant swirl. A few bars later and a harder dissonance is heard, with a darker ground-note associated with the idea

that none too good a watch is being kept over the gold. In eight bars of such music there are five of dissonance, varying from the vague diminished seventh (described by Beethoven as a neutral chord) to the harsher major second. That disappears when the maidens return to their childlike play; but little catch-notes of dissonance maintain hints of doubt in the situation; and fifteen bars later, with the appearance of Alberich, we hear the minor second, the most piercing dissonance in the European scale.

So far Wagner has used no discord not in frequent use before his time. The fresh usage is in its dramatic application. Wagner, like Mozart, used his chords instinctively; but, unlike Mozart, he made them entirely subservient to a dramatic situation. For the earlier master the use was chiefly dependent upon the musical tradition.

Now let us consider a more strained and subtle use of harmonic values. For the expression of unsatisfied love-longing in the Prelude to Tristan and Isolde, Wagner charged nearly every bar with dissonance. One discord moves into another, from anxiety to passion never quite reaching pain. A complex of double dissonance is effected, so when a dissonant note finds resolution another dissonance remains; and the whole piece ends as it began, an unanswered problem. Schumann and Chopin had ended little pieces with a discord, and they seem to end in the air. Wagner's end has dramatic probity in that it leads at once into the stage scene, the listeners having been attuned and emotionally identified with the drama that follows. That identification is, as already suggested, what validates Wagner musico-dramatic art, as it had secured life for earlier operas in spite of their many absurdities.

It was not a love of discord, as such, that caused Wagner to make the *Tristan* Prelude one of almost continuous dissonance, but simple dramatic necessity. The uneasy effect of the music is relieved by sufficient consonantal resolution to preserve harmonic logic, and afford architectonic balance. Its harmonic quantities are apt for their musical as well as their dramatic purpose. The material is so exploited that we are aware of beauty as well as unease; and in fact its prevalent dissonance is less near to monotony than the prevalent consonance of the *Rhinegold* Prelude. Perfect agreement is as dull in music as in social intercourse.

Let us now consider some harmonic disagreements in post-Wagnerian music. They are of an entirely different kind. Hitherto dissonance has been increasingly evolved and expanded as an expression of an increasing interest in and understanding of human

character, and of increasing social complications; but in the music of Richard Strauss harmony begins to become an art for its own sake. To give right harmonies for hitherto untouched aspects of life must lead to the employment of musical details in new aspects; to explore new musical possibilities for their own sake can only result in extravagance—in rhythm, by syncope or monotony; in melody, by inflation or reactionary atonality; in harmony, by the irrelevance and exacerbation of dissonance.

Strauss's harmonies have a habit of sudden moves beyond the prevailing tonality. Wagner used that sort of thing with dramatic significance—for instance, in Tristan, when he was concerned with the idea of oblivion; but Strauss does it frequently and with no dramatic effect that I can discover. It has been acclaimed as a sign of chromatic progress. Wagner had already used chromaticism with definite dramatic effect. Strauss interpolates a few beats out of the current key and then hops back, like a man dodging into doorways instead of taking a straightforward way along the street. It is a step towards atonality, the very idea of which is absurd if we are to realise the full value of the European tradition. In Asia and countries where scale forms are still inchoate some sort of microtonal scale may naturally evolve to express emotions beyond our conception; but for us atonality must involve the repudiation of the useful and various scale-forms which Western musicians have developed during several centuries, in favour of-what? A vague tonality without axis! A mist, and we off the road that leads home. The very idea is merely a theoretical declaration of musical disintegration, and Strauss is its first notable exponent. His sense of dissonance is not more exploratory of human feeling than Wagner's, but merely confusing because irrelevant. When Strauss seems to settle down to a key and a concord we have the uncomfortable feeling that in a few seconds he will be moving house again. And he does. And, further, he opens the way for the monstrosities of modern cacophony. Discord results from a simultaneity of notes. Strauss introduced chord clash, so advertising physical pain for which music is an unnatural means of expression. Chordal discords violate the nature of musical material by passing from the conflict of partials which can be tolerated to a conflict in which they become inaudible as music, audible only as noise. Mix a sufficient number of harmonics and they neutralise each other in music as colour is denied to sight when the whole palette is mixed to mud. The only convincing example of such anti-musical noise known to me is

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Mossolov's The Foundry, which celebrates, not a musical experience, but the importance of the workshop rather than the musician's world—a sound enough conclusion in the earlier period of Soviet Russian life; but after all the foundry itself produced a still more convincing noise, even as a sheep produces a more convincing bleat than the muted horns in Strauss's Don Quixote. It was no mere coincidence that Wagner, who based his work on European tradition, had been concerned to give dramatic expression to the German burgher as a creative person in medieval times, while Strauss, showing him as a degenerate and fool in Ariadne auf Naxos, used musical forms which are themselves decadent and foolish.

When Strauss forgot his will to be big and surprising, and allowed his real musical genius its instinctive flow, he was an altogether different composer—a simpler, truer, and sentimental person. He belonged to the same class as Brahms, Franck, and Elgar, who had not his too frequent blow-frog-to-ox affectations. Having less intuitive sense of originality than they, he splashed for novelty; but in the arts when novelty does not arise in some fresh development of human nature it is meaningless and bewildering. Strauss is a figure characteristic of the moment when music became another symbol of the decay of Western civilisation. Since his time irrelevance, and especially irrelevant dissonance, have become outstanding features of European music, which therefore is less and less comprehensible by the general public.

About the same time, it seemed that Russian music might reinvigorate the Western tradition; but as Strauss lost the path indicated by Wagner, so Stravinsky failed to fulfil the slighter dramatic indications of his master. Rimsky-Korsakov's art was true, like the art of his greater contemporaries, Borodin and Moussorgsky. They all expressed the contradictions of their time and country by combining the simple and direct musical idiom of the Russian people with an orchestral and stage milieu suited to the extravagance of the Czarist Court. Stravinsky exploited the orchestral extravagance and treated the folk idiom with the contemptuousness of a man-about-town; and because the Russians had a less developed tradition than the Germans, Stravinsky sank to lower depths of imbecility than Strauss. When Russian imperialism was tottering, Stravinsky naturally became an émigré, and his pretences increasingly evident. When he could no longer ride on the back of the Diaghilev ballet, he moved like a fugitive from one musical standpoint to another, now pseudo Mozart, now parasitic

Pergolesi, and in open terms declaring the unhistorical, non-evolutionary nature of his activities. As musical exponent of the narrowing world of futurists and surrealists, he is outstanding.

Christopher Caudwell's wonderful study of poetic law, *Illusion* and *Reality*, shows how disintegration occurs when artists are concerned primarily with the dream world of their own personalities; how disorganised images issue from such efforts. Surrealism and all the modern cliquish movements seem to have in the sphere of art the tendency towards anti-social sectarianism which Marx stigmatised in one of his letters: "The sect sees the justification for its existence and its 'point of honour,' not in what it has in *common* with the class movement, but in the particular shibboleth which distinguishes it from it." That is the position to-day as between modernist arts and the peoples of the world. No wonder that its most natural expression in music is discord!

Aragon renounced his narrow dream world as a direct consequence of his experiences with Frenchmen of the Resistance. It will be interesting to watch the final development of Picasso's work now that he has joined the Communist Party.

As for the many musicians who were born into the surrealist decadence—a few of them may be mere personality-mongers, but others are certainly men who may have expected to find in dissonance a natural expression of revolt against the smugness and sentimentality of post-Wagnerian music. Unfortunately, the same evils are apparent in much of the music of Soviet Russia where there is no longer any excuse for them.¹

Among modernist musicians Hindemith has certainly not been least significant. He is reported once to have received a visit from a young Soviet composer who wanted to know what he should do to be saved. Hindemith's answer was, I am informed, "Write for your children and your workers."

Is not that answer good for all creative musicians to-day? We can find little personal satisfaction and no stimulus so long as there is an abyss between music and the general public. How wide that abyss has been less obvious because the B.B.C. has robbed the public of its rightful place in musical judgment. The musical department of the B.B.C. has been controlled for a generation by men who were born into the surrealist atmosphere while the

influence of public reaction (for all its class limitations) is no longer effective because listeners have no share in radio control. But it is more and more clear that the new and growing public has no use for the modern stuff. Indeed, one musician holding an important position at Broadcasting House remarked to me, "The new music is dead." Of course, it was never alive in the sense of being an expression of the greater social life. The problem is, how to re-establish relations between fully developed musical art and a public of whose crude judgment many artists seem to be afraid.

The influences which have resulted in the decadence of the arts have, of course, also affected the taste of the public. From folkmusic, through music-hall song and ballroom dance, to the jerk of jazz and the anæmia of swing, the decline is as obvious as in more ambitious forms. Nor will a solution of the problem be found in an isolated field of æsthetics. Musicians can enter into a full realisation of their art only when they become associated with workers in other fields. Only in such association can emotion rise to the heat where it becomes creative. By all means let musicians accept the full technic of their art as it has been developed from Bach to Sibelius, even as socialised industry accepts the scientific and mechanical developments of the capitalist period. It is not lack of skill, but the need for natural human expression that is missing in the music of to-day. Only in the service of such expression can the expensive forms of modern art be justified; and to make that expression clear and complete it seems to me that Wagner's suggestion still points the way. His form of music-drama is open to criticism; but except in relation to stage and film it would appear that music can now exist only as a vague and escapist activity. That is not entirely to dismiss such music, for we all need an occasional holiday from the realities of life, and well made music has great recreative value; but considering that during the past history of the art its most striking developments have taken place only when a composer has felt himself to be the servant of the social body, it seems likely that the next great step forward will also happen in a similar relationship.

¹ This article was written before the recent criticism by the Russian Communist Party of their composers, and the composers' entirely reasonable and wise consideration of that criticism. Happy the country where there is sufficient lay interest in, and understanding of, music for such criticism to be possible.

Slaves and Serfs

By John Morris

THE simplest and best-known Marxist formulation of how human society develops is to be found in Stalin's Dialectical and Historical Materialism: "Five main types of relations of production are known to history, primitive communal, slave, feudal, capitalist, and socialist." The uniform experience of lecturers, particularly in discussion with workers, is that it is a great deal harder to explain the transition from slavery to feudalism than from feudalism to capitalism, or capitalism to socialism. Until very recently, Marxist historians have been able to devote only relatively little thought to ancient history. The problems are misty and unexplored. It is therefore permissible, and indeed necessary, to state a case, with the certainty of oversimplification, and at the risk of considerable error, in the hope that a discussion of the problems will stimulate further research.

No simplified Marxist formulæ can be taken for granted without a study of how Marx arrived at them. They are not finite truths, but summaries of a definite stage in the development of Marxist thought. Engels² scornfully condemned people who "simply make use of the phrase historical materialism to get their relatively scanty historical knowledge . . . fitted together . . . into a neat system. . . . The materialist conception of history has a lot of friends whom it serves as an excuse for not studying history." Since the "five main types" have been widely popularised, there have been unfortunate attempts to fit every society into one or other of these types, to seek after successive periods where the majority of the producers are first slaves and later serfs.3 Marx insisted that his historical method meant "studying each form of evolution separately and then comparing them," abjuring "the universal passport of a general historico-philosophical theory, whose supreme virtue consists in being super-historical."4

He saw the heart of the matter in "the specific economic form in which unpaid surplus labour is pumped out of the direct

producers." This "determines the relations of rulers and ruled.... Upon this is founded the entire formation of the economic community, and this also determines its specific political shape, in short...the form of the state.... This does not prevent the same economic basis from showing infinite variations... [whose] causes must be ascertained by careful analysis." It is the business of Marxist historians to study and use the method of Marx, to examine his conclusions in the context of his argument and in the light of subsequent research.

Marx saw the period of class society as one whole and single epoch. By class society he meant civilisation, written history, the period between barbarism and socialism. In this period of some 6,000 years mankind has shared common problems, unknown alike to the half million odd years of savagery and barbarism and to the future society which is dawning. Within the history of class society, he saw one great watershed division, between modern industrial capitalism and all pre-capitalist societies.3 The prerequisite of capitalism is wage labour, the existence of a large class of propertyless workers who are free to dispose of their labour power with no other compulsion than that of economic necessity. In all precapitalist societies, wage labour is relatively unimportant, while the great bulk of the population is unfree. Slaves are legally unfree and they work with means of production belonging to others. Small peasants, artisans, etc., are legally free, and they possess their own means of production. But they are subject to various forms of "non-economic" compulsion. "This lack of freedom," he wrote,4 "may be modified from serfdom with forced labour to a mere tributary relationship." It begins with the dawn of class society and lasts till the coming of capitalism.

In his early study, Marx distinguishes three forms of precapitalist production, Oriental or Asiatic, Greco-Roman or Classical

¹ The source of Stalin's formulation is to be found in *Capital*, III, p. 383: "... primitive communal, slave, small agricultural and small bourgeois, capitalist."

² Marx and Engels, Selected Correspondence, p. 473 (August 5th, 1890).

³ Cf. the recent attempts to discover an epoch of slavery in Bohemia (recently condemned by the Czech Marxist historians) and in Armenia (condemned by Manandjan, *Istoricheskii Zapiski*, XV, summarised in *Voprosi Istorii*, 1946, pp. 5–6, 152).

⁴ Marx and Engels, *Selected Correspondence*, p. 355 (1877).

¹ Capital, III, p. 919.

² The writings of Marx and Engels are therefore extensively quoted in this article, not as authoritative dieta, but in order to tempt the reader to look them up and examine the context. For the same reason, references to secondary and original authorities are given sparingly, and are confined to such as are direct and clear evidence, and are easily available.

³ A work of great importance for the understanding of his approach is a study written in 1857–8, entitled *Pre-capitalist Forms of Production* (referred to here as *P.C.F.*), first published (in Russian) in *Vjestnik Drevniji Istorii*, 1940, pp. 1, 10. Marx later modified and developed his views on the formation of class society, especially after the publication of Morgan's work in 1877.

⁴ Capital, III, p. 918.

⁵ "Slavery and serfdom are both only stages in the development of property, based on a tribal structure." P.C.F., p. 22.

⁶ P.C.F., p. 13.

Antiquity, and Germanic, or European Middle Ages. Later, 1 instead of Oriental society, he mentions "vassallage," the "tribute State" or the "State as the supreme landlord." In the tribute State, the basis of society is a collective, whose members are bound together, in fact or in theory, by kinship. Ownership of land is possibly only by and through membership of the collective. The collective (Gemeinwesen) may be a village commune, a nomad tribe, or a large territorial state with a complicated structure. Such a large state is formed when one collective conquers another and treats its subjects as its own property: the conquered collective nevertheless preserves its own individuality. Within the collective, the surplus may be disproportionately divided. The king, the god, the priest, and their noble retinue come to constitute a ruling class. They do so the more readily when cultivation and the production of a surplus depends on irrigation, communications, or other public works. But the ruler, on whom the whole ruling class directly depends, is the personification of the whole collective, and in him is vested the collective ownership of the land. Consequently, 2 "there is no private ownership of land, although there is complete private possession and use of land." Marxist scholars have not seriously challenged these conclusions in their application to India, Indonesia, or ancient Egypt. They have been challenged by students of Mesopotamia. The Soviet scholar Struve, ³ following Meissner, Cuq and other western European Assyriologists, maintains that the vast body of evidence which has accumulated since Marx's death disproves his conclusions. On the other hand, Nikolski4 holds that Struve's views are schematic, confuse ownership with possession. and fail to take due account of what Marx actually said, especially in the 1857 article. He maintains that the recent evidence confirms and establishes Marx's distinction, which is valid for all the ancient east.5 What seems beyond doubt is that the complex of social ideas about land tenure differed profoundly from the ideas of the Greco-Roman world. On this the Greeks and Romans themselves were quite clear: in their eyes,6 Oriental kings owned all the lands in their kingdoms and could create private property only by detaching it from their kingdom.

There is no evidence to suggest that the dominant relation of

¹ Capital, III, pp. 383, 389 and 918-9. ² Ibid., III, p. 918.

³ Vjestnik Drevniji Istorii. 1940, pp. 3-4, 373. ⁴ Voprosi Istorii, 1934, pp. 1-2, 36.

⁵ A serious treatment of this problem in English is badly needed.

ruler and ruled was determined by a master-and-slave relation. Nor does Marx suggest that it was. On the contrary, the main source of wealth of the ruling class was a tribute rent paid in kind or in labour (on the home farm or demesne)1 by the members of the collective, freeborn, but subject to all manner of legal and customary compulsions. Slaves existed, but in the main as personal or domestic servants, in public works and State business, sometimes as shepherds, craftsmen, bakers, weavers, etc. Slave labour in the production of basic cereal crops does not figure at all prominently in our sources. Slaves frequently appear with a quite high social status, in China, Indonesia, and Homeric Greece far above that of the despised wage labourer. Like the occasional free craftsmen, they are either members of, or under the protection of the collective. Marx sharply distinguishes² this patriarchal slavery from the later plantation slavery of Greek and Roman times.

There are abundant traces of trade in the most primitive Oriental class societies. But trade does not necessarily imply an economy producing commodities specifically for exchange. Marx here distinguishes between "commodity production," and the incidental "throwing onto the market of the surplus over the immediate needs of the producers." The former is characteristic of capitalism, and also of Roman society:3 the latter is common to all forms of production, including primitive communism.4 Commerce, in all societies, "promotes the production of surplus products destined for exchange." But so long as the collective remains the basis of society, trade plays a subordinate role, "the trading nations of the ancients existed . . . in the pores of . . . society."5

Marx called these societies static. By this he meant that social changes occur so slowly that they can never generate a revolutionary leap forward into another type of society.

Of the ancient tribute states, only those of Mesopotamia and Egypt are the direct ancestors of European civilisation and of modern capitalism. It is with them that Greco-Roman society must be compared. The silt soil of their valleys is extravagantly fertile. It provided a large surplus of corn, and enabled the collectives to

² E.g. Capital, III, pp. 697, 934.

3 Socialism, Utopian and Scientific, p. xxvii.

4 Capital, III, p. 383. ⁵ Ibid., III, p. 388.

⁶ References collected in A. H. M. Jones, The Greek City from Alexander to Justinian, p. 96 n.

¹ For example, the temple households of Lagash (Professor Childe gives a good short summary in What Happened in History, p. 84); cf. also P.C.F., p. 11. "The lord's demesne is here met for the first time.

⁶ Ibid., III, p. 924. cf. also P.C.F. and Theorien über den Mehrwert, where he argues that an essential condition of human progress is the separation of town and country and that this separation is at a minimum in the East.

support a substantial population not engaged in food production. This surplus man power made possible both military expansion and immense public works. The agricultural surplus enabled the inhabitants to buy (usually through the intermediary of neighbouring trading peoples) the stone and minerals which the river valleys lacked. Occasionally a barbarian people, or a power controlling the metal supplies, conquered and temporarily dominated the agricultural centres. But the real centre of power always shifted back to the economically decisive areas of the rivers. The rich civilisations of the Euphrates and Nile developed over many thousands of years a high level of craftsmanship and science, based on a skilled bronze-using metallurgy. But they continued, and riveted into a hard tradition, the ancient social forms of nascent class society. All political power remained vested in the sacred person of the god, king, or priest. The ruler remained the sole ultimate landowner—at any rate, by contrast with the classical society that followed. Craft and science were closely guarded mysteries. Trade remained the incidental exchange of the surplus use values, commodity production a subordinate interest of society. The needs of media of exchange were satisfied by barter, or by the use of heavy bars of precious metal or weighed quantities of gold and silver. The need for money was not yet felt. With this social and economic foundation, the human mind could not yet conceive that life could be organised in any other way. Future development was blocked by the ossified rules of a tribal society that had long since ceased to exist. The tribute state led to a dead end.

Humanity was set free by the impact of two separate and complementary processes . . . the gradual introduction of the use of iron (cheaper, but for long not more efficient, than bronze), and the coming of barbarian peoples to the Mediterranean coasts, especially of the Greeks to Greece. Cheap iron meant more specialisation, and more tools for the poor, and for barbarian peoples. It made possible the long distance sea trade. A single merchant could range over the whole Mediterranean, and accumulate a much larger capital than any single merchant in the short hauls of ancient land transport. The Phœnicians of the Levant were able to develop a prosperous middleman's carrying trade, which itself stimulated commodity

production at both ends. For example, their greatest colony, Carthage, soon drew her wealth not merely from a middleman's profit, but also from turning her own arable land over to olives, grown specifically for export.

The Phœnicians were a people of the Near East, hampered by the accumulated traditions of the Bronze Age. The Greeks, by contrast, were free from those traditions. Moreover, they were favoured by their geographical setting. The Ægean forms a natural emporium of east-west and south-north trade. Greek soil is relatively poor, and from the start a substantial proportion of the settlers were driven to trade.

Trade and merchant capital are by themselves "incapable of bringing about and explaining the transition from one mode of production to another." For centuries the warrior nobles remained the ruling class, the traders an inferior element, even among the Greeks of the coasts and islands. The nobles occupied land because they were the hereditary chiefs of tribal collectives. The smaller landholders became free peasants. But the centralised autocracy of the east never developed. The Athenian, like the Carthaginian merchant, learnt to produce at home the commodities he had once bought abroad for re-export, notably olives and manufactures. He fed their producers with imported corn. "Commerce and handicrafts became the main occupations. . . . Movable property . . . no longer a means to the acquisition of landed property . . . became an end in itself." Town and country were separated.

With the increase in trade and commodity production came the invention of coined stamped metallic money, and, in the sixth century B.C., of coins in small denominations. With small coins it became technically possible to maintain large masses of workers independently of natural, household economy. Money economy "penetrated like corrosive acid into the old traditional life." The old aristocrats hated it, and the Spartans forbade its use. Both nobles and peasants needed more money than the sale of their old surplus could provide. Both borrowed from the trader, and the usurer became a social force more potent than in the older societies.

¹ A comparatively recent example is the Arab conquest of Persia (a.d. 650). In a little over a century, the Caliphate moved to Baghdad, and Arabia became a relatively unimportant province.

¹ Capital, III, p. 385.

² "Peasant agriculture on a small scale and the carrying on of independent handicrafts, which together form the basis of the feudal mode of production, . . . also form the economic foundation of the classical communities at their best, after the primitive form of ownership of land in common had disappeared and before slavery had seized on production in earnest." Capital, I, p. 325; cf III, p. 938, and Marx and Engels, Selected Correspondence, p. 127, March 8th, 1855.

³ Engels, Origin of the Family, p. 129.

⁴ Ibid., p. 123.

The new rich needed land, both to turn over to orchard crops and even more to give them social and political influence. The transfer of land had to be facilitated. In the great social changes of the seventh and sixth centuries B.C., the last surviving vestige of the theory of communal landownership disappeared. Henceforth, money more than birth became the means to landownership. Everyone tried to hoard money. All classes sought to be paid in money, and to pay out in kind. The success and failure of attempts to establish money rents is one of the key points in the economic history of antiquity.

Small change brought a new type of state, one that gave equality of opportunity to all propertied citizens, irrespective of their birth. Greek democracy, limited as it was to those who held full citizenship, was none the less the greatest social advance in written history before modern times. It taught the lesson that man could change the accident of his birth and shape his own destiny. From this lesson followed the hitherto undreamt of concept of human liberty and human equality, the spirit of enquiry and criticism which has made possible all future human progress. Without Hellenism, said Engels, no modern socialism.1

The social transformation did not stop with the rulers. Hitherto slaves had been the result rather than the source of wealth. They were the luxury servants of the rich. Now, an apparently unlimited market for the first time made slave production for the market on a large scale a paying proposition.

The supply of slaves was not lacking. The rulers of the ancient communities neighbouring Greece, in need of money to buy the newly available goods, were not slow to sell the inferior members of their collectives. Kidnappers and pirates found a new incentive. The enslavement of debtors was an easy and obvious means of creating new labour power. The pressure of the masses soon prevented the enslavement of the poor by their fellow citizens. But prisoners of war acquired a value, and Greek cities sold the captured citizens of other Greek cities into slavery down to the last days of Greek independence, despite the energetic protest of a section of Greek thought.

The main use of slaves in production for the market was in manufacture, in export agriculture, and in the silver mines. There is little evidence in Greece for the great plantations of contemporary Carthage or later Rome. In a few isolated cases, we have evidence of the concentration of some scores of slaves in large factories, but the majority always worked in ones and twos for small craftsmen and small farmers. Even in the rare factories there is no real sign of a fresh division of labour. A few technical inventions come into use at the very beginning of slave economy,1 but the decisive improvements in agriculture and transport were reserved for the early middle ages in Europe.

Slave production was by no means universal in Greece. In Sparta, Thessaly, Crete and many other areas the ruling class drew their wealth from the forced labour of a subject alien population, who fed themselves from their own plots, a form of serfdom rather than of slavery. Outside Greece, slave commodity production was confined to the Greek and Phænician colonies in the Mediterranean. Among the neighbouring barbarian states, a part of the population was sold abroad to Greece as slaves. The rulers attempted to impose money rents upon those who were left behind. In so far as they succeeded, the cultivators became "free" tenants, bound to their land and their landlord rulers by rent or tax rather than by membership of the collective. 2 The attempts seem to have met with very limited success. All over the ancient Near East the old collective social forms were but superficially disturbed.

The great drawback of slave production is that the slave must be maintained all the year round, whatever his productivity. He is profitable only when fully employed. To maintain the full employment of slaves a continuously and rapidly expanding market was essential. The Greek world was hemmed in, by barbarians on the north, Carthage on the west and Persia in the east. Moreover, isolated Greek colonies planted among the barbarians soon learned themselves to grow and manufacture the commodities in demand. The rate of expansion declined. By the middle of the fifth century B.C., a certain falling off in the export trade was accompanied by lavish capital expenditure on public works. Property concentrated in fewer and fewer hands, and the numbers of the impoverished citizens increased. All over Greece, the population exceeded the food supply. Infanticide became common. Slave owners, beginning with the smallest, found themselves unable to maintain their slaves. Some were sold to wealthy contractors. The rich Nikias owned a thousand slaves, whom he hired out to the owners of mining concessions, big or small. But there is no evidence that he

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¹ Cf. Gordon Childe in *The Modern Quarterly*, 1946, No. 2, pp. 30–1. ² Some of the most important evidence is discussed by T. R. S. Broughton in Tenney Frank's *Economic Survey of Ancient Rome*, *Asia Minor*, pp. 692 ff.

used any substantial number of them on his own land, or owned mining concessions himself. Others manumitted their slaves, set them free, usually at a price. The poor citizen, unable to maintain himself, turned for relief to any rich patron who would support him, at the cost in some degree of his freedom. Often he became a mercenary soldier. The cities took increasingly to war with one another, in an effort to bolster up their own dwindling prosperity at the expense of their neighbours. Slave economy was on the decline.

The Greek crisis was solved by aggression abroad. In the late fourth century B.C. Greece was forcibly united by Philip and Alexander, kings of the half-barbarian Macedonians of the north. Alexander destroyed the empire of Persia and ruled to the borders of India. The ruling classes of the Middle East had long been accustomed to Greek luxuries. Now they became Greeks, spoke Greek, wore Greek clothes, built Greek houses, filled them with Greek furniture and ate Greek food. Greek (Hellene), henceforth is a cultural term, denoting an educated man who speaks Greek, whatever his nationality, no longer an inhabitant of the Greek peninsula. The cities of old Greece enjoyed a brief revival. But soon the merchants learnt to cut their transport charges by establishing manufactures in the Near East and importing Greek techniques. The newly Hellenised lands of the eastern Mediterranean prospered, while old Greece withered. Modern historians call this age the Hellenistic period.

Moreover, the market was no longer confined to a very few nobles. It spread to all townsmen. The sudden new demand led to the use of a number of technical inventions and modifications, as at no other period in the history of classical antiquity. But prosperity did not spread to the countryside. On the contrary, in order to maintain the expense of new and enlarged towns, the peasantry was more savagely exploited than before. Once again, some of them were transformed into slaves and others into oppressed tenants. But money rent was established only in some areas and at certain periods, not as the prevailing form of rural exploitation throughout the Hellenistic world.

Greek expansion led to a further decisive advance in human political thought. The democracy of the Greek city had given political equality to all propertied citizens. But it continued the ancient conception of tribal and Bronze Age society, that a stranger was an enemy. In pre-Hellenistic Greece, still the only proper

treatment of a conquered people was to enslave or subject them, despite the energetic propaganda of the more advanced Athenian thinkers for a different attitude. Alexander's conquests set new problems. In the next generation, Zeno, the founder of Stoicism, propounded the revolutionary doctrine that all men are brothers, irrespective of race, and that God is one, God of all mankind. His successor, Chrysippus, endeavoured to correct the dangerous social implications of his doctrine by pointing out that while all men are equal, some (the wealthier and nobler) are better than others. Henceforth, local patriotism is an uneasy bedfellow with the ideal of world citizenship, now in conflict, now temporarily harmonised.

Alexander's solution gave commodity production a wider market and a new lease of life. But it was short-lived. It failed to provide political unity. Persia and India were soon lost, though both retained for many centuries a heavy imprint of Greek economy and Greek ideas. The eastern Mediterranean lands split into half a dozen rival states. Expansion ceased after its initial burst. The market could be extended only by fresh conquest. In the second century before Christ, manumissions, unemployment, infanticide again became common, and the Hellenistic kingdoms engaged in mutual wars as disastrous as those of the Greek cities. Unity again came from without, from the economically undeveloped, but militarily efficient power of Rome. Rome succeeded in establishing political unity and internal peace. She also annexed the barbarian west-France, Spain, Britain, and south-west Germany and central Europe—and thereby gave Mediterranean slave production a further extension. The Roman conquest was accompanied by a series of slave revolts, in some of which sections of the poor free men joined the slaves.

The Roman solution lasted longer, and operated over a vastly larger area. It is worth examining more closely. The early Roman state, like its contemporaries in Greece, was founded on small peasant and artisan economy. But, unlike the Greek maritime states, it was not favourably situated for long distance trade. Roman power was founded on direct plunder, on military conquest. Slavery hardly "seized on production in earnest" until the great Punic (Carthaginian) war against Hannibal (218–201 B.c.). Prolonged absence at the wars drove many peasants into debt, and the moneylenders turned them off their land. Small cereal farms

An accessible translation of some of Zeno's hymns is to be found in Sedgurch's Marcus Aurelius; a discussion of the subject in W. W. Tarn's Hellenistic Civilization.

were enclosed into great ranches and orchards (latifundia), cultivated by foreign slaves. The dispossessed flocked to Rome, and were fed with foreign corn, the tribute of subjects, not, as in Greece, the profits of trade. Among the new rich of Rome, generals, usurers,

tax-farmers figured more prominently than merchants.

Rome's attitude to foreigners and subjects therefore differed radically from that of the Greek cities. Where trade was the source of new wealth, another city was an enemy to be knocked down and held down. The isolation of the ancient tribal community was perpetuated in the Greek polis. But where war was the source of wealth, the conquerer needed above all manpower for the armies. The Romans early found that loyal subject allies fought better than mercenaries. Rome soon learnt to associate the ruling classes in conquered states with her own interests, to win further wars with their aid, and to govern through their agency. She was consistently generous in admitting her dependent allies and her subjects to full Roman citizenship. When Rome became mistress of the world, this traditional policy became of first importance. Citizenship was extended to the well-to-do of all provinces, and the term "Roman." as the term "Greek," came to mean a certain social status, with no reference to nationality. The Stoic doctrine of equality of race finally overrode the local particularism of the ancients, and found its logical conclusion when the Emperor Caracalla (in A.D. 212) extended Roman citizenship to all free inhabitants of the Empire.

Rome thus not only extended the frontier of classical civilisation, and gave some centuries of undisturbed internal peace; she also broke down the barriers which had hitherto isolated from each other the myriad communities within her frontiers. Thereby she postponed the breakdown of its economy for some four or five hundred years. Over this long period its internal contradictions were free to work themselves out. Chief among these contradictions are the class antagonism between the large-scale owners of land and movable wealth, and the mass of small-scale owners, artisans, labourers and slaves; between the developed urban areas and the backward countryside; and between the merchants and the producers.

The class antagonisms were at first most evident among the Italians. During the years of conquest (the last two centuries B.C.), Rome concentrated in the hands of the rulers of Italy both the looted wealth of the East and a huge labour force of slaves. In the latter part of the first century B.C. and in the first century A.D.,

the products of Italian industry were poured into the western provinces and rapidly raised their economy from barbarism to an urban civilisation comparable with that of Greece and Italy in its externals. With their gains, the Italians bought the luxury products of the Near and Far East. Thereby they incidentally helped the industry of the Hellenistic world to recover from the shattering effects of the wars of conquest. The picture of a parasitic Italy idling gluttonously on the steady tribute of the oppressed provinces is exaggerated. The idle parasites and the oppressed masses existed in Italy and in all provinces.

Before the end of the first century A.D. the great age of Italian prosperity was over. It depended on the process of Romanisation, and once the essentials of the process were complete, the provinces were in the main able to meet their own demand. The merchants again established manufactories and orchards near to the centres

of consumption.

Italy faced unemployment. In A.D. 70 an ingenious inventor presented the Emperor Vespasian with the plans of a mechanical crane, designed to economise in human labour in the great building schemes of the Emperor. 1 He was rewarded, but Vespasian rejected his invention with the comment: "How shall I feed my deserving poor (plebeculam)?" The problem at this date was largely confined to Italy-above all, Rome-and to a less extent to the great manufacturing centres of the east. Successive governments provided meagre doles² and produced inadequate relief schemes. By the time of the younger Pliny (c. A.D. 100), the great ranches have gone. Pliny's considerable estates appear to be let in the main to rentpaying tenants, though perhaps his vineyards were still worked by his own slaves. His tenants probably owned each a slave or two, but, even so, they were chronically unable to meet their rent. Pliny prides himself on a happy solution to the problem.³ He gave up rent in money, and instead accepted a tithe of the crop, in return for which he saw to the maintenance of the capital equipment of his tenants. This system, known as share-cropping or metayage, marks the end of an unsuccessful attempt to introduce money rents in Italy itself. Superficially, it recalls the kinship collective of the ancient east. In fact, it foreshadows the feudal manor.

¹ Suetonius, Vespasian, p. 18.

² The picture of a pampered proletariat living in idle luxury on imported corn is much overdrawn. The phrase "bread and circuses" is a reactionary sneer of much the same order as Marie Antoinette's "Let them eat cake." ³ Letters, 9, 37.

The cause of the decline of latifundia is not hard to see. Almost all ancient and modern writers1 have noted that cereal cultivation by slaves is not successful. Corn crops require heavy concentrations of labour at certain seasons and a larger staff of overseers. Corn is bulky and expensive to transport. It is an article of mass consumption, and its ceiling price is therefore limited by the capacity of the masses to pay. Its yield is variable and its price unsteady. The profit from the buying and selling of corn comes therefore from exploiting a temporary local surplus and a temporary local famine, not from increasing its production in general. On the other hand, wool, oil and wine, the produce of orchard and pasture, are cheap to transport and can easily be cultivated for export to a luxury market. It pays to increase their production, and to employ slaves in their cultivation. Slave agriculture therefore means a turn from cereals to industrial crops, from self-sufficiency to commodity production. The decline of ancient commodity production meant a reversion from slave agriculture toward tenant or serf cultivation. For this reason, the Greco-Roman world never produced enough food to guarantee a stable supply for its towns.

The contradiction between cereal agriculture and slave commodity production underlay the form of the antagonism between town and country. There is a decisive difference between the form of this antagonism in the European Middle Ages and classical antiquity. In the Middle Ages the towns grew up within the framework of an established rural society, and often in opposition to its rulers. They were forced, directly or indirectly, to pay for their food. Thereby they put money into the pockets of the rural classes, and enabled the landowners to establish money rents far more widely. Money rents created a rural demand for urban industry. On the other hand, in antiquity, when Greco-Roman civilisation took possession of new areas, the towns were imposed suddenly and forcibly on a countryside that had hitherto had little need or knowledge of them. With local exceptions, the gulf between the living standards of town and country was infinitely wider than in medieval Europe. Money rent did not prevail. Consequently, the peasantry paid heavily for the upkeep of towns that were largely parasitic on their economy, while they provided a very insignificant market for urban industry. Marx2 holds that in the Middle Ages "the country exploits the town politically, . . . the town exploits

the country economically." In antiquity, the town exploited the country both politically and economically.

The absence of an internal market put the urban producer at the mercy of the trader. He could sell directly only within his own town. The great fortunes were made by expensive and risky long-distance trade, for which he lacked the capital. The highest profit always lay in small articles with a high price. Hence it was only in the height of its prosperity that any region made goods of mass consumption for export. The more long-distance trade contracted, the more it tended to concentrate on expensive luxuries, and the more capital it needed. The big merchant swallowed up the lesser, and both consumed the craftsman. Marx pointed the contrast. "In the precapitalist stages of society, commerce rules industry. The reverse is true of modern society." Feudal society produced conditions in which the commodity producer ultimately got the better of the merchant. Antiquity created no such conditions.

All these contradictions undermined the basis of classical economy from the beginning. Only territorial expansion by repeated successful wars could postpone the collapse. The peace and stability of the Roman Empire, behind its seeming prosperity, gave free rein to the forces of disintegration.

The conflicts within the ruling class figure prominently in Roman history. But they were fought out within the limits imposed by the antagonism between rulers and ruled. Unlike the exploited classes, the ruling class was always conscious of a bond uniting all the "best" people against the "mass." The ruling classes of different regions competed for political power. The economic strength of the Roman Empire always lay in the eastern Mediterranean, but in the early Empire Italy and the west controlled the State apparatus. Yet, though the ruling class in underprivileged areas, as Syria and Asia Minor, might chafe at their social and political inferiority in face of the Latin foreigner, they were fully conscious that the Roman State protected them against riot and rebellion at home. Rome's liberal citizenship policy made a world safe for wealth. Moreover, at a very low cost, the Government maintained an efficient defence of the frontiers of civilisation against the barbarians.

The conflict between the regions only became acute when the cost of defence increased. The barbarians learned from Rome. While Roman military science did not develop, the technical

 $^{^{1}}$ E.g. Columella, 1, 7, 6; Cairnes, Slave Power, pp. 50 ff. 2 Capital, III, p. 930.

military level of the tribes across the frontier slowly rose. The gap between the armed strength of the Romans and of their enemies began to close. The legions were losing their immense superiority. The regional antagonisms within the ruling class were settled, if not resolved, in the later Empire.

Similarly, the social rivalries within the ruling class were subordinate to its deeper class solidarity. Throughout antiquity, agriculture was the decisive branch of industry,1 landed wealth the foundation of social and economic power. The aim of every merchant or financier was to invest his gains in land, the only safe investment, and to turn himself into a landowner. Only rarely, when, as in Athens, there was an absolute insufficiency of land, did money appear as an end in itself. Normally, the great social struggles of the wealthy appear as struggles of new men against hereditary nobles. The new men fought either for the right to buy land or, having bought land, for equality of political and social status between new landowners and hereditary landowners. Once they had won their fight, the successful merchants and financiers ceased to be moneyed men, inherited the prejudices of the aristocracy against non-landed wealth, and founded new aristocratic houses. For this reason, while merchants and financiers abound, a coherent moneyed class, based on movable property, standing against a landed class, is a rare and temporary phenomenon. The ruling class remained a landed class over against all forms of workers, though it constantly drew recruits from outside its own ranks.

The rulers achieved and clearly understood class solidarity. Not so the exploited classes. They were too diversified, too isolated. Revolts of slaves and poor free men occurred in the Hellenistic period, and peasant risings were frequent in the last centuries of the Western Empire, notably in Gaul and Africa. Neither are evidenced for the early Empire. Not for nothing did Rome practise the maxim, "divide and rule." Nevertheless, social relationships were drastically transformed precisely during the early Empire.

As the market contracted, slave production became increasingly uneconomic. Slavery presupposes full employment. The wage labourer and the tenant contribute less surplus labour when in work, but they do not have to be maintained when work is short. The first two centuries A.D. are marked by an unprecedented volume of manumissions. A contract is drawn up between the master and the slave; usually the slave pays a cash sum down, and

undertakes obligations towards his former master, usually to work for a stated number of days over a stated period, to leave him a portion of his property in his will, etc. The ex-slave becomes a freedman. He is by no means a freeman, though his descendants become so. The master gives up his absolute control over the slave's labour, in exchange for defined rights over a part of it, and frees himself from the obligation to feed and maintain his slave. At the same time, many poor free-born citizens placed themselves under the patronage of the rich; they received a partial maintenance in exchange for undertaking analogous obligations. There is a tendency for slave and poor freeman to draw together, for the distinction between slave and free to become cloudy.

Manumission was not the only way to deal with slaves, who could no longer be profitably employed in the old way. As in Athens, the system of contractors comes again into prominence. Contractors buy slaves, and let them out to builders, farmers, etc. Here again, free-born citizens, without loss of their legal freedom, appear to sell their labour power to the same contractor in exchange for their keep. The distinction of slave and free is again blurred. The crafts were likewise affected. The faint traces of large-scale slave factories disappear altogether. Soon slaves start up as master craftsmen themselves, either with their own capital, in which case they pay their owners a quit-rent for the right to use their labour power themselves, or with their owner's capital, on which they pay interest. Economic function and legal status came into conflict.

In all these ways slavery tended to merge with free labour. But for long slavery remained a legal and social category. It was ceasing to be an economic reality in the production of commodities. Slavery in domestic service remained for many centuries. But the result was to replace the old basic division between slave and free citizen with a new one, between great magnate and his varying categories of unfree dependents.

In the countryside, a similar process occurred. At the very beginning of the Roman Empire the law books reveal an instance of a slave owning his own farm and cultivating it as a tenant (quasi colonus). Outside Italy and Spain, and perhaps certain parts of Africa, the great slave ranches never seem to have taken root. Even there they seem already to be in decline in the first century A.D., giving place to small tenant holdings. In the western provinces, the Roman conquest transformed tribal nobles into Roman gentlemen, the free tribesmen into tenants. In the east, the process of

transforming the ancient collectives varied from area to area, but was not complete before the decline set in.

In place of the old sharp division between slave and free man emerged a new division between lord and dependent, between honestiores and humiliores. The humble stubbornly resisted the exactions of their masters. Landowners found ever greater difficulty in extracting sufficient surplus labour, and began to fight each other

for a larger share of the dwindling surplus.

In the third century, the internal struggles of the ruling class brought a disastrous civil war. A drastic inflation followed. The ruling class was driven to more and more intensive exploitation of the peasantry, and the peasantry resisted vigorously. In Africa the Donatists, in Gaul the Bagaudæ resemble the rebellious peasants of medieval history. Money rents collapsed altogether. Smaller landowners were ruined, and great estates grew to colossal dimensions. The country house became no longer the holiday resort of its owner, but his permanent residence. The home farm, cultivated by the labour rent of his tenants,1 and their rent in kind, henceforth constituted his income, which he realised in cash as and when he could. On top of the inflation came civil war. The State no longer fulfilled its function of providing external defence and internal security. It became a burden to the landlords, who increasingly refused to pay their contributions to its maintenance. The State leant more and more heavily on the small man, too weak to resist its demands. Only by surrendering his land to the rich and powerful could he be safe against illegal exactions, against the State and its tax-gatherers, against the bandit or foreign marauder. The free tenant, the peasant freeholder were both reduced to the status of the dependent cultivator. The surplus slaves were given plots of land on which to maintain themselves in exchange for labour services and rent in kind. Economically, slave and free were assimilated to the same dependent state. Yet the wide variety of social and legal distinctions, affecting their personal rights, subsisted for many centuries and was only slowly levelled towards a common equality of subjection.

It was not till the twelfth and thirteenth centuries A.D. that the lawyers were able to try to include all these various social and legal categories within one single term. The Latin word servus, forsaking its ancient meaning of legal slave, began to connote the whole body of dependent cultivators.

The dependent cultivators were grouped around great selfsufficient estates, each equipped with its own craftsmen and virtually independent of the towns, save for luxuries for the lord and his entourage. These estates took shape during the third and fourth centuries A.D., before the barbarian invasions. Economically, this social organisation was not unlike the tribal households of the Germans across the frontier. Socially, it was very different. It is sometimes described as "a reversion to household economy." Superficially true, the phrase is misleading and inadequate. The new households were very unlike the old collectives. The latter were built on ancient tradition of kinship rights, divinely ordained for all eternity, and incapable of social development. The new households owed their origin to the dictates of current economic and political conditions, and changed as those conditions changed. They were capable of development. Not all the ingenuity of medieval theorists could persuade mankind that God had ordained their present way of life for everlasting at the Creation. It was palpably man-made, and man could and did adapt it.

But, at its outset, the new household economy grew up within the framework of an urban, commodity-producing society. The ideas and institutions of that society took long to die. Towns remained, though in the west they decayed. The centralised State survived until the barbarian invasions, though the ruling class no longer

needed it.

This conflict between new economic conditions and old social forms occasioned a chronic shortage of manpower in the last centuries of the western Empire. Yet there is no evidence for a substantial fall in population. It is a puzzling phenomenon. The true explanation is more likely to be a fall in productivity than in population.1

Both town and State continued to strive after taxation in cash. While the smaller freeholders still struggled for independence, they were forced to grow a certain surplus for sale on the market, in order to pay money taxes. But the great landowners tended to accept rent in kind, a percentage of the crop, which they themselves sold on the market. As the freehold peasant turned into rent-paying tenant, his financial burden was eased. No longer driven to sell on the market, his output decreased. Household economy therefore

 $^{^{1}}$ First clearly evidenced in the Roman world, in Africa, $c.\ {\tt A.D.}\ 200.$

¹ Professor A. H. M. Jones, Ancient Economic History, 1948 (Inaugural lecture at University College, London) gives an excellent and clear-sighted discussion of this problem.

brought about a lower agricultural productivity. Although the town population grew less, its food supply declined even faster. Town and State still demanded food. The great landlords still found a profitable market. Unable to raise the output per head, they were greedy for more and more tenants. There was a shortage of manpower on the land.

At the same time, the burden of taxation and the decreasing food supply caused townsmen to fly to the country. Town and State still needed craftsmen, and the towns too found themselves short of men. The State tried in vain to freeze every man to the occupation and residence of his father. It could not break the vicious circle. Decreasing productivity involved a serious dislocation of labour. A section of the population was employed in the maintenance of obsolete institutions. It was not enough to keep those institutions in being. Although there were fewer men in the towns and more on the land, the agricultural surplus so decreased that the country was even less able to support the towns and their state apparatus. No longer able to defend the frontiers or suppress internal disorders, the State became a useless burden to the ruling class and the masses alike. It was discontinued by the barbarian invaders.

It was in the midst of this society that the Germanic invaders settled, in the course of the fifth century A.D. They too were organised in great households, but in households that were still essentially tribal kinship units. It was not difficult for the two to assimilate. In the words of a contemporary, the rich Goth became a Roman, while the poor Roman became a Goth. Except in Britain, the two elements fused¹ more or less easily. Roman influence undermined the kinship basis of German society, and enabled the separate barbarian peoples to develop rapidly their own state institutions. On the other hand, the Germans discarded the outworn centralised State. In northern Europe, the Franks tackled the specific problems which its heavy soils and comparatively poor waterways posed, free from the deadweight of Mediterranean and Bronze Age technical tradition, but with the experience of its achievements behind them. The result was the technical inventions of the eighth to tenth centuries. It is probable that the agricultural output of the European Middle Ages was higher than that of classical antiquity.

It is now possible to suggest some of the main problems which research into the transition from slavery to feudalism will have to

Slaves and Serfs

consider. The five types of production relations are main types. In considering ancient history alone, Marx notes at least two other forms: the period of small peasant production in Greece and Rome, between primitive communism and slavery, and the landlord state of the East. Secondly, while these main types follow one another in roughly chronological order, slavery, serfdom and infinite gradations of unfreedom exist from the beginning of class society and survive till the coming of capitalism, leaving their traces to-day.

Why, then, does Marx describe classical antiquity as an epoch of slavery? Slavery was never the prevailing form of agricultural exploitation, except in some areas for relatively short periods. It was never the status of the majority of the population. Marx repeatedly contrasts domestic or patriarchal slavery with slavery in commodity production. Commodity production, based on slavery, was, directly or indirectly, the foundation of the power of the ruling states of classical antiquity.

Slave commodity production was never able to seize and revolutionise ancient cereal production, was unable to establish money rents. In Marx's view it is by the agency of money rent² that "the character of the entire mode of production is more or less changed." This failure, in the Roman Empire, Marx links with the "low level of the production of commodities in general and of the circulation of money in general." Without money rents, no widespread circulation of money in the countryside, no internal rural market. The merchants subsisted on a precarious urban and luxury market, quite inadequate unless it was continually expanding. That is why Engels says that slavery collapsed "because the market for its goods was no longer there." 5

Marx explains the low level of productivity by the effect of merchants' (and usurers') capital. While merchant capital disintegrates the old social forms, it is by itself incapable of "bringing about and explaining the transition from one form of society to another." In one set of circumstances, the formation of big money

¹ The process of fusion may be studied in Gregory of Tours, History of the Franks (written c. 580 A.D.).

¹ Some Marxist scholars (e.g. Godes, On the Asiatic Form of Production, 1931) hold that these forms of production are properly varieties of feudalism, and that Marx's thought was tending in that direction at the time of his death. All, however, including Godes, agree that Marx himself saw them as separate and independent forms of production.

² i.e. "that ground rent which arises from a mere change of form of rent in kind." *Capital*, III, p. 925.

³ Ibid., III, p. 925. ⁴ Ibid., III, p. 926. ⁵ Origin of the Family, p. 169. ⁶ Capital, III, pp. 387, 390. Engels, Anti-Dühring, p. 166, and Origin of the Family, p. 123, etc. ⁷ Capital, III, 385; cf. p. 47, above.

capital and the expropriation of the peasantry is followed by capitalism, in another by slavery. In both cases commodity production; in the one, the producers were wage labourers, in the other slaves.

What explains this different development? It is one of the most difficult problems of history. Merchant capital rotted the old social forms of patriarchal kinship society. But it created no new form of exploitation. Of the forms which already existed, one, slavery, gained a new scope and a new character. But wage labour did not develop.² When in the later Middle Ages, the accumulation of capital was again strong enough to destroy the social forms which hindered it, wage labour was already in existence.³

Classical antiquity separated town and country, levelled out the social and economic inequalities of previous societies, and made possible the emergence of the homogeneous nation states which the barbarian invaders created on its ruins. Feudalism was capable of development. New tools gave increased productivity and a greater population. The towns, growing up within rural society, were forced to promote the circulation of money in the countryside. Money rent was established. With money rent, it became profitable and possible to make use of wage labour on the land. The circulation of money in the countryside afforded a considerable rural market, and industry was free to produce goods of mass consumption, notably clothing, not only luxuries for the ruling class. Given a stable local market, the producer was slowly ultimately able to get the better of the merchant. Industry came to rule commerce. The conditions of capitalism came into being.

The key to the decline of slavery lies not only in the later centuries of the Roman Empire. It is to be sought in the whole structure of ancient economy. The problems summarily discussed above seem to the present writer important and relevant. Further research along these and similar lines should throw light on the inherent contradictions of slave economy. Once these are understood, the growth of feudalism in the room of slavery should present much less complicated problems.

¹ Marx and Engels, Selected Correspondence, pp. 354-5 (1877).

The Greatness of Joseph Conrad

BY ARNOLD KETTLE

TOSEPH CONRAD seems to me the greatest of the novelists who have written in English during the last fifty or sixty years. His greatness has been, I think, only very partially recognised. Those who have praised him seem, for the most part, to have had a hazy and limited idea of his genius. The emphasis has been along the "boys' adventure story" or "Kipling of the seas" lines, with an underlining of what is exotic, glamorous, "romantic" in the books. Lord Jim has been emphasised at the expense of Nostromo, Youth praised more often than Heart of Darkness, The Rover recommended rather than The Secret Agent. It is true that Lord Jim is—at any rate in its opening half—a most impressive piece of work; but the pre-eminence it has been given has, I think, tended to do a disservice to Conrad's reputation by leaving his greatest books comparatively unknown. However, there would seem to be at the moment a certain quickening of interest. A new "uniform edition" is on the way (first nine volumes, headed inevitably by Lord Jim, already out); Mr. Philip Toynbee has been on the ball in the Third Programme; and it now only needs a few words from Mr. Cyril Connolly to instal Conrad among the élite. Unfortunately, it may well be that his new reputation will do him no more justice than the old. One foresees with horror where the latest emphasis will lie. Only a matter of time before Under Western Eyes is discovered to pre-date Koestler and The Secret Agent to out-Graham Greene (which indeed it does). Guilt, Betrayal and Sin will be to the forefront and

"Mistah Kurtz—he dead"

will again take its place as a grim and awful symbol of the inability of man to cope with the world he has inherited.

The purpose of this essay is to suggest that the greatness of Conrad is not that of a Kipling or of a Kafka, that it stems from his grappling honestly, manfully and unneurotically with the real problems of his world, and that it is inextricably bound up with—and to a certain extent limited by—his awareness of the underlying social movement of his time.

² Wage labour, of course, existed in antiquity, but on a very much smaller scale than, for example, in fourteenth-century England.

³ Dobb's Studies in the Development of Capitalism is fundamental to a discussion of this problem.

¹ I except Miss M. C. Bradbrook, whose little book, *Joseph Conrad, England's Polish Genius*, is good as far as it goes, and—particularly—Dr. F. R. Leavis, whose two articles in *Scrutiny* (Vol. X, Nos. 1 and 2) are by far the most useful and discerning critical estimate of Conrad's novels.

I

In considering the nature of Conrad's greatness, four headings suggest themselves: his descriptive power; his moral interest; his understanding of the social nature of man; and his artistic control. It is on the second and third of these topics—which are not, I am sure, separable—that I propose to concentrate. The first topic I shall pass over quickly and the fourth I shall try to illustrate as I go along.

The first heading—Conrad's power of description—has received, perhaps, more than enough attention. The great set-pieces of his work—the storm in Typhoon, the evocation of the East at the end of Youth—are well known. Even finer are less obviously purple passages: the way in which the sordid dinginess of the Soho shop and street pervade the atmosphere of The Secret Agent, a novel in which the almost claustrophobic pressure of London's buildings leaves no breath of air or sea. In Nostromo the evocation of the Republic of Costaguana—an entire South American state whose political and social history over a number of years is the subject of the novel—is astonishingly concrete, not merely rich and luxuriant, but solid in a way no mere piling of adjectives can achieve. Here it is a subtle repetition, an association of character or event with concrete objects or characteristics (a fan, a lighthouse, long moustaches, a lame leg) which gives the prose its quality. What at first appears a somewhat irritating insistence is seen after a time to be a conscious and essential method. Without this ability to make concrete the scenes and settings of his novels that combination of outward clarity and inward depth which is one of Conrad's characteristics would be lost. For Conrad (I shall return to this), though he is not a superficial writer, though his characters have an "inwardness" in something of the way of Dostoyevsky's or James's people, is yet concerned essentially with the real, material world. One never gets from his books the impression that the inner life is more real or in some way quite isolated from the physical world.

One example of this descriptive power must suffice (and one which will, conveniently, lead us on to my main topics, Conrad's moral and social interest). It is the first description in *Heart of Darkness* of Africans of the Congo. Marlow (who is, almost explicitly, a part of Conrad) has come out, a young sea-captain, his ears ringing with the stories of the civilising mission of the Empire-builders:

"A slight clinking behind me made me turn my head. Six black men advanced in a file, toiling up the path. They walked erect and slow, balancing small baskets full of earth on their heads, and the clink kept time with their footsteps. Black rags were wound round their loins, and the short ends behind wagged to and fro like tails. I could see every rib, the joints of their limbs were like knots in a rope; each had an iron collar on his neck, and all were connected together with a chain whose bights swung between them, rhythmically clinking. Another report from the cliff made me think suddenly of that ship of war I had seen firing into a continent. It was the same kind of ominous voice; but these men could by no stretch of the imagination be called enemies. They were called criminals, and the outraged law, like the bursting shells, had come to them, an insoluble mystery from over the sea. All their meagre breasts panted together, the violently dilated nostrils quivered, the eyes stared stonily uphill. They passed me within six inches, without a glance, with that complete, deathlike indifference of unhappy savages. Behind this raw matter one of the reclaimed, the product of the new forces at work, strolled despondently, carrying a rifle by its middle. He had a uniform jacket with one button off, and seeing a white man on the path, hoisted his weapon to his shoulder with alacrity. This was simple prudence, white men being so much alike at a distance that he could not tell who I might be...."

Notice the effect of the clinking of the chain, which is not merely ghastly but *near*, so that the reader peculiarly hears it, just as later he sees (or, rather, doesn't see) the button missing from the guard's tunic. The effect here is that the scene is so concretely presented that the moral significance—the "ominous voice" of the imperialist man-of-war, the guard as a part of the "new forces"—is not separate from the picture, but a part of it.

Some kind of "moral discovery," Conrad wrote, "should be the object of every tale." He was no Art-for-Arter, this artist who, incredibly, wrote his books in a foreign language which he learned as an adult, and wrestled with his novels in a way reminiscent of Flaubert, the novelist whom he most admired. And by "moral discovery" he did not mean merely the illustration of a preconceived moral truth. It was in the creation of the work of art that

¹ Under Western Eyes (ed. Blackwood), p. 60.

the discovery was made. This seems to me very important. The good and honest artist does not illustrate, he creates; and that very act of artistic creation, that moulding into significant form of some thing or part of life, is in itself a discovery about the nature of life, and ultimately its value will lie in the value of that discovery. I emphasise this perhaps slightly academic point because I think Conrad's seriousness as an artist needs, from the outset, to be stressed. It is interesting, incidentally, that illuminating remarks about his art come more frequently in the novels themselves than in his prefaces, which are oddly naïve and unsatisfactory. The explanation undoubtedly lies in this word "discovery." It was in his artistic grappling with life, not in his logical thinking about it, that Conrad delved deepest and with best result.

What were the "moral discoveries" he made? It is not easy to define them, because he never did so himself. In fact, when he tried he is disappointing. "What is so elusive about him," Mr. E. M. Forster has excellently said, "is that he is always promising to make some general philosophic statement about the universe, and then refraining with a gruff disclaimer. . . . No creed, in fact. Only opinions, and the right to throw them overboard when facts make them look absurd. Opinions held under the semblance of eternity, girt with the sea, crowned with the stars, and therefore easily mistaken for a creed." That seems to get him: no creed, but an unflinching respect for facts, the facts of the world he lived in. The moral discoveries are always based on facts.

The most important fact of all to Conrad is the social nature of man. It is a fact (or, if you will, an opinion based on fact) which permeates the books and informs, not least, that hard and "jewelled" style, generally so concrete in its imagery, so controlled in its movement.

Conrad began writing in the eighteen-nineties, after twenty years as sailor and adventurer. His early books are nearly all about the sea or about distant lands: Malaya, Indonesia, India, Africa. What were the "facts" he found? Not merely, as some of his admirers would pretend, glamour, adventure, colour, romance. There is an uglier word as well: imperialism. Conrad doesn't often mention the

word; clearly it wasn't part of his familiar vocabulary. What is significant is that, in this period when the growth of imperialism was the dominant factor in world history, only two considerable writers of English—Kipling and Conrad—looked this phenomenon in the face. From their experience both of them gained a vitality which other writers of their age notably lacked. But only Conrad looked at imperialism honestly enough to become an artist.

Heart of Darkness is perhaps the most horrifying description of imperialism ever written. Beside it Gide's Journal of the Belgian Congo makes drawing-room reading. Almost at random one can take a description of the native African workers:

"They were dying slowly—it was very clear. They were not enemies, they were not criminals, they were nothing earthly now, nothing but black shadows of disease and starvation, lying confusedly in the greenish gloom. Brought from all the recesses of the coast in all the legality of time contracts, lost in uncongenial surroundings, fed on unfamiliar food, they sickened, became inefficient, and were then allowed to crawl away and rest. These moribund shapes were free as air-and nearly as thin. I began to distinguish the gleam of eyes under the trees. Then, glancing down, I saw a face near my hand. The black bones reclined at full length with one shoulder against the tree, and slowly the eyelids rose and the sunken eyes looked up at me, enormous and vacant, a kind of blind, white flicker in the depths of the orbs, which died out slowly. The man seemed youngalmost a boy-but you know with them it's hard to tell. I found nothing else to do but to offer him one of my good Swede's ship's biscuits I had in my pocket. The fingers closed slowly on it and held—there was no other movement and no other glance. He had tied a bit of white worsted round his neck—Why? Where did he get it? Was it a badge—an ornament—a charm—a propitiatory act? Was there any idea at all connected with it? It looked startling round his black neck this bit of white thread from beyond the seas."

Or, not less appalling, of the white exploiters:

"This devoted band called itself the Eldorado Exploring Expedition, and I believe they were sworn to secrecy. Their talk, however, was the talk of sordid buccaneers: it was reckless without hardihood, greedy without audacity, and cruel without

¹ R. G. Collingwood puts this well in *The Principles of Art* (Oxford), 1938: In certain cases "the artist has no idea what the experience is which demands expression until he has expressed it. What he has to say is not present to him as an end towards which means have to be devised; it becomes clear to him only as the poem takes shape in his mind, or the clay in his fingers."

courage; there was not an atom of foresight or of serious intention in the whole batch of them, and they did not seem aware these things are wanted for the work of the world. To tear treasure out of the bowels of the land was their desire, with no more moral purpose at the back of it than there is in burglars breaking into a safe. Who paid the expenses of the noble enterprise I don't know; but the uncle of our manager was leader of that lot..."

The theme of the story is degradation—the degradation of the ruled and of the rulers: darkness, horror, death. The irony is fundamental to the whole concept of the story and, for the most part, it is a controlled irony: the ignorance and complacency of the metropolitan organisers contrasted with the facts of colonial exploitation; the idealisation of Kurtz by his fiancée contrasted with the truth, that he is the very essence of dark corruption. And the outer setting of the tale (it is being related by Marlow to his friends on the deck of a yawl in the Thames Estuary) increases the irony: Roman imperialism is recalled and the Thames itself becomes for a moment a Roman Congo. The theme is universalised.

Yet Heart of Darkness, for all its power and honesty, is not a complete artistic success. One suspects early on that something is going a little wrong when Marlow begins talking of "the fascination of the abomination," a highly romantic concept with too many decadent associations and at unfortunate variance with the tone of (a moment later):

"The conquest of the earth, which mostly means the taking it away from those who have a different complexion or slightly flatter noses than ourselves, is not a pretty thing when you look into it too much."

And later, as Marlow continues his progress up the Congo, there is a piling on of adjectives, a reiteration of imperfectly formulated abstractions—"horror," "inconceivable," "unspeakable," "inscrutable"—of which the actual effect, as Dr. Leavis has said, "is not to magnify but to muffle." Kurtz becomes a symbol—one is not quite sure a symbol of what—except that it is beastly. More and more the horror is evoked not (as in the earlier description of jungle and degradation) in relation to facts, but in relation to something undefined, mysterious in the cheapest sense.

This final weakness of *Heart of Darkness* is analysed by Dr. Leavis together—in the case of the final scene with Kurtz's

"Intended"—with some general observations about the inadequacy of Conrad's mystical presentation of women. "About his attitude towards women there is perceptible, all the way through his literary career, something of the gallant simple sailor." With this last remark one is bound to agree (almost all Conrad's women are unsatisfactory, almost all "mysterious" in an all too novelettish way). But why not apply to Conrad's presentation of imperialism the same criteria? I think it is certain that, just as Conrad didn't know enough about women (had, so to speak, got his facts wrong), so also he didn't, at any rate at the time of Heart of Darkness, know enough about imperialism or, rather, was not prepared to draw all the conclusions from what he did know. The "horror" of Heart of Darkness is, in fact, the horror of imperialism. It is successfully presented artistically just so long as no general conclusion has to be drawn from it. But once there is the necessity of recognising, in what Kurtz stands for, not merely a ghastly fact but a principle —that imperialism itself, all imperialism, is rotten¹—Conrad takes refuge in a vague mysteriousness and loses himself in a jungle of adjectives, impenetrable in just the sense that a lie is impenetrable.

But Conrad was honest. "There is a taint of death, a flavour of mortality, in lies—which is exactly what I hate and detest in the world." While Kipling celebrated the white man's burden, Conrad wrote what he saw. He is describing Stein in *Lord Jim*:

"There were very few places in the Archipelago he had not seen in the original dusk of their being, before light (even electric light) had been carried into them for the sake of better morality and—and—well—the greater profit too. . . ."

The hesitancy will out, but so will the moral discovery. For all his temperamental conservatism, all his loyalty to Britain, his adopted country, and its Empire, his honesty time and again wins through. None of his stories is propagandist. He will not sell himself. His feeling for the native peoples is sincere. Dain Waris in Lord Jim, Hassim in The Rescue are presented with the greatest sympathy and dignity, indeed they are among Conrad's few characters (apart from the women) who can be said to be idealised. And the truth is that these young Malayan aristocrats are conceived as Polish rather than as Malayan nationalists. They are not

¹ There is a revealing passage in *Heart of Darkness* when Marlow is examining a map of the world and remarks: "There was a vast amount of red—good to see at any time, because one knows that some real work is done in there..." The British Empire seems always to be different....

among Conrad's successes because, excusably, for all his sympathy, he did not understand these people.

As he grew older, the moral discoveries he drew from his art became rather more fully rationalised. His hatred of financial speculation, of "material interests," may be an "opinion" rather than a "creed," but it is an opinion which permeates several of the later novels. Chance is full of it. Marlow's description of the financial dealings of the swindler de Barral is a splendid piece of ironic writing equalled by the scorn bestowed on the Tropical Coal Belt Company in Victory. But to abstract single themes from particular novels is a dangerous practice and can easily be a misleading one. I wish merely to emphasise that Conrad's concern with imperialism is no chance interest, but is central to his whole work, which is the presentation through his art of man as a social being.

The finest example of that art is the great novel, Nostromo.

п

Nostromo, A Tale of the Seaboard, as it is inadequately described by its author, is a political novel in the widest sense—the sense in which Aristotle and Marx used the word. Its background is the history of a South American republic—presented, as I have already suggested, with extraordinary concreteness—that passes through a revolution which establishes a liberal parliamentarian régime, a counter-revolution led by totally unprincipled adventurers, and a third revolution which (in the particular province concerned) re-establishes the liberals. The liberals—bourgeois parliamentarians distinguishable from the counter-revolutionaries principally by a greater smoothness of manners—are supported and financed by the owners of the greatest power in the land, the San Tomé Silver Mine, run by an Englishman, Charles Gould, backed by American capital. The main theme of the novel, fundamental to the personal themes that form the "story," is the corrupting power of the silver mine, which changes all that touches it—dehumanises Gould and dries up his marriage, makes a mockery of the liberal ideals of the parliamentarians and the Christianity of the American capitalist, corrupts the incorruptible Nostromo, Capataz de Cargadores, great man of the people, symbol of their aspirations.

Nostromo is, from the technical point of view, an amazing tour de force. The method Conrad uses is of particular interest, because his problems are the characteristic problems of the modern

novelist: to present a wide canvas in which essentials are not lost in too great detail; to convey political and social movement on various levels (conscious, unconscious, semi-conscious); to suggest the almost infinite interrelatedness of character and character, character and background; to give each character a real individuality and yet see each as part of a concrete whole; in short, to show men in society. Conrad's method is to oversimplify somewhat individual character in the sense of giving each individual very sharply-defined personal characteristics, frequently reiterated, so that each stands out clearly, not only in contrast to the others, but against the clear, concrete, surface-objective background of the whole. In fact, the characters are not simple at all; by the end of the book their depths and complexities are well established; it is their presentation which is simplified. Like the Elizabethan dramatists, Conrad employs his own convention for the revelation of social life. Just as Hamlet is at once a type and an individual, the melancholic, conventionally presented in a way the audience immediately grasps, and gradually revealed in all his complexity and significance, so is Monygham, the cynical but austere moralist, conventionally presented to the reader with his scarred face and twisted body and—thus immediately apprehended in essentials—plays his part in the vivid pattern of the novel, while the full depth and significance of his character is gradually revealed. One might contrast Conrad's method, highly conventionalised and dependent on a continuously controlled and (in a wholly laudatory sense) artificial prose, with that of John Dos Passos who, in an even more ambitious political novel, U.S.A., achieves breadth only at the sacrifice of depth and a colloquial prose style at the sacrifice of all reasonable brevity.

I will give one example of the method of *Nostromo*, a passage following a scene of great intimacy between Antonia, the daughter of the idealist liberal leader, and Decoud, the sceptical, unprincipled, Europeanised dilettante, who is in love with her. It is late evening and they are standing in the window of Antonia's house.

"She did not answer. She seemed tired. They leaned side by side on the rail of the little balcony, very friendly, having exhausted politics, giving themselves up to the silent feeling of their nearness, on one of those profound pauses that fall upon the rhythm of passion. Towards the plaza end of the street the glowing coals in the brazeros of the market women cooking their

evening meal gleamed red along the edge of the pavement. A man appeared without a sound in the light of a street lamp, showing the coloured inverted triangle of his bordered poncho, square on his shoulders, hanging to a point below his knees. From the harbour end of the Calle a horseman walked his soft-stepping mount, gleaming silver-grey abreast each lamp under the dark shape of the rider.

"Behold the illustrious Capataz de Cargadores,' said Decoud gently, 'coming in all his splendour after his work is done....'

There are several of the essentials here of Conrad's method. The personal relationship, intimately yet objectively suggested, is placed, by the immediate evocation of the whole plaza, securely within a larger social relationship, the private world related at once to the public world. The glowing coals, with their suggestion of after-passion, are at the same time surface-objective, adding to the visual reality of the scene, and atmospherically valuable, a kind of "bridge" between the two worlds. The market women and the man in his poncho are not merely picturesque (though they are that), they fill out involuntarily the social picture, they give a warmth and significance to the "politics" that Antonia and Decoud (all too abstractly) have been discussing. And then, all within five sentences. the next character is on the scene: Nostromo, heralded by his "conventional" epithet, "illustrious." And already the image most often associated with Nostromo has appeared, silver. Silver-grey is his horse in the lamplight, gleaming like the silver buttons which he has magnificently ripped off his tunic to give to his admirer Morenita, and like the treasure of the San Tomé Mine that will destroy him: all leading onward to the last sentence of the book. when the name of Nostromo, the dead captive of the mine, has been cried out across the sea by his lover:

"In that true cry of undying passion that seemed to ring aloud from Punta Mala to Azuera and away to the bright line of the horizon, overhung by a big white cloud *shining like a mass of solid silver*, the genius of the magnificent Capataz de Cargadores dominated the dark gulf containing his conquests of treasure and love." (My italics. A. C. K.)

More remarkable, however, than the technical achievement is the moral honesty and political insight which Conrad brings to his masterpiece. "'What is wanted here is law, good faith, order, security' [says Charles Gould, the owner of the silver mine]. 'Anyone can declaim about these things, but I pin my faith to material interests. Only let the material interests once get a firm footing, and they are bound to impose the conditions on which alone they can continue to exist.'"

"As against the mob the railway defended its property, but politically the railway was neutral."

(What better summary could one have of the "non-political" flap-doodle of the capitalist class?)

The inadequacy of liberalism is poignantly exposed in:

"The feeling of pity for those men (the liberals), putting all their trust into words of some sort, while murder and rapine stalked over the land...."

And nearly all the liberals are shown as cowardly quislings when the moment of danger comes.

Again, a messenger from Hernandez, the notorious bandit, asks Charles Gould:

"'Has not the master of the mine any message to send to Hernandez, the master of the Campo?'

"The truth of the comparison struck Charles Gould heavily. In his determined purpose he held the mine, and the indomitable bandit held the Campo by the same precarious tenure. They were equals before the lawlessness of the land. It was impossible to disentangle one's activity from its debasing contacts. A close-meshed net of crime and corruption lay upon the whole country..."

One tends to quote passages which show Conrad's conscious understanding of the social situation he is recording; but the real test of a novel lies of course in its ability to convey artistically that understanding and such a test needs quotations longer than one can conveniently make.

Mrs. Gould's disillusionment with the effects of "material interests" (i.e. imperialism) is complete when Dr. Monygham says:

"There is no peace and no rest in the development of material interests. They have their law and their justice. But it is founded on expediency and is inhuman; it is without rectitude, without

the continuity and the force that can be found only in a moral principle. Mrs. Gould, the time approaches when all that the Gould concession stands for shall weigh as heavily upon the people as the barbarism, cruelty, and misrule of a few years back."

And at the close of the novel her husband must leave her, at a moment when she needs help and consolation, because there is labour unrest in the mine. The workers are disillusioned too. And Mrs. Gould in her sad wisdom reflects:

"'It had come into her mind that for life to be large and full, it must contain the care of the past and of the future in every passing moment of the present.'"

The tragedy of Nostromo is that he has none of this sense at all. He is without past and can have no future. He has no roots; he is an expatriate Italian. His great power and influence over the workers is exerted arbitrarily; he lives only for reputation. And when this is taken from him (by the failure of the liberal-capitalist alliance, which he has supported from no principle) he falls a prey immediately to the power and temptation of the silver of the mine. Thus Nostromo, though a "natural" leader of the people and sharing their deepest hopes and aspirations as well as their fears and superstitions, is useless as a leader because he is without principle. He is a careerist.

But if Nostromo does not understand the point of Mrs. Gould's reflection, Conrad does; and it is in this profound comprehension that the greatness of the book ultimately lies. For it succeeds most wonderfully in capturing the truth of social movement. Engels once wrote:

"History makes itself in such a way that the final result always arises from conflicts between many individual wills, of which each again has been made what it is by a host of particular conditions of life. Thus there are innumerable intersecting forces, an infinite series of parallelograms of forces which give rise to one resultant—the historical event. This again may itself be viewed as the product of a power which, taken as a whole, works unconsciously and without volition. For what each individual wills is obstructed by everyone else, and what emerges is something which no one willed."

I cannot imagine that Conrad had ever read Engels, and whether he had or not is quite irrelevant (for what we are dealing with is life, not authority). But this process which Engels describes in terms of science is precisely the total effect of *Nostromo*, achieved in terms of art—nothing less than the presentation of society in motion, history in the making.

Conrad succeeds, moreover, in the immensely difficult task of showing the interrelation between the individual and society. The men in Nostromo are what they are because they are part and parcel of a social situation; and at the same time they change and modify that situation. You cannot abstract them from the situation or the situation from them. When-like Decoud, the dandy, or Nostromo, the careerist-they do not accept their social obligations and attempt to live in isolation, lonely, haunted, without principle, nothing is left for them but death. Betrayal and isolation-that sense of guilt so powerful in the socially and intellectually dispossessed of our time-are powerful themes in Conrad's novels. In Nostromo the general stink of corruption (cf. Graham Greene), the grovelling fear of the terrified Hirsch (cf. Koestler), Nostromo's remorse at refusing the dying wish of his Italian foster-mother for a priest (cf. Ulysses) all bring something to this atmosphere, and the character of Dr. Monygham who has, under torture, betrayed his friends (cf. Sartre) reinforces it. But the description of Monygham's release from jail after torture and imprisonment is significant:

"He advanced one stick, then one maimed foot, then the other stick; the other foot followed only a very short distance along the ground, toilfully, as though it were almost too heavy to be moved at all; and yet his legs under the hanging angles appeared no thicker than the two sticks in his hands. A ceaseless trembling agitated his bent body, all his wasted limbs, his bony head, the conical, ragged crown of the sombrero, whose ample flat rim rested on his shoulders.

"In such conditions of manner and attire did Dr. Monygham go forth to take possession of his liberty. And these conditions seemed to bind him indissolubly to the land of Costaguana like an awful procedure of naturalisation, involving him deep in the national life, far deeper than any amount of success or honour could have done. They did away with his Europeanism; for Dr. Monygham had made himself an ideal conception of his disgrace.

It was a conception eminently fit and proper for an officer and a gentleman..."

Not merely is the sense of the social nature of man here extremely powerfully expressed, but there is also a subtle dissociation of the writer from the man he is describing. To permit himself the irony of the last sentence without jeopardising the compassion which informs the whole description, Conrad needed all the artistic and moral control which most of his successors have notably lacked. The difference between the treatment of the dispossessed in Nostromo and in the contemporary novels and plays of pessimistic neurosis is that Conrad sees their problem, not as a symbol of life itself, but only as a part of life. That he shares to a large extent their despair is true, and he expresses that despair most powerfully (Mrs. Gould, in her disillusionment, wonders for a moment whether "There was something inherent in the nature of successful action which carried with it the moral degradation of the idea"). But though the theme is so poignantly done it retains the status of a theme, overtopped by the prevailing vitality, the sense of life developing.

Conrad succeeds, in fact, where Ernest Hemingway fails, in discovering imaginatively that "every man is a piece of the continent, a part of the main," and his triumph is the more remarkable because, in his personal political opinions, he would seem to have been far from clarity. This is shown particularly in *Nostromo* in his inadequate attitude towards "the mob," who never come to life as human beings. Significantly, one of the few incorruptible characters in *Nostromo* is the old Garibaldino, the austere and noble Italian democrat who fathers Nostromo. He is a creation into whom Conrad has obviously put great sympathy (the sympathy, one is perhaps permitted to feel, of a liberal Polish nationalist). But, though personally admirable, the Garibaldino is ultimately ineffective. His principles are out-of-date, he cannot cope with the world of the San Tomé Silver Mine. And he kills Nostromo, whom his daughters love.

Conrad, then, had no conscious, intellectualised solution for the problems of the society which he depicts with such truth and insight. And yet, clearly, as an artist he achieves his "moral discovery": that vital sense of society changing, developing, becoming; of men mastering—with almost infinite difficulty, agony and error—the problems they *must* master. It is wrong to talk glibly

of the "solution" offered by a work of art, the experience of the work of art is in itself a kind of solution, a synthesis, a discovery of the nature of the problem. But even on the level of immediate helpfulness this great novel holds its surprises. By a stroke of astonishing intuition the only man who is present with the dying Nostromo—symbol to Conrad of the people "in his mingled love and scorn of life and in the bewildered conviction of being betrayed, of dying betrayed he hardly knows by what or by whom"—is none of the main characters of the novel whom we already know, but an obscure little workman, a "small, frail, bloodthirsty hater of capitalists," who, personally unadmirable and presented ironically, yet speeds Nostromo to his death with the assurance that "The rich must be fought with their own weapons."

III

In conclusion, I want to mention the two brilliant European novels, so different from the normal picture of Conrad the romantic sailorman, The Secret Agent and Under Western Eyes. No rower in their scope than Nostromo, each deals with a small number of specialised characters, the one with the mean and ignoble tragedy of an agent provocateur and his wife, the other with the classic theme of betrayal and guilt among nineteenth-century Russian revolutionaries.

The characteristic of these novels is their intensity and their control. The Secret Agent, in particular, is a technical triumph as impressive in its way as Nostromo, though richness and breadth have given way to economy and deliberate limitation. But both novels retain, to an extraordinary degree, Conrad's deep sense of social movement. It is instructive to compare a long, conscientious, contemporary (to Conrad) social novel like The Forsyte Saga with the brief, taut, vignette, The Secret Agent. In Galsworthy's book, for all the verisimilitude, all the paraphernalia of period realism and class-consciousness, the "human interest" and the family tree, there is no organic sense of social movement at all, no imaginative transmission through the prose and the texture of the vitality and inner conflict of human society. You can get from The Forsyte Saga a rather more entertaining and a good deal less valuable version of what you can get in the Victoria and Albert Museum, and in that sense alone is there "social significance" in the book. Whereas from The Secret Agent, which has some two hundred pages, no

fully "sympathetic" character, and seldom moves out of a seedy shop in Soho, you get on your pulses, not "human interest," but a sense of the human predicament and of the underlying workings of our society.

Both The Secret Agent and Under Western Eyes deal with revolutionaries, anarchists, terrorism. To Conrad the word "anarchist" (which he uses somewhat indiscriminately) is a very bitter term of reproach and contempt. But each individual revolutionary he sees and judges with scrupulous honesty—from the inhuman, fanatical "Professor" with his perfect explosives, to the despicable thug Nikita and the intelligent, steadfast Sophia Antonovna. What he lacks is any sense of an organised, disciplined, scientific revolutionary party or-more important still-of any mass democratic movement among the people themselves; and there is no doubt that this deficiency ultimately limits the value of his novels. (If you are going to write a great novel about revolutionaries you must know more about them than Conrad does.) But here we are on the fringe of a critical method which must immediately be suspect. Once we begin to say of a writer, "If he had understood such and such better he might have been a greater writer," we are guilty of unrealism, because we are dealing in hypothetical questions and applying standards which may have a certain objective truth, but are nevertheless being used as abstract absolutes.

There is a passage in *The Secret Agent* which illustrates beautifully both the quality of Conrad's novel and the critical dilemma I have just referred to. Verloc, the agent, has been directly responsible for the death of his wife's feebleminded brother. He is a stupid, dishonest, respectable, complacent and not unkindly man without the slightest inkling of the moral issues involved. He realises that his wife will be upset; but he is totally unaware of what the reader already knows—the depth and complexity of his wife's feeling for her brother.

"Mr. Verloc was a humane man, he had come home prepared to allow every latitude to his wife's affection for her brother. Only he did not understand either the nature nor the whole extent of that sentiment. And in this he was excusable, since it was impossible for him to understand it without ceasing to be himself."

The short passage may give some idea of the combination of irony and compassion, scorn and pity, which underlie the novel.

It also puts forward a proposition relevant to the literary critic. If Conrad had understood things he did not understand—the full significance of imperialism, the destiny of the working-class movement—he would not have been Conrad. Whether or not he would have been a greater novelist is a merely fatuous question.

We are on safer ground—perhaps the only safe ground—in recording not what might have been, but what is in the novels. The Secret Agent ends wonderfully with the pathetic suicide of Mrs. Verloc and a meeting of two of the anarchists, the inhuman, crazy "Professor" and the detestable sensualist, Ossipon. The key words are "madness and despair" and they are reiterated rather as the word "horror" is reiterated in Heart of Darkness. But by now Conrad's control is complete. The "impenetrable mystery" which in the earlier story remains vague and unrealised is here (the same words are used) given a precise irony and set in the inverted commas of a newspaper quotation. The madness and despair are no vague "feelings" but the madness of a social situation which leads to senseless destruction and the despair of the humble and afraid who, like Mrs. Verloc, are caught up in the destruction. And again, just as in Nostromo, the very end of The Secret Agent brings a flash, which might be called intuition, but for which I prefer Conrad's own phrase, "moral discovery." The "Professor," symbol of evil, of purposeless, unprincipled destruction, walks away:

"His thoughts caressed the images of ruin and destruction. He walked frail, insignificant, shabby, miserable—and terrible in the simplicity of his idea calling madness and despair to the regeneration of the world. Nobody looked at him. He passed on, unsuspected and deadly, like a pest in the street full of men."

"Men," the last word of the book, is significant. It is "men," "a street full of men," human society, warm, alive, positive, that is placed in opposition to the forces of darkness. The "positives" of the book are not merely the Liberal Cabinet Minister, representative of democratic law and order, but a street full of men.

Conrad's philosophy (such as it is), his political position, the limitations of his outlook, could all no doubt be "explained" with reference to his background. The expatriate Pole, the son of a nationalist (who was yet not, he insisted, a revolutionist), the man who felt from his earliest years the force and horror of the class and national struggles of Eastern Europe, the outcast who had himself no society, save that of a ship (and then only the officers'

quarters), where he felt at home. The raw material is all there; but I am not much inclined to emphasise it. It certainly explains a lot, but it does not explain why he is a great artist, and it is as an artist, not as a rather muddle-headed Polish *émigré*, that he is of value to us. His description of Razumov in *Under Western Eyes* perhaps applies to himself as well as any:

"He was aware of the emotional tension of his time; he even responded to it in an indefinite way. But his main concern was with his work, his studies, and with his own future."

And again there is much of Conrad in Razumov's political dilemma:

"Between the two he was done for. Between the drunkenness of the peasant incapable of action and the dream-intoxication of the idealist incapable of perceiving the reason of things and the true character of men."

Certainly he felt this problem very deeply, posed between a ruling class he despised and a working class (or peasantry) in which he felt little confidence. But it is notable that, though he is merciless towards the failings of the revolutionaries in *Under Western Eyes*, he is even less merciful to the Tsarist autocracy. With magnificent and disciplined irony, he makes "fidelity"—his own keyword²—the keyword too of General T.—the goggle-eyed symbol of mean-souled despotism. He does not suggest for a moment that the revolutionaries are *wrong* to revolt, and ultimately it is Sophia Antonovna, the tireless and selfless revolutionary worker, who carries forward the positive values of the tale. Always it is the police spies, like Nikita, and their employers (like Vladimir in *The Secret Agent*) who reach the lowest depths of degradation.

And the basis of Conrad's sanity is always his obstinate insistence on the social nature of man. He is never neurotic, never bogs down in the individualist quagmire which he explores so subtly.

² See A Familiar Preface: "Those who read me know my conviction that the world, the temporal world, rests on a few very simple ideas; so simple that they must be as old as the hills. It rests notably, among others, on the idea of Fidelity."

Sometimes in *Under Western Eyes* he seems on the very brink of capitulation, almost overwhelmed by the difficulty of—

"appraising the exact shade of mere mortal man, with his many passions and his miserable ingenuity in error, always dazzled by the base glitter of mixed motives, everlastingly betrayed by a short-sighted wisdom."

But he always pulls back. Always he carefully dissociates himself from mysticism, always avoids the seductive hopelessness of Original Sin. It is loneliness, isolation, lack of social existence (he has no ties, no family, no parents, only Russia which is corrupt and run by the General Ts.) that drive Razumov into his season in hell.

"No human being could bear a steady view of moral solitude without going mad."

That is Conrad's nightmare: man divorced from society. That is why his emphasis on guilt and betrayal, loneliness and error, is not in a fundamental sense neurotic, not based on a denial of social obligation or a sense of romantic individualism, not, in his own words, "a matter of crazy nerves or a morbid conscience." Always, like Nathalie Haldin in *Under Western Eyes*, he faces "cruel realities, not morbid imaginings of her own making."

And that is why when the Koestlers of this world come to claim Conrad they will have more on their hands than they bargain for.

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¹ See, for instance, his description of his youth in A Personal Record: "An impartial view of humanity in all its degrees of splendour and misery together with a special regard for the rights of the unprivileged of this earth, not on any mystic ground but on the ground of simple fellowship and honourable reciprocity of services was the dominant characteristic of the mental and moral atmosphere of the houses which sheltered my hazardous childhood: matters of calm and deep conviction both lasting and consistent, and removed as far as possible from that humanitarianism that seems to be merely a matter of crazy nerves or of a morbid conscience."

The Nature and Development of Life and of Our Ideas about it

N. W. PIRIE

A SPECIALIST is likely to appreciate the way in which his own subject shades into all adjacent subjects without clear lines of demarcation and the way in which some of the basic concepts of his subject will not stand rigid definition. At the same time he is apt to expect subjects other than his to be clear and sharply defined; he expects them to supply a set of facts and concepts that he can use in his own speciality without too much thought. Nature, however, is not like that; it is a state of affairs that exists and we describe it. In general we can assume that all the possibilities exist and that they merge into each other by smooth gradations. Any attempt to define categories, to give names, to make classifications or to establish laws is bound to mislead if much is expected of it. These things are wholly artificial and, although essential as a basis for our thinking, they have nothing to do with Nature.

We tend to think of Nature as made up like the number series 1, 2, 3, etc., where the numbers have an individuality and significance that is not shared by the spaces between such as $1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$. In fact, it is like a road; the place where a mile post is has no merit or interest that the places between the mile posts lack. Our classificatory terms are like the mile posts; they have been set up to mark the most common, the first recognised, the economically significant, etc. From these posts fields of knowledge develop and between the fields lie borderlands in which few phenomena fell in the early phases of the development of the domain. But the phenomena are fundamental and the words and classifications secondary. It would have been as logical to have started our classification in the borderlands. Then our present standards, the middles of fields, would have been the anomalies. In the early phases this would not have been convenient; as large a proportion of our experience as possible should lie obviously inside the defined categories. The development of technique, however, brings with it increasing knowledge of the borderlands. It then becomes necessary to think whether the centres of our categories are still in the most convenient places. It may be advantageous to set up new centres or to move the old ones.

The fringes of biology, and therefore the connotations of the word "life," provide an excellent example of this process. During the past few centuries there have been great fluctuations in the positions where the boundaries of biology have been set and in the importance attached to them. The history of these fluctuations has often been told, but it may be summarised again. Until the beginning of the seventeenth century the spontaneous appearance of living forms in inanimate systems was not regarded either as philosophically repugnant or contrary to experience. Even in the seventeenth century Descartes, and the Catholic Church, had a mechanistic view of life and saw no need for a boundary between the living and non-living states. The growth of experiment brought with it the conviction that the two states were sharply distinguished and by the eighteenth century there were well established Mechanist and Vitalist schools. Mechanism, which at this time was associated with the belief that organisms only arose from other organisms, was in the ascendant and, but for the support given to it by Buffon, Vitalism would probably have died. The evidence that Spallanzani and, in the nineteenth century, Pasteur brought forward was largely responsible for the systematisation of the belief that there was a sharp boundary between living and nonliving matter. This view did not lack critics and it should be stressed that Pasteur himself did not express it categorically and did not assert the absolute impossibility of spontaneous generation.

In the nineteenth century it became clear that the same principles of chemistry and physics held good on both sides of the boundary and that no new quality, describable in terms of chemistry or physics, was associated with the living state. So much has been written on this phase of the controversy that there is no need to restate the arguments here. The present century has brought an unprecedented increase in knowledge of systems on either side of the boundary so that an increasing number of biologists have come to doubt the usefulness of maintaining it. Confusion does not often arise because most research is carried out in regions far removed from the boundary. Most systems are either obviously living or obviously dead and when the matter becomes doubtful Ritchie's¹ neat phrase, "... a matter of degree. Some things are deader than others, some things are livelier than others," is generally held adequately to summarise the matter.

This agnostic attitude has not gained universal acceptance. Many text-book writers, giving way to the widespread wish to parcel Nature up into neatly labelled bundles, have given lists of the characteristic features of the systems that, for æsthetic reasons, we wish to call living. These lists have been dismissed as valueless; 1,2,3 each feature is absent from some systems we wish to call living and present in some that we do not. The distinction is either arbitrary, like that between gem-stones and other minerals, or else it must be defined in terms of the simultaneous presence of some out of a large number of qualities.

We say that a dog is alive because, in an environment that is equipped (by mechanisms that we need not at the moment go into) with suitable amounts of food, oxygen, water, etc., it is irritable, motile, fecund and so on. Any of these qualities may disappear—for example by anæsthesia, sleep, or castration without the dog being dead. But if its head is cut off the dog, considered as a dog, is dead. Its tissues are not. A physiologist, working with one of its kidneys on a perfusion pump, calls the kidney alive if it can still respire and secrete. If secretion fails, the physiologist would say that the kidney had died, but individual cells from it may still be able to grow and divide in a suitable tissue culture medium. A metazoan cell is able to survive, and often to multiply, in the environment provided by the other cells or by the experimenter, but it cannot survive in the medium that surrounds it soon after the integration of the organism has gone. At the level of complexity above the single cell, life has an arbitrary meaning depending on the passing interest of the person using the word.

The state of affairs in the cell is similar. Here also there are reproducing units with other capacities besides self-reproduction. Chromosomes are an obvious example, but enzymes are better because something is known about the mode of formation of some of them. With some enzymes, the cell makes a precursor and the enzyme then converts this into more enzyme. The integration of the cell produces an environment in which the enzyme, by a slight stretch of the normal meaning, can live. The cell is performing the same service for the enzyme that the other cells perform for an

individual cell in the body of a dog or the surrounding world for the dog as a whole.

This brief analysis of the nature of life as its manifestations become simpler has brought us at each stage to the position that it exists at the expense of a pre-existing environment. The essential thing is that the environment should be metastable. It must contain substances ready to react with one another, but unable to do so until the action is catalysed. Every system that could conceivably be called living exists in an actual or potential energy flux and its existence is entirely dependent on that flux. The old analogy, which has been used from at least the time of Heraclitus, between life and a flame is a remarkably good and close one. A flame exists because two substances that can combine, with liberation of energy as heat, co-exist under such conditions and in such proportions that when once the combination has been started the heat liberated starts new combination. In a flame an elaborate internal structure and energy exchange system has to be maintained by a balance between conduction, convection, radiation and absorption. If energy is not properly conducted from one part to another, the flame goes out; it is a product of balance in a comparatively narrow metastable zone. If conditions are right, a flame will move over a field of dry grass, catalysing the reaction between atmospheric oxygen and carbohydrates and leaving the unconsumable residue behind it. Precisely these words describe what a rabbit does as it feeds in the same field. A flame on the end of a pipe is comparable to a static organism to which food is brought by a flowing stream. Such analogies bring out the necessity for some external mechanism to supply the food for both organism and flame. With many organisms this is done by other organisms and the problem of their relationship to one another becomes important. Thus green plants exist at the expense of the energy flux given by the light of the sun, and this group is responsible for establishing the metastable states on which almost all other life depends.

A flame has analogies with life in its energy exchanges, its ability to reproduce in a suitable environment, its ability to grow, and so on. But no one wishes to call it "alive." The reason is fairly obvious; it is not made of the right sorts of material. The word "life" is used æsthetically, and, after all the other criteria have been satisfied, there remains the point that we expect a living system to be made up of "organic" materials. When Engels¹ made his well-known

¹ E. A. Schäfer, "Life: Its Maintenance, Origin and Nature," Report of the British Association, 1912, p. 3.

<sup>W. J. V. Osterhout, The Nature of Life, 1924.
N. W. Pirie, "The Meaninglessness of the Terms Life and Living," in Perspectives in Biochemistry, 1937.</sup>

¹ F. Engels, quoted from *Dialectics of Nature*, 1940, p. 195.

observation, "Life is the mode of existence of protein bodies, the essential element of which consists in continual, metabolic interchange with the natural environment outside them, and which ceases with the cessation of this metabolism, bringing about the decomposition of the protein," he was expressing the ideas of the time. Thus Pasteur¹ had said: "La présence des matières albumineuses est une condition indispensable de toute fermentation, parce que le ferment a besoin d'elles pour vivre." Engels was also laying down in the first nine words a necessary, but not sufficient, condition. We now know that "protein bodies" can exist for many thousands of years in the absence of any activities that we wish to call "living," but nothing resembling life is known in the absence of proteins. This is a statement about present-day life and presentday usage. It is probable that a system will be found, or made, with such attributes that, although free from protein, it will be reasonable to call it "alive," but no such system is known. Protein is the normal, but need not be the necessary, vehicle of life.

The protein-based biology that we see around us is not the only possible biology; we only know that it is the successful end result of 1,000,000,000 years of evolution and competition. During most of this period the most difficult problem for an organism has not been the maintenance of structure and activity at the expense of foods and energy sources in the environment, but the avoidance of being used as a food itself by a voracious neighbour. Before life had become distributed so fully over the earth's surface, this was not so, and it is reasonable to assume that at this time there were more possible modes of existence open to an organism. Emphasis on the present unique position of proteins can degenerate into a protein mysticism, and there are signs of this in the recent article and note by Bacon² in this journal. Strong a priori argument can be given for thinking that a system with living attributes will be made up of substances of considerable chemical complexity; these substances may be proteins only because protein-based systems have proved more efficient than the alternatives. There is nothing in the chemistry of the proteins to suggest that they offer possibilities of reactivity, specificity or structural coherence that could not have been got in, for example, the polysaccharides. The

¹ L. Pasteur, quoted from Euvres, 1922, Vol. 2, p. 195.
² J. S. D. Bacon, "The Nature of Life: Its Chemical Basis," Modern Quarterly, Vol. 3, No. 1, p. 45, and Vol. 1, No. 4, p. 81.

organisms we are familiar with tend not to use polysaccharides in active roles to anything like the extent that they use proteins. But this is a fact that requires interpretation; it is not logically derivable from anything that we know otherwise about these two groups of substances.

A consideration of the nature of life has led us of necessity to think of the origin of life. The questions "What is life?" and "How did life arise?" are formally distinct, but in practice they are inextricably mixed. Until the outlines of the picture of our minimum requirements for a living system have been drawn, we cannot tell how far back into the history of the earth the origin of life on it should be pushed. It is still impossible to make any definite suggestions; there are too many possibilities, all of about equal improbability. Attempts have been made to avoid the problem altogether. Thus Buffon, John Turberville Needham and Herbert Spencer endowed much of inanimate Nature with nascent or potential life which only unfolded under suitable circumstances. The same idea is implicit in Leibnitz's concept of monads each of which is a microcosm and from which the world is built. Experiment has shown that these ideas are wrong, but they also seem to be irrelevant. The well-known conclusions of van Helmont on the production of mice from bran and the exhalations of a dirty shirt, over which Pasteur was to be so delightfully ironic, or the more detailed experiments of Buffon and Needham are not concerned with the origin of life at all but with the transference of preexisting life from one manifestation to another. Buffon thought new life sprang from the putrefaction of old. He criticised Spallanzani's experiments on the grounds that the prolonged heating needed if putrefaction was to be prevented was destroying these vital traces. Pasteur clarified the situation greatly, but mainly as a result of his combative spirit and magnificent polemical style. His experiments were useful, but others had made and were making similar experiments with similar results. He compelled agreement with his argument that it was easier to attribute the results of his antagonists, living or dead, to germs and spores in the air than to any unknown agents. But argument based on this Parsimony Principle of Duns Scotus is always dangerous, and it is interesting to find Bastian, who was the last to remain unconvinced, using the same argument in favour of spontaneous generation. He found this idea more economical than an atmosphere thick and foggy with germs.

The writings of Huxley¹ and Tyndall² are a great step forward and they show a grasp of the fundamental nature of the problem that has not been improved on since. They had no use for the idea of Sales-Guyon de Montlivault³ that life came here as dust or on meteorites. This idea was, at the time, being popularised by Kelvin and Liebig, but its serves simply "to banish the investigation of the question to some conveniently inaccessible corner of the universe." Tyndall asserted, at one and the same time, his belief that life had arisen by smooth derivation through intermediate forms from non-living precursors and his complete disbelief in any of the examples of spontaneous generation that had been claimed. He fully realised that some people would have difficulty in appreciating the logic of his position. Huxley had a similar point of view, but he was not so clear about why many people found it difficult to understand. He made the wise observation that it is foolish simply to repeat experiments on the development of living forms in boiled putrescible fluids. Every one of the millions of cans of food that had been produced since Appert's 4 publication on the preservation of food by heating and sealing was in effect such an experiment. Both in the laboratory and in the factory there would be failures, but scientists would attribute these to technical defects rather than to spontaneous generation.

Tyndall and Huxley were content simply to state their conviction that life arose by natural processes from the materials to hand on the cooling planet and wisely refrained from proposing any detailed hypotheses on the mechanism of the process. This gap was soon filled. Preyer, in framing his transcendent hypothesis of incandescent life, seems to a modern reader simply to be taking the old flame analogy a little too seriously and Pfluger, who put it all down to the activity of cyanogen in the primitive atmosphere, was being unnecessarily detailed. In the succeeding years there have been great increases in our knowledge of the probable composition of the atmosphere and surface layer of the earth in the period before the appearance of life; there have been even greater

increases in our knowledge of the composition and activities of the simpler living forms. These two lines of development converge and it is therefore useful to restate the basic postulate from time to time and to consider what the most probable picture is in the light of present day knowledge. As this convergence goes on the problem can be more and more clearly stated and it is a platitude of science that a problem has been nearly resolved by the time it has been clearly formulated.

Looked at from the standpoint of present-day culture media, the primitive atmosphere and ocean seem rather unpromising. The mixture of things present in the primitive atmosphere had much in common with present-day volcanic gases; it contained little or no oxygen, but was a mixture of nitrogen and carbon dioxide laced with hydrocarbons, ammonia, hydrogen sulphide and boron chloride. Geochemists, notably Goldschmidt and Vernadsky, have speculated on its more detailed composition, but the atmosphere makes up such a small proportion of the whole mass of the earth that it is impossible to be precise about the point at which, for each substance, a balance will be struck between rate of production from the cooling magma and rate of loss into space or of absorption by the surface rocks. This atmosphere, whatever its composition, was exposed to intense sunlight which then included much of the ultraviolet from which atmospheric oxygen now protects us. Syntheses must have gone on, but the speculative field about the products of these syntheses is extensive. The present state of Venus is relevant for this planet has probably a similar composition to that of the earth and it is probably at a stage of development comparable to that of the earth when the first living forms developed here. The venerial atmosphere contains little or no water vapour, but has dense white clouds. There was reason to think that these consisted of formaldehyde polymers but this is now considered unlikely. 1 Until unequivocal proof is forthcoming about the nature of these clouds it is clearly premature to frame an elaborate hypothesis about the nature of the original culture medium in which life developed on earth. That it contained organic matter is certain and that it would now be looked on as an antiseptic is probable.

In spite of these uncertainties some speculation about the stages interposed between the building up of complex molecules on a

¹ T. H. Huxley. "Biogenesis and Abiogenesis," Report of the British Association, 1870, p. 73.

² J. Tyndall, Report of the British Association, 1874, p. 74.

³ E.-J.-F. de Sales-Guyon de Montlivault, "Conjectures sur la réunion de la lune à la terre, et des satellites en général à leur planète principale, à l'aide desquelles on essaie d'expliquer la cause et les effets du déluge, la disparition totale d'anciennes espèces vivantes et organiques, et la formation soudaine ou apparition d'autres espèces nouvelles et de l'homme lui-même sur le globe terrestre," 1821.

⁴ N. Appert, L'art de conserver pendant plusieurs années toutes les substances animales et végétales, 1810.

¹ R. Wildt, "The Geochemistry of the Atmosphere and the Constitution of the Terrestrial Planets," Review of Modern Physics, 1942, 14, 150.

cooling irradiated planet and the evolutionary progression of organisms is both fashionable and tempting. Four ideas that regularly appear in these discussions may be considered and dismissed, for they appear to be illusory. First, that the original forms would be very small, i.e. analogous to the viruses. No argument has ever been presented for this view and its acceptance without argument does not seem to make the problem any simpler. Chemical simplicity is probable, but a system large enough to help along any synthetic activities it may have by processes such as fluid flow, drop formation and surface evaporation is as likely a beginning as a microscopic structure which is still large compared to most molecules. It is easy to construct pictures of a beginning in which use is made of the surface energy and, as Goldschmidt has pointed out, orientating activity of mineral crystals. Such a system might well be as large as the surface of the crystal. Secondly, the inaugural process is often called autocatalytic, but this is an unnecessary assumption. An autocatalyst catalyses the reaction that produces it. But the concept is no longer useful if there are many intermediate stages. Thus there is no point in calling a motor car an autocatalyst because many of the workers in the factory making the car drive there in cars. So with the first organism; it starts a chain of events that need only ultimately make more catalyst. Thirdly the autotrophic bacteria—that is bacteria that can live in simple inorganic media—are sometimes considered relevant. They may be, but complex carbon compounds are an inevitable result of geochemical development. With a wide range of substrates to hand, there is no need to limit the choice of an initial action to any particular class of substances. Finally it is often assumed that this stage of evolution happened once only. Haldane¹ has used as an argument in favour of this assumption the fact that the proteins of plants and vertebrates are made almost exclusively from amino-acids of the l-series.2 There are

¹ J. B. S. Haldane, "The Origin of Life," reprinted in *The Inequality of Man*, 1932. Also H. Eyring, F. H. Johnson and R. L. Gensler, "Pressure and Reactivity of Proteins, with Particular Reference to Invertase," *J. Physical Chemistry*, 1946, 50, p. 453.

many reasons for disputing the cogency of this argument. Many phyla have not been examined at all, and this preoccupation with one series is less complete in the bacteria and funguses than in the vertebrates and higher plants. Thus penicillin, a fungus product, contains a d-amino-acid. Animals get their amino-acids by eating plants or eating other animals that eat plants, they have therefore no choice but to use the amino-acids the plant provides. Because of this dependence, the predominance of l-amino-acids can only be used as evidence that the surviving green plants have a common origin; this is in any event probable. It is obvious, as Mills1 has pointed out, that there are advantages in using the d- or l-form of a molecule exclusively. There may be occasional advantage in using the unusual form, as an engineer sometimes uses a left-hand thread on a screw, but biochemical economy and workshop economy agree on the desirability of uniformity. After 1,000,000,000 years of evolution it is not surprising that the successful forms should be economical. Any bias in a primitive organism, whether arising accidentally or as the result of natural polarising influences, will quickly extend and an organism evolving later in the now biassed environment will have a better chance of survival if it conforms.

Reasons were given in the last paragraph for thinking that the first steps towards systems that we would wish to call living may have been taken frequently and may have covered considerable areas and involved a wide range of chemical actions. Any picture that is given of these steps is more of a quodlibet than a hypothesis. A suitable mineral surface, kept moist with a solution of the components of the primitive ocean and atmosphere will absorb light and may promote a reaction whose product dissolves the active element from the mineral. This process is in a strict sense autocatalytic and would be favoured by agents which improve illumination or keep the product in the neighbourhood of the mineral. The accidental simultaneous presence of another catalytic system using the same element and making a sponge or an oil from the materials to hand would be such a favourable influence. A sponge would help to hold the products of the action together and an oil would dispel dust and debris and so permit better access of light. Such a conjunction would spread and pieces of it scattered on to suitable surfaces would start new focuses. Even two actions, linked thus,

² Simple molecules are symmetrical, as most bottles and chairs are, but as complexity increases it becomes more likely that molecules will be asymmetric like corkscrews and books. Alongside the normal type of object there can then be the mirrorimage one, like a left-handed corkscrew or a book printed to be read from the back or in a mirror. Amino-acids of the *l*-series are related to each other as the various types of right-handed screw, corkscrews, woodscrews, twist drills, etc., are related. In both cases members of the opposite series, which is called the *d*-series with amino-acids, can be made.

 $^{^1}$ W. H. Mills, "Some Aspects of Stereochemistry," Report of the British Association, 1932, p. 37.

show the beginnings of organisation, more would be added if they accidentally occurred in the neighbourhood and favoured those already present. Each action proceeds independently, but each is favoured by the others. When a system exists in an environment so unsuitable that it must carry out several chemical actions that are dependent on one another something like a cell is necessary. Catalysts have to be held together so that the product of one can get to the next and this can be done either by integrating them into a supermolecule or by having them all in a semi-permeable bag. The advantages that flow from juxtaposition have given survival value to the complexity of biological organisation with which we are familiar.

No detailed attention should be given to a parable such as this about the origin of life. Innumerable others could be made all equally improbable. Accident, often repeated accident, is invoked in all such parables but this is not a defect; the times and areas available for accident are so vast that anything physically possible may reasonably be assumed to have happened and organism-like systems have probably not originated very often. Each origin may have been different. It is important to remember that the present fundamental biochemical uniformity of living matter and the apparent convergence of evolution as we proceed back along the fossil record are alike irrelevant to this discussion. It is probable that life of a sort existed for millions of years before the appearance

1 The probability of an event can of course only be calculated if something is known of the mechanisms involved in it. Thus the probability of a road accident cannot be derived from knowledge of the road area and the car miles per year. Traffic conventions upset the random arrangement. Disregard of this has led C. E. Guye (L'évolution physico-chimique, Paris, 1942) to calculate what he calls the probability of spontaneous appearance of a protein. Finding the probability small, he seeks to reintroduce the old "vital principle" concept. V. H. Mottram has recently (*Listener*, April 22nd, 1948) adopted the arithmetic, but prefers to call the principle God. Guye's position is built up from dubious assumptions held together by fallacies. Three atoms can never meet if collisions are truly instantaneous and a fortiori the 10,000 atoms needed for an average protein could not. The probability of a meeting depends on the time that elapses before the atoms separate again and this may be a millionth of a second or centuries. Thus quick, step-wise polymerisations to make molecules larger than the proteins can become the basis of the plastics industry because each link holds while the next is being made. Furthermore, the rate of an action depends on the product of the concentrations of all the reagents in the phase in which it is taking place. With a complex reaction this introduces enormous scope for uncertainty in probabilities. If we make the reasonable assumption that syntheses go on in the adsorbed layer on minerals calculations based on random movement lose what shreds of validity they might still be thought to retain.

No argument can be based on the probability of appearance of a specific molecule. Such an argument is only valid if we assume that there is only one way in which organisms could have developed. Nature has developed in the way with which we are familiar because accidentally the syntheses happened that way and not because only one direction of development was possible.

of a structure coherent enough to leave a fossil. During this period the greater part of biochemical evolution took place. Since then there has been that evolution of structure with which paleontologists are concerned and which is sometimes mistaken for the whole of evolution. There is evidence of biochemical specialisation during this period, but little evidence for the development of novel capacities. This may explain why evolution, considered biochemically, seems so often to be associated with the loss rather than the acquisition of a capacity. By the Precambrian period organisms were already near the top of the biochemical tree; since then a few have made jumps or flights, but most have been able to do nothing but climb part of the way down again.

Life, considered as a going concern now, is a system of interrelations; each organism is affected by, even if not wholly dependent on, others. It is this factor more than any other that robs present-day biochemistry of any strict relevance to the problem of the origin and essential nature of life.

 $^{^{1}\,\}mathrm{A.}$ Lwoff, L'évolution physiologique: études des pertes de fonctions chez les microorganismes, 1943.

Communication

THE ART OF DIALECTICAL STATEMENT

By CAVENDISH MOXON

WHAT is the difference between a Marxian and a metaphysical use of language? Basically, it is a difference of logic, and therefore a difference in the choice and arrangement of words. The metaphysically trained writers and speakers, believing in absolutely identical and different things, reverently obey the laws of formal logic. The Marxist writers and speakers, denying the existence of absolutely changeless and exclusive things, critically apply the principles of dialectical materialism to the concrete problems of logical statement.

The ideological air is full of undialectical verbalisations. In the capitalist world, formal logic prevails in the copy-book mottoes of the school books, the absolute assertions of the Creeds, the categorical imperatives of traditional morality, the over-simplified abstractions of academic philosophy, the unlimited æsthetic ideals and the exaggerated slogans of reactionary politics. At a time of ideological confusion like the present, it is important to possess a clear dialectical criterion for judging with speed the logical adequacy of statements:

The classics of Marxism contain many warnings against the oversimplified, one-sided statements of Rightists and Leftists. By studying the concrete application of dialectics in Marxian theory and practice, it is possible to avoid the grosser forms of illogicality, to keep within the limits of adequate statement, and to increase the effectiveness of verbal attack and defence.

The fundamental principle of dialectical materialism is contained in the following brief and abstract statement:

Each thing is a relative unity of interpenetrating but ineradicable opposites.

This law must be scientifically applied to the logical composition of statements. Of course, only serious statements obey the laws of dialectics. Much of the enjoyment in wit depends on a skilful lack of dialectical balance. But all serious statements must have a relative unity by avoiding unqualified absolutes. The scope of our assertions must be limited by adjectives, adverbs or by clauses. The Fascist assertion that all wars are eugenic and good is as dialectically unbalanced as the pacifist denial that any wars are justifiable and good.

The closer capitalism comes to its end, the more violent are its convulsive antagonisms. The intensified conflicts between classes and individuals are reflected in their contradictory ideas and ideals and their frequent emotional exaggerations and verbal extremes. Under such

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conditions of conflict, the Marxist can achieve an adequate verbal reflection of reality only by consciously applying dialectical logic to the making of statements.

Dialectically adequate statements must avoid one-sided oversimplifications, absolute assertions and denials of unity or difference and evenly balanced constructions that imply a fixed equilibrium between the opposites verbally related in the sentence.

This rule implies (1) avoidance of phrases that express fence-sitting and morbid ambivalence. In such sentences what is given "on the one hand" exactly equals what is taken back "on the other hand." The rule also implies (2) an avoidance of undialectically used words such as "absolutely," "merely," "entirely," "perfect," "pure," and "complete."

To illustrate this point. The mechanistic materialists one-sidedly assert that the secondary qualities of objects are merely subjective; the dialectical materialists assert that these qualities are the subjective form of a really objective content.

It is also a dialectical law that when an increase in quantity goes beyond a certain point, a new quality appears. As applied to statements, this law means that you can turn a true proposition into an exaggeration or a fallacy by inserting words of unqualified meaning, or by omitting words that limit the scope of the statement.

An example will serve to clarify the rule. In the New Masses a writer once asserted that "Communism believes in the perfectibility of man." Perfection is a religious concept: Marxists have no place in their world for perfect beings. The writer means that Communism sets no arbitrary limits to human attainment and psycho-physical development in the scientifically based society of the future. The word "improvability," though uglier, would be more accurate.

Addressing the American people with regard to their entering the First World War, President Wilson said: "We have no selfish ends to serve... we seek no material compensations." This statement betrays ignorance of the inevitable mixture of human motives. Even the purest altruist cannot act from love alone. The adequate action is one in which the opposites of self-will and social will mutually interpenetrate to form a rational desire and purpose. It was this craving for complete consistency that led the Socialist E. Bernstein to reject dialectics because it "prevented all consistent analysis of things."

A quotation from E. Fromm's book, Escape from Freedom, shows how even a progressively inclined analyst's mind can be influenced by reactionary logical judgment. Fromm writes: "If we will what others have suggested, then our decisions are not really our own." (My italics.) Here he implies that you really assert your power to make a decision only when you deny to others their power to influence your will. By his ideal of full freedom, Fromm takes sides with the individualist anarchists. He sees no place for an interpenetration of the opposites of self-

will and social will in a single act. For Fromm there are only two alternatives: either you take the power of decision into your own hands by denying to others the right to share in its making, or you give them the right to direct you and lose your freedom of will-power.

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