

Chapter 6 - The Open Society

Extract from *"Philosophy and the Real World : An Introduction to Karl Popper"* by [Bryan Magee](#) Published by Open Court Pub Co, July 1985, ISBN: 0875484360

From Plato to Marx most great political philosophies have had their roots in related views not only of social and historical development but of logic and science, and ultimately of epistemology. Readers who have followed me thus far can see now that Popper's is no exception. Because he regards living as first and foremost a process of problem solving he wants societies which are conducive to problem solving. And because problem-solving calls for the bold propounding of trial solutions which are then subjected to criticism and error-elimination, he wants forms of society which permit of the untrammelled assertion of differing proposals, followed by criticism, followed by the genuine possibility of change in the light of criticism. Regardless of any moral considerations (and it is of the highest importance to grasp this) he believes that a society organized on such lines will be more effective at solving its problems, and therefore more successful in achieving the aims of its members, than if it were organized on other lines. The common notion that the most efficient form of society, in theory at least, would be some form of dictatorship, is on this view utterly mistaken. That the dozen or more countries in the world that have the highest living standards (not that this would be his main criterion) are all liberal democracies is not because democracy is a luxury which their wealth enables them to afford: on the contrary, the mass of their people were living in poverty when they achieved universal suffrage. The causal connection is the other way round. Democracy has played a vital role in bringing about and sustaining high Living standards. Materially as in other ways, a society is practically bound to be more successful if it has free institutions than if it does not.

All government policies, indeed all executive and administrative decisions, involve empirical predictions: 'If we do X, Y will follow: on the other hand if we want to achieve B we must do A.' As everyone knows, such predictions not infrequently turn out to be wrong - everyone makes mistakes - and it is normal for them to have to be modified as their application proceeds. A policy is a hypothesis which has to be tested against reality and corrected in the light of experience. Detecting mistakes and inherent dangers by critical examination and discussion beforehand is an altogether more rational procedure, and one as a rule less wasteful of resources, people and time, than waiting till they reveal themselves in practice. Furthermore it is often only by critical examination of the practical results, as distinct from the policies themselves, that some of the mistakes are to be identified. For, in this connection, it is essential to face the fact that any action we take is likely to have unintended consequences. This simple point is one whose implications are highly charged for politics, administration and any form of planning. It can be illustrated easily. If I want to buy a house my very appearance in the market as a buyer will tend to raise the price: but although this is a direct consequence of my action no one

can possibly maintain that it is an intended one. And when I go on to take out an insurance policy to raise a mortgage, this will tend to raise the value of the insurance company's shares: and again this direct consequence of my action has no connection with my intentions. (See pp. 103 and 105). Things are all the time happening which nobody planned or wants. And this inescapable fact should be allowed for both in decision making and in the creation of organizational structures: if it is not it will be a permanent source of distortion. This again reinforces the need for critical vigilance in the administration of policies, and the allowance for their correction by error elimination. So not only do authorities which

forbid prior critical examination of their policies condemn themselves to making many of their mistakes in a more expensive form, and discovering them later, than they need; they also - if, as is usually the case, they likewise forbid critical examination of the practical application of their policies - condemn themselves to pressing on with mistakes for some time after these have begun to produce injurious unintended consequences. The whole approach, characteristic of highly authoritarian structures, is anti-rational. As a result the more rigid perish with their false theories, or at best (if they are lucky and ruthless) ossify, and the less rigid make a progress which is bruised, costly and unnecessarily slow.

It is not enough for anyone with power (whether in government or some lesser organization) to have policies, in the sense of aims and goals, however clearly formulated. There must also be the means for achieving them. If the means do not exist, they must be created: otherwise the goals, however good, will not be reached. In one respect, therefore, organizations and institutions of every kind have to be looked on as machines for implementing policies. And it is as difficult to design an organization so that its output is what you want as it is a physical machine. If an engineer designs a new machine but his design is not right for the purpose; or if he is adapting an already existing machine, but has not changed it in all necessary ways: then what will come out of it can not possibly be what he wants: it can be only what the machine can produce - which will not only be something other than what he wants but may be seriously defective by any standards, and even dangerous. And precisely this is true of a great deal of organizational machinery: it is incapable of doing what the people operating it require of it, regardless of their cleverness, good intentions or well-formulated goals. There is need, therefore, for a political (or administrative) technology as well as a political (or administrative) science, one that embodies a permanently but constructively critical attitude to organizational means in the light of changing goals. The implementation of every policy needs to be tested: and this is to be done not by looking for evidence that one's efforts are having the desired effects but by looking for evidence that they are not. Testing in this sense is usually cheap and easy in practice, if only because minute accuracy is seldom necessary. The British higher education system already contains at least one department devoted to the Popperian study of institutions (set up by Tyrell Burgess at the North East London Polytechnic) and its results are both simple and of great potential usefulness, for huge sums and efforts are commonly expended on mistaken policies without any provision for the tiny sums and efforts required at the same time to see if undesired results are

emerging. People in organizations tend, on the contrary, to turn a blind eye to evidence that what they want is not happening, in spite of the fact that such evidence is precisely what they ought to be looking for. And of course the perpetual search for, and admission of, error at even the organizational level is hardest of all in authoritarian structures. Thereby does their irrationality extend into the very instruments they use.

Popper's moral sentiments about political matters have been expressed, if with less depth of passion, by others. His writing is deeply moving at this level: but what is distinctive about him is the wealth and power of argumentation with which he has shown that the heart has reason on its side. For it has been widely believed, and in our century more than any other, that rationality, logic, the scientific approach, call for a society which is centrally organized, and planned and ordered as a whole. Popper has shown that this, besides being authoritarian, rests on a mistaken and superseded conception of science. Rationality, logic and a scientific approach all point to a society which is 'open' and pluralistic, within which incompatible views are expressed and conflicting aims pursued: a society in which everyone is free to investigate problem-situations and to propose solutions; a society in which everyone is free to criticize the proposed solutions of others, most importantly those of the government, whether in prospect or application; and above all a society in which the government's policies are changed in the light of criticism.

Since policies are normally advocated, and their implementation supervised, by people who are in some way or other committed to them, changes of more than a certain magnitude involve changes in personnel. So if the open society is to be a reality the most fundamental requirement is that those in power should be removable, at reasonable intervals and without violence, and replaceable by others with different policies. And for this to be a genuine option people with policies different from those of the government must be free to constitute themselves as an alternative government, ready to take over: that is to say they must be able to organize, speak, write, publish, broadcast and teach in criticism of the people in power, and must have constitutionally guaranteed access to a means of replacing them, for example by regularly held free elections. Such a society is what Popper means by 'democracy', though as always he would set no special store by the word. The point to be emphasized is that he sees democracy in terms of the preservation of certain kinds of institution what used to be called, before American cold war propaganda brought the term into disrepute, free institutions especially those which enable the ruled effectively to criticize their rulers and to change them without bloodshed. He does not see it as just the election of governments by a majority of the governed, for that view leads to what he calls 'the paradox of democracy'. What if the majority votes for a party, such as a Fascist or Communist party, which does not believe in free institutions and nearly always destroys them when it gets into power? The man committed to choice of government by majority vote is here in an insoluble dilemma: any attempt to stop the Fascist or Communist party taking over means acting contrary to his principles, yet if they do take over they will put an end to democracy. Furthermore he has no moral basis for active resistance to, say, a Nazi regime if a majority has voted for it, as in Germany it very nearly did. Popper's approach is free of this paradox. A man committed to the

preservation of free institutions can without self-contradiction defend them against attack from any direction, whether from minorities or majorities. And if there is an attempt to overthrow free institutions by armed violence he can without self-contradiction defend them by armed violence: for if, in a society whose government can be changed without force, a group nevertheless resorts to it because it can not get its way otherwise, then whatever it may think or intend it is setting up by violence a government which will be removable only by violence - in other words a tyranny. Indeed, force may be morally justified against an existing regime which sustains itself by force, if one's aim is to establish free institutions - and one has a serious chance of succeeding - for then one's object is to replace the rule of violence by a rule of reason and tolerance.

Popper points to other paradoxes which his approach avoids. One already suggested is the paradox of tolerance: if a society extends unlimited tolerance it is likely to be destroyed, and tolerance with it. So a tolerant society must be prepared in some circumstances to suppress the enemies of tolerance. It should not of course do so unless they constitute a genuine danger - quite apart from anything else this leads to witchhunting. And it should try all in its power to meet such people first on the level of rational argument. But they may 'begin by denouncing all argument: they may forbid their followers to listen to rational argument, because it is deceptive, and teach them to answer arguments by the use of their fists or pistols': and a tolerant society can survive only if it is prepared, in the last analysis, to restrain such people by force. 'We should ... consider incitement to intolerance and persecution as criminal, in the same way as we should consider incitement to murder, or to kidnapping, or to the revival of the slave trade, as criminal.*' (The Open Society and its Enemies, vol, i, p. 265)

Another, more familiar paradox, first implicitly formulated by Plato, is the paradox of freedom. Unqualified freedom, like unqualified tolerance, is not only self-destructive but bound to produce its opposite - for if all restraints were removed there would be nothing whatever to stop the strong enslaving the weak (or meek). So complete freedom would bring about the end of freedom, and therefore proponents of complete freedom are in actuality, whatever their intentions, enemies of freedom. Popper points more particularly to the paradox of economic freedom, which makes possible the unrestrained exploitation of the poor by the rich, and results in the almost complete loss of economic freedom by the poor. Here again there 'must be a political remedy - a remedy similar to the one which we use against physical violence. We must construct social institutions, enforced by the power of the state, for the protection of the economically weak from the economically strong....This, of course, means that the principle of nonintervention, of an unrestrained economic system, has to be given up; if we wish freedom to be safeguarded, then we must demand that the policy of unlimited economic freedom be replaced by the planned economic intervention of the state. We must demand that unrestrained capitalism give way to an economic interventionism.*' (The Open Society and its Enemies, vol. ii, p. 125)

And he goes on to point out that opponents of state interventionism as such are guilty of

self-contradiction. 'Which freedom should the state protect? The freedom of the labour market, or the freedom of the poor to unite? Whichever decision is taken, it leads to state intervention, to the use of organised political power, of the state as well as of unions, in the field of economic conditions. It leads, under all circumstances, to an extension of the economic responsibility of the state, whether or not this responsibility is consciously accepted.*' (The Open Society and its Enemies, vol, ii, p. 179.)

And more generally: 'If the state does not interfere, then other semi-political organizations such as monopolies, trusts, unions, etc., may interfere, reducing the freedom of the market to a fiction. On the other hand, it is most important to realize that without a carefully protected free market, the whole economic system must cease to serve its only rational purpose, that is, to satisfy the demands of the consumer.... Economic "planning" that does not plan for economic freedom in this sense will lead dangerously close to totalitarianism.*' (The Open Society and Its Enemies, vol ii, p. 348)

In all these cases the maximum possible tolerance or freedom is an optimum, not an absolute, for it has to be restricted if it is to exist at all. The government intervention which alone can guarantee it is a dangerous weapon: without it, or with too little, freedom dies: but with too much of it freedom dies also. We are brought back to the inescapability of control - which must mean, if it is to be effective, removability - of government by the governed as the "sine qua non" of democracy. This however, though necessary, is not sufficient. It does not guarantee the preservation of freedom, for nothing can: the price of freedom is eternal vigilance. As Popper has remarked, institutions are like fortresses in that although to be effective they have to be properly constructed this alone will not make them work: they have also to be properly manned.

By and large political philosophers have regarded the most important question as being 'Who should rule?' and their differing philosophies seek to justify different answers: a single man, the well-born, the rich, the wise, the strong, the good, the majority, the proletariat, and so on. But the question itself is mistaken, for several reasons. First, it leads straight to another of Popper's paradoxes, which he calls 'the paradox of sovereignty'. If, say, power is put in the hands of the wisest man, he may from the depths of his wisdom adjudge: 'Not I but the morally good should be the ruler'. If the morally good has power he may say, being saintly: 'It is wrong for me to impose my will on others. Not I but the majority should rule'. The majority, having power, may say: 'We want a strong man to impose order and tell us what to do'. A second objection is that the question: 'Where should sovereignty lie?' rests on the assumption that ultimate power must be somewhere, which is not the case. In most societies there are different and to some extent conflicting power centres, not one of which can get everything its own way. In some societies power is quite widely diffused. The question 'Yes, but where does it ultimately lie?' eliminates before it is raised the possibility of control over rulers, when this is the most important of all things to establish. The vital question is not 'Who should rule?' but 'How can we minimize misrule - both the likelihood of its occurring and, when

it does occur, its consequences?'

The argument up to this point, then, is that the best society we can have, from a practical as well as moral point of view, is one which extends the maximum possible freedom to its members: that the maximum freedom is a qualified one; that it can be created and sustained at optimum level only by institutions designed for that purpose and backed by the power of the state; that this involves large-scale state intervention in political, economic and social life; that too little or too much intervention will alike result in unnecessary encroachments on freedom; that the best way to minimize the dangers both ways is to preserve, as the most important institutions of all, constitutional means whereby the governed can remove the wielders of state power and put in their places other men with different policies: that any attempt to render such institutions ineffective is an attempt to introduce authoritarian government and should be prevented, if necessary by force; that the use of force against tyranny may be justified even when the tyranny has majority support: but that the only untyrannical aims the use of force can have are the defence of free institutions where they exist and their establishment where they do not.

It has always seemed to me obvious that this is a philosophy of social democracy - as plainly anticonservative on the one side as it is anti-totalitarian (and as such antiCommunist) on the other. For it is above all else a philosophy of how to change things, and to do so in a way which, unlike violent revolution, is rational and humane. As I believe I have now shown, it is seamlessly interwoven with Popper's philosophy of science. But we must also remember that the man who wrote *The Open Society* had, just behind him, 20 years of involvement with active members of the Social Democratic Party of Austria. As a Social Democrat he had become convinced that the nationalization of the means of production, distribution and exchange, which constituted the foundations of his party's platform, would not of itself solve the problems it was intended to solve yet might well destroy the values the party held most dear. Being a young man, without political influence except on his friends, what he would have liked to see but assumed he had no chance of seeing was the renunciation by the Social Democrats of the Marxist analysis of social change, and the replacement of this by the sort of ideas he was arguing for. In the end he became disillusioned with his party, not primarily because of its muddleheadedness intellectually but because of the way it exposed the workers to violence which it had no programme for resisting: because of its leaders' fear of responsibility; and above all because of its complicity with the Communists in not offering allout resistance to the Nazis' seizure of power - even though its motives were not, like the Communists', Machiavellian. but characteristically flabby. He has retained ever since a distrust of Social Democratic parties. He would now describe himself, if pressed, as a liberal in the old fashioned sense of that word.

And here I must declare an interest. I am a democratic socialist and I believe that the young Popper worked out, as no one else has ever done, what the philosophical foundations of democratic socialism should be. And like him I would like to see these ideas replace the garbled mixture of Marxism and liberal-minded opportunism which

passes for political theory on the democratic left: in 1962 I published a book advocating this in the context of British Labour Party politics called *The New Radicalism*. In short, while making it clear that Popper is no longer a socialist, I want to claim his ideas for the democratic socialism in which he was so deeply enmeshed when he began to produce them, and in response to whose needs they were produced. This is where I believe their real significance is, and where their future lies. My longest-running argument with the older Popper is about what in my contention is his failure to accept, in matters of practical politics, the radical consequences of his own ideas. (If I am right about this, there is at least one famous precedent: Marx used to protest, in later life, that he was not a Marxist.)

The general guiding principle for public policy put forward in *The Open Society* is: 'Minimize avoidable suffering'. Characteristically this has the immediate effect of drawing attention to problems. If, say, an Education Authority set itself the aim of maximizing opportunity for the children under its care it might, understandably, not be sure how to go about doing this; or it might start thinking in terms of spending its money on the building of model schools. But if, rather, it sets itself the aim of minimizing disadvantage, this directs its attention immediately to the most underprovided schools - those with the worst staffing problems, the most overcrowded classes, the slummiest buildings, the least or worst educational equipment and makes doing something about them the first priority. The Popperian approach has this consequence right across the board: instead of encouraging one to think about building Utopia it makes one seek out, and try to remove, the specific social evils under which human beings are suffering. In this way it is above all a practical approach, and yet one devoted to change. It starts from concern with human beings, and involves a permanent, active willingness to remould institutions.

'Minimize unhappiness' is not just a negative formulation of the Utilitarian maxim 'Maximize happiness'. There is a logical asymmetry here: we do not know how to make people happy, but we do know ways of lessening their unhappiness. Readers will at once see an analogy between this and the verifiability or falsifiability of scientific statements. I believe that there is, from the ethical point of view, no symmetry between suffering and happiness, or between pain and pleasure..., human suffering makes a direct moral appeal, namely, the appeal for help, while there is no similar call to increase the happiness of a man who is doing well anyway. (A further criticism of the Utilitarian formula "Maximize pleasure" is that it assumes, in principle, a continuous pleasure-pain scale which allows us to treat degrees of pain as negative degrees of pleasure. But, from the moral point of view, pain cannot be outweighed by pleasure, and especially not one man's pain by another man's pleasure. Instead of the greatest happiness for the greatest number, one should demand, more modestly, the least amount of avoidable suffering for all; and further, that unavoidable suffering - such as hunger in times of unavoidable shortage of food - should be distributed as equally as possible.)*" (*The Open Society and its Enemies*, vol. i, pp. 284-285)

Such an approach, Popper lightly claims, leads to a perpetual stream of demands for immediate action to remedy identifiable wrongs. And such action is of a kind most likely to secure widespread agreement, and result in manifest improvement. He is also, and again rightly, anxious to avoid Utopianism, which in practice is intolerant and authoritarian (this point will be returned to at greater length in the next chapter). There is, however, some doubt as to whether 'Minimize unhappiness' goes far enough to be our chief political maxim, for all its great heuristic value. It confines itself to rectifying abuses and anomalies within an existing pattern of distribution of power, possessions and opportunity. Taken literally, it would seem to rule out even such moderate liberal measures as state subsidy of the arts, and the municipal provision of such things as sports grounds and swimming baths. So extremely conservative a position would be an unnatural consequence of Popper's radical philosophy, at least in an affluent society - it has, indeed, proved too conservative for even a professional Conservative politician* (Sir Edward Boyle: *New Society*, 12.9.1963)

- and Popper himself would not want to rest on it. We should make it a methodological rule always to apply it first, and act on the consequences, but then wherever possible to look at the situation afresh, in terms of a second, richer formulation which subsumes our first one. The second formulation is: 'Maximize the freedom of individuals to live as they wish'. This requires massive public provision in education, the arts, housing, health, and every other aspect of social life - but always with the effect of extending the range of choice, and hence the freedom, open to individuals.

Chapter 7 - The Enemies of the Open Society

Extract from *"Philosophy and the Real World : An Introduction to Karl Popper"* by [Bryan Magee](#) Published by Open Court Pub Co, July 1985, ISBN: 0875484360

Although in my view the most importantly relevant aspect for today of The Open Society and its Enemies is its philosophy of social democracy, and although this was close to Popper's heart when he wrote the book, it was not his chief reason for writing it. One has to remember that for most of the period while he was working on it Hitler was meeting with success after success, conquering almost the whole of Europe, country by country, and driving deep into Russia. Western civilization was confronted with the immediate threat of a new Dark Age. In these circumstances what Popper was concerned to do was to understand and explain the appeal of totalitarian ideas, and do everything he could to undermine it, and also to promulgate the value and importance of liberty in the widest sense. This capacious programme places the philosophy of social democracy in the most unparochial of contexts, unparochial in time as well as in place.

Near the centre of Popper's explanation of the appeal of totalitarianism is a socio-

psychological concept which he calls 'the strain of civilization' - a concept related, as he acknowledges, to that formulated by Freud in *Civilization and its Discontents*. We often hear it asserted that most people do not really want freedom, because freedom involves responsibility, and most people are frightened of responsibility. Whether or not this applies to 'most people' there is, I am sure, a vital element of truth in it. Accepting responsibility for our lives involves continually facing difficult choices and decisions, and bearing the consequences of them when they are wrong, and this is burdensome, not to say alarming. And there is something in all of us, something infantile perhaps, which would like to escape it by having the load taken from our shoulders. However, our strongest instinct being the instinct for survival, our strongest need is probably the need for security; so we are prepared to shift responsibility only to someone or something in whom we have greater confidence than in ourselves. (This is why people want their rulers to be 'better' than themselves, and why they embrace so many implausible beliefs that reinforce confidence that this is so, and why they are so seriously disturbed by revelations that it is not so.) We want the unavoidable and difficult decisions that govern our lives to be taken by someone stronger than ourselves who nevertheless has our interests at heart, as might a stern but benevolent father; or else to be given to us by a practical system of thought that is wiser than we and makes fewer or no mistakes. Above all we want release from fear. And in the end most fears - including the most basic such as fear of the dark, fear of strangers, fear of death, fear of the consequences of our actions and fear of the future - are forms of fear of the unknown. So we are all the time pressing for assurances that the unknown is known really, and that what it contains is something we are going to want anyway. We embrace religions which assure us that we shall not die, and political philosophies which assure us that society will become perfect in the future, perhaps quite soon.

These needs were met by the unchanging certainties of pre-critical societies, with their authority, hierarchy, ritual, tabu and so on. But with the emergence of man from tribalism and the beginnings of the critical tradition, new and frightening demands began to be made: that the individual should question authority, question what he had always taken for granted, and assume responsibility for himself and for others. By contrast with the old certainties, this threatened society with disruption and the individual with disorientation. As a result there was from the beginning a reaction against it, both in society at large and (this was partly Freud's point) within each individual. We purchase freedom at the cost of security, equality at the cost of our self-esteem, and critical self-awareness at the cost of our peace of mind. The price is steep: none of us pays it happily, and many do not want to pay it at all. The best of the Greeks were in no doubt about the merits of the exchange: and better - it has since been said of the greatest of their social critics and questioners - to be Socrates discontented than a pig contented. Yet there was a reaction in which Socrates was put to death for his questioning. And from his pupil Plato onwards there has never been any lack of outstandingly gifted individuals opposed to society's becoming more 'open'. They have wanted it to go back, or forward, to one which was more 'closed'.

So from the beginning of critical thought, with the preSocratics, the developing tradition

of civilization has had running parallel to it (or perhaps it would be more accurate to say running within it) a tradition of reaction against the strain of civilization, which produced accompanying philosophies of return to the womblike security of a precritical or tribal society, or of advance to a Utopia. Because such reactionary and Utopian ideals meet similar needs they have deep and essential affinities. Both reject existing society and proclaim that a more perfect one is to be found at some other point in time. Hence both tend to be violent and yet romantic. If you think society is going from bad to worse you will want to arrest the processes of change; if you regard yourself as establishing the perfect society of the future you will want to perpetuate that society when you get it, and this likewise will mean arresting the processes of change; so both the reactionary and the Utopian are aiming for an arrested society. And since change could only conceivably be prevented by the most rigid social control - by stopping people from doing anything on their own initiative which might have serious social consequences both are led into totalitarianism. This development is inherent from the beginning, though when it comes about people will say that the theory has been perverted. It is already commonplace to hear it said of this or that reactionary theory (e.g. that the most efficient form of government would be a dictatorship) or theory of a perfect future (e.g. Communism) that it is all very fine as a theory but unfortunately does not work out in practice. This is a fallacy. If a theory fails to work in practice this alone shows that something is wrong with the theory. (Such, quite apart from anything else, is the point of scientific experiment.) But although the practical consequences of reactionary and Utopian theories are societies like those of Hitler and Stalin, the desire for a perfect society is clearly not itself rooted in human wickedness, but the reverse. The most horrific excesses have been perpetrated with sincere moral conviction by idealists whose intentions were wholly good; like those, for example, of the Spanish Inquisition. The ideological and religious autocracies and wars that constitute so much of Western history are the most biting exemplification of the proverb 'the road to hell is paved with good intentions'. Nor is it only fools who are led along this path: indeed the sense of dissatisfaction with existing society which starts people off is more likely to go with intelligence and imagination than with their absence - the unintelligent and unimaginative tend rather to accept things as they find them, and to be conservative. So the revolt against civilization - that is to say against the realities of freedom and tolerance, and their consequences in diversity, conflict, the acceptance of unpredictable and uncontrollable change, and manifold insecurity - has, as I suggested earlier, been spearheaded by some of the greatest among the intellectual leaders of mankind, and their genius has made elitism - a contempt for the inert conservatism of ordinary people, and hence a practical non-acceptance of egalitarianism and democracy - all the more 'natural' for them, and them all the more comfortable in it, Popper, in his attacks on the enemies of the open society, attributes to most of them the highest of motives, and to some of them the highest of intelligence, and acknowledges that their appeal is to some of our finest instincts, and to insecurities deep in us all.

He takes Plato as the supreme example of a philosopher of genius whose political theory embodies a wish to return to the past, and incorporates an extensive and detailed critique of it in the first of the two volumes of *The Open Society and its Enemies*. The second

volume contains a corresponding critique of Marx as the supreme philosopher whose theory projects a perfect future. (He distinguishes Marxism from Utopian theories for reasons which will become clear later, but he argues out his opposition to both.) His way of tackling these heavyweight opponents, especially Marx, constitutes in itself one of the most important lessons in method to be gained from his writings. Throughout the history of advocacy and controversy the approach even of polemicists of genius, like Voltaire, has been to seek out and attack the weak points in an opponent's case. This has a severe disadvantage. Every case has weaker as well as stronger parts, and its appeal lies, obviously, in the latter; so to attack the former may embarrass its adherents but not undermine the considerations on which their adherence largely rests. This is one of the reasons why people so rarely change their views after losing an argument. More often such a reverse leads eventually to a strengthening of their position, in that it leads them to abandon or improve the weakest parts of their case. It often happens that the longer two intelligent people go on arguing the better each side's case becomes, for each is being all the time improved by the other's criticism. The Popperian analysis of this is self-evident. What Popper aims to do, and at his best does do, is to seek out and attack an opponent's case at its strongest. Indeed, before attacking it he tries to strengthen it still further. He sees if any of its weaknesses can be removed and any of its formulations improved on, gives it the benefit of every doubt, passes over any obvious loopholes: and then, having got it into the best-argued form he can, attacks it at its most powerful and appealing. This method, the most intellectually serious possible, is thrilling; and its results, when successful, are devastating. For no perceptible version of the defeated case is reconstructable in the light of the criticism, every known resource and reserve of substance being already present in the demolished version. This is what Popper is thought to have done with Marxism hence the comment from Isaiah Berlin quoted in the second sentence of this book. And I must confess I do not see how any rational man can have read Popper's critique of Marx and still be a Marxist. But that is something we shall come to in a moment.

In the academic world the most controversial aspect of *The Open Society and its Enemies* has always been the attack on Plato. All too much of the comment on this has been ignorant. I have heard many talk who assumed that the first volume of *The Open Society* primarily is a critique of Plato, that Popper takes a disparaging view of Plato's stature as a philosopher, and that he has been 'totally rebutted', or some such phrase, in Ronald B. Levinson's excellent, massive and scholarly book in *Defense of Plato* (to which Popper made reply in an Addendum to the fourth edition, 1961, of *The Open Society*). None of these things is true. Popper describes Plato unequivocally as 'the greatest philosopher of all time' (p.98), and uses, naturally and without irony, phrases like 'with all the might of his unequalled intelligence' (p. 109). He does in fact subscribe to Whitehead's dictum that the whole of Western philosophy is footnotes to Plato. Nor is criticism of Plato his primary purpose: Levinson states the position correctly when he writes, on p. 17 of *Defense of Plato*, 'Popper's attack upon Plato is the negative aspect of his own positive conviction, which motivates his entire book, that the greatest of all revolutions is the transition from the "closed society" to the "open society", an association of free

individuals respecting each others' rights within the framework of mutual protection supplied by the state, and achieving, through the making of responsible, rational decisions, a growing measure of humane and enlightened life.' And far from totally rebutting Popper's judgment of Plato, Levinson concludes by conceding the most important part of it. 'First and foremost we have agreed that Plato was proposing, in Popper's terms, to "close" his society, in so far as this denotes regimentation of the ordinary citizens (p. 571)--- Plato's political ideal can be classified without distortion as a very highly differentiated one among the many varieties of authoritarian governments denoted by our generalized version of Webster's definition of totalitarianism: it can also, as we earlier agreed, be called "totalitarian" in Sabine's carefully guarded sense of a government which "obliterates the distinction between areas of private judgment and of public control". (p. 573) Levinson disagrees pungently with a great many things Popper says, yet always with respect for his 'wide and detailed acquaintance with many fields of thought' and 'his unqualified commitment to liberal and democratic ideals, to the defence of which the entire work [The Open Society and its Enemies] is dedicated' (p.19). The persisting notion that Popper's Platonic scholarship has somehow been shown to be rubbishy is itself rubbishy in the sense that it is reiterated without knowledge. The more important philosophers are not guilty, however. Bertrand Russell wrote: 'His attack on Plato, while unorthodox, is in my opinion thoroughly justified'. And Gilbert Ryle, himself a notable Plato scholar, wrote in his review of Popper's book in *Mind* : 'His studies in Greek history and Greek thought have obviously been profound and original. Platonic exegesis will never be the same again'. A quarter of a century later, on BBC Radio 3 (28 July 1972) Ryle specifically re-endorsed this judgment.

Platonism as such is not a live issue in the political and social life of the modern world. Nor is the philosophy of the pre-Socratics. But Marxism is. In fact in one overwhelmingly practical respect the personal achievement of Marx as represented by the situation of our time is without parallel in the history of mankind. Less than a hundred years ago, there he was, an intellectual in his fifties, living in Hampstead with his wife and family, devoting his days to reading and writing, little known to even the educated public. And in under seventy years of his death a third of the entire human race, including the whole of Russia and its empire, and the whole of China, had adopted forms of society which called themselves by his name. It is a phenomenon whose utter extraordinariness is still, I think insufficiently pondered. But few would deny that Marx is the most influential philosopher of the last hundred years, and that an understanding of the world we live in today is impossible without some knowledge of his political and social thought. And, unlike twenty years ago, today interest in Marxism is increasing, not diminishing, in our universities and among the intelligent young throughout the West.

Central to Marxism is its claim to be scientific. Marx saw himself as, so to speak, the Newton or Darwin of the historical, political, economic - in fact what one might generally call the social - sciences. He offered to dedicate the second volume of *Das Kapital* to Darwin, for whom he had a greater intellectual admiration than for any other of his contemporaries, regarding him as having, by his theory of evolution and natural selection,

done for the morphology of the natural sciences, what he himself was striving to do for human history. Darwin hastily declined the honour in a polite cautiously phrased letter, saying that he was unhappily ignorant of economic science, but offered the author his good wishes in what he assumed to be their common end - the advancement of human knowledge.*' (Isaiah Berlin Karl Marx, p. 232.)

The heart of the matter is this: Marx believed that the development of human societies was governed by scientific laws of which he was the discoverer. His conception of science was unavoidably pre-Einsteinian. Like every other wellinformed man of his time he thought that Newton had discovered Natural Laws which govern the motions of matter in space, so that given the relevant data about any physical system one could predict all its future states. Thus we can predict the times of sunrise and sunset, eclipses, the movements of tides, and so on. However, although Natural Laws enable us to foretell the future of our solar system they do not enable us to control it: they work, it might be said, with iron necessity towards inevitable results which we can scientifically predict and describe but not alter. Marx saw his own discoveries as paralleling this precisely, and he drew the parallel by a deliberate use of Newtonian terms. In *Das Kapital* he describes himself as having discovered 'the Natural Laws of capitalist production', and warns that 'even when a society has got upon the right track for the discovery of the Natural Laws of its movement - and it is the ultimate aim of this work to lay bare the Economic Law of Motion of modern society - it can neither clear by bold leaps, nor remove by legal enactments, the obstacles offered by the successive phases of its normal development.... It is a question of these laws themselves, of these tendencies working with iron necessity towards inevitable results. The country that is more developed industrially only shows, to the less developed, the image of its own future.'

The fact that Marx personally welcomed the future which he saw as inevitable is scientifically irrelevant. Strictly speaking he could no more be said to be advocating it than an astronomer is advocating the eclipses he predicts, though he may enjoy watching them when they happen, and so look forward to them and be pleased at their coming. At all times Marx was insistent that his theory was 'scientific' in this sense - he was describing, not prescribing: and he dismissed other forms of Socialism by contrast as 'Utopian' - at best mere advocacy, at worst mere visions. Popper accepts this distinction between, on the one hand, the Marxist belief that we are powerless to shape the course of history, and on the other hand Utopian beliefs that it is in our power to make a perfect society - though Marxism has been widely misunderstood as being a belief of the latter kind, and seems actually to be thought so by most Communists, who are thus what Popper would term 'vulgar Marxists' and what Marx would have termed 'Utopian Socialists'. The truth is, I think, that Communism is Utopian and Marxism not, which makes it important to keep the distinction in mind.

A crucial consequence of Marxism's claim to be science is that it must defend itself successfully at a scientific level of argument or else lapse into incoherence. And if it suffers defeat at any point on this level, it has no recourse to other forms of argument: it

must, in short, submit itself to tests and accept the consequences. And what Popper is thought to have done is demolish its claims to scientific truth beyond any serious possibility of their reconstitution. He has not done this by showing Marx's theory to be unfalsifiable. Vulgar Marxism is unfalsifiable, but Popper does not make the mistake of attributing vulgar Marxism to Marx. Karl Marx's own theory, treated with the intellectual seriousness it deserves, yielded a considerable number of falsifiable predictions, the most important of which have now been falsified. For instance, according to the theory only fully developed Capitalist countries could go Communist, and therefore all societies would have to complete the Capitalist stage of development first: but in fact, except for Czechoslovakia, all the countries to have gone Communist have been pre-industrial - none has been a fully developed Capitalist society. According to the theory the revolution would have to be based on the industrial proletariat: but Mao TseTung, Ho Chi-Minh and Fidel Castro explicitly rejected this and based successful revolutions on the peasantries of their different countries. According to the theory there are elaborate reasons why the industrial proletariat must inevitably get poorer, more numerous, more class-conscious and more revolutionary: in fact, in all industrial countries since Marx's day, it has become richer, less numerous, less classconscious and less revolutionary. According to the theory Communism could be brought about only by the workers themselves, the masses: in fact in no country to this day, not even Chile, has the Communist party managed to get the support of the majority in a free election: where they have achieved full power it has been imposed on the majority by an army, usually a foreign one. According to the theory, ownership of the Capitalist means of production was bound to become concentrated in fewer and fewer hands: in fact, with the development of the joint-stock company, ownership has become so widely dispersed that control has passed into the hands of a new class of professional managers. And the emergence of this class is itself a refutation of the Marxist prediction that all other classes would inevitably disappear and be polarized into two, an ever shrinking Capitalist class which owned and controlled but did not work, and an ever expanding proletariat which worked but did not own or control.

And then, to take up a different tack, what Marx and Engels had to say about most sciences has been rendered obsolete by the subsequent development of those sciences: for instance their theory of matter by post-Einsteinian physics, and their understanding of individual behaviour by post-Freudian psychology. The Ricardian economic foundations of Marxism itself have been swept into limbo by postKeynesian economics, and its Hegelian logical foundations by post-Frege logic. Their view of the future development of political institutions was quite unlike what has actually occurred - chiefly, I suspect, because of their failure to take the growth of parliamentary democracy seriously (a failure again imposed on them by their theory, which precluded any such serious development). All this constitutes the refutation of a theory claiming to be scientific by the basic method of submitting its predictions to the test of experience and finding them falsified. But it will be remembered from earlier chapters that this, though the main, is not the only kind of test a theory has to pass: it has also to meet the logical criteria of internal consistency and coherence. And Marxism's fundamental tenet that the development of the means of production is the sole determinant of historical change is shown to be logically incoherent

by the fact that no such theory can explain how it is that the means of production do develop instead of remaining the same.

Marx's view that history develops according to scientific laws is one example of what Popper calls 'historicism'. I mean by "historicism" an approach to the social sciences which assumes that historical prediction is their principal aim, and which assumes that this aim is attainable by discovering the "rhythms" or the "patterns", the "laws" or the "trends" that underlie the evolution of history.* (The Poverty of Historicism, p. 5)

Examples of historicist beliefs are: that of the Old Testament Jews in the mission of the Chosen People: that of the early Christians in the inevitability of mass conversions to be followed by the Second Coming: that of some Romans in the destiny of Rome to rule the world; that of Enlightenment liberals in the inevitability of progress and the perfectibility of man; that of so many Socialists in the inevitability of Socialism: that of Hitler in the establishment of a Thousand Year Reich. One has only to start listing some of the more famous examples to note their low fruition-rate. But apart from specific theories, the general notion that history must have a destination, or if not that a plot, or at any rate a meaning, or at least some sort of coherent pattern, seems to be widespread.

If historical inevitability is to be seriously argued a limited number of explanations is possible. Either history is being directed by some outside intelligence (usually God) in accordance with its own purposes. Or history is being driven forward by some inside intelligence (immanent spirit, life force or some such entity as 'the destiny of man'). Or there is no spirit at all, in which case entirely deterministic material processes must be at work. The first two alternatives are in an obvious sense metaphysical: they are not falsifiable, and certainly not scientific. And the third rests on a conception of science which is no longer tenable.

The reasons for Popper's rejection of these views should be clear from everything that has gone before in this book. He is an indeterminist who believes that change is the result of our attempts to solve our problems - and that our attempts to solve our problems involve, among other unpredictables, imagination choice and luck. Of these we are responsible for our choices. Insofar as any process of direction is at work it is we, in our interaction with each other, and with our physical environment (which we as a species have not created) and with World 3 (which we as a species have created, but which each individual inherits and can do only a little to change) who move history forward. Any purposes it embodies are our purposes. Any meaning it has is meaning we give it.

From the standpoint of these ideas he attack; all historicist theories. And the one on which he mounts his most powerful attack is Marxism, both because it is the most influential of them in the modern world and because it is the one above all which claims that the development of history takes place according to scientific laws, and that knowledge of these laws (which it provides) enables us to predict the future. Popper's argument at its most technical consists in showing that no scientific predictor, whether a

human scientist or a calculating machine, can possibly predict, by scientific methods, its own future results. In more homely terms the argument takes the following tack. It is easy to show that the course of human history has been strongly influenced by the growth of human knowledge, a fact which even people who regard all knowledge as the byproduct of material development can admit without selfcontradiction. But it is logically impossible to predict future knowledge: if we could predict future knowledge we would have it now, and it would not be future; if we could predict future discoveries they would be present discoveries. From this it follows that if the future contains any significant discoveries at all it is impossible to predict it scientifically, even if it is determined independently of human wishes. And there is another argument: if the future were scientifically predictable it could not, once discovered, remain secret, since it would in principle be rediscoverable by anybody. This would furthermore present us with a paradox about the possibility/impossibility of taking evasive action. On these logical grounds alone historicism collapses; and we must reject the notion, central to the Marxist programme, of a theoretical history corresponding to theoretical physics.

With the collapse of the notion that the future is scientifically predictable the notion of the totally planned society goes down as well. This is also shown to be logically incoherent in other ways: first, because it cannot give a consistent answer to the question "Who plans the planners?"; and second because, as has been shown, our actions in any case are likely to have unintended consequences. This latter point, incidentally, exposes the fallacy in the assumption made by Utopians generally (though not by Marx - indeed Marxism is clearer about this than many Social Democrats) that 'when something "bad" happens in society, something we dislike, such as war, poverty, unemployment, then it must be the result of some bad intention, some sinister design: somebody has done it "on purpose": and, of course, somebody profits from it. I have called this philosophical assumption the conspiracy theory of society.*' (Popper in Modern British Philosophy (ed. [Bryan Magee](#)) p. 67.)

Other fronts in Popper's onslaught on Marxism are supported by arguments which have been expounded earlier in this book and need not be repeated, the most important being that Marx, in putting forward what he called 'scientific Socialism', was wrong not only about society but also about science, his view of it being the one Popper believes himself to have overthrown. If Popper is right about science then his is also the only genuinely scientific political philosophy: and also, most importantly, the hostility to science and the revolt against reason, both of which are so prominently expressed in today's world, are directed at false conceptions of science and reason.

Popper's arguments that we can know of no meaning in history other than that invested in it by human beings have a psychologically disturbing, because disorienting, effect on some people who feel themselves placed in some sort of existentialist void by them. Others fear that if Popper is right all values and norms must be arbitrary. The latter misapprehension is well dealt with in *The Open Society* (vol. i, pp. 64-65) 'Nearly all misunderstandings can be traced back to one fundamental misapprehension, namely, to

the belief that "convention" implies "arbitrariness"; that if we are free to choose any system of norms we like, then one system is just as good as any other. It must, of course, be admitted that the view that norms are conventional or artificial indicates that there will be a certain element of arbitrariness involved, i.e. that there may be different systems of norms between which there is not much to choose (a fact that has been duly emphasized by Protagoras). But artificiality by no means implies full arbitrariness. Mathematical calculi, for instance, or symphonies, or plays, are highly artificial, yet it does not follow that one calculus or symphony or play is just as good as any other.' His full explanation of why not, and of what he believes to be man's true orientation, is provided by his evolutionary theory of knowledge, in particular his theory of World 3, which is to be found in writings discussed by us earlier, though published by him later.

Some of Popper's arguments against Marxism apply to Utopianism - for instance his argument against the possibility of societies being 'swept away' and replaced by something 'wholly new'. The Utopian approach may be described as follows. Any rational action must have a certain aim. It is rational in the same degree as it pursues its aim consciously and consistently, and as it determines its means according to this end. To choose the end is therefore the first thing we have to do if we wish to act rationally; and we must be careful to determine our real or ultimate ends, from which we must distinguish clearly those intermediate or partial ends which actually are only means, or steps on the way, to the ultimate end. If we neglect this distinction, then we must also neglect to ask whether these partial ends are likely to promote the ultimate end, and accordingly, we must fail to act rationally. These principles, if applied to the realm of political activity, demand that we must determine our ultimate political aim, or the Ideal State, before taking any practical action. Only when this ultimate aim is determined, in rough outline at least, only when we are in possession of something like a blueprint of the society at which we aim, only then can we begin to consider the best ways and means for its realization, and to draw up a plan for practical action.*" (The Open Society and its Enemies, vol. i, p. 157)

Popper's arguments against any approach to politics which starts from a blueprint and then sets out to actualize it have to be faced by any idealist if he seriously wants to be an idealist without illusions. There is first the argument that wherever you want to go you have no choice but to start from where you are. It is no more possible to start from scratch in politics than it is in epistemology or science or the arts. All real, as distinct from envisaged, change can only be change in actually existing circumstances. Utopians commonly assert that before this or that thing can be changed, society as a whole will have to be changed: but what this comes down to is the assertion that before you can change anything you must change everything which is self-contradictory. Second, whatever actions we take will have some unintended consequences which may easily be at odds with our blueprint. And the more wholesale the action the more plentiful the unintended consequences. To claim rationality for sweeping plans to change society as a whole is to claim a degree of detailed sociological knowledge which we simply do not possess. And to talk in the Utopian way about means and ends is to use a metaphor

misleadingly: what is actually in question is one set of events close in time, which are referred to as 'the means', followed by another more distant set of events, which are called 'the end'. But these will be followed in turn - unless history just stops - by yet further successive sets of events. So the end is not an end in fact, and there can be no serious defence for privileges claimed for what is merely the second set of events in an endless series. What is more the first set of events, being closer in time, are more likely to materialize in the form envisaged than the second, more distant and more uncertain. Rewards promised by the latter are less sure than the sacrifices made for them in the former. And if all individuals have equal moral claims it is wrong to sacrifice one generation to the next,

As to the blueprint itself, it is an ascertainable fact that people differ about the kind of society they want - even conventional Conservatives, Liberals and Socialists do so, to allow for no others. So whatever the nature of the group that gets into power with the aim of putting its blueprint into production it will have to render the opposition of others ineffective, if not coerce them into serving an end they disagree with. Whereas a free society cannot impose common social purposes, a government with utopian aims has to, and is bound to become authoritarian. The radical reconstruction of society is a huge undertaking which is bound to take a long time: is it even remotely likely that social objectives and ideas and ideals will not substantially change during that time, especially as it will be, by definition, a time of revolutionary upheaval? Yet if they do change it means that what appeared the most desirable form of society, even to the people who made the blueprint, will diverge further and further from it as they approach it - and further still from anything wanted by their successors, who had nothing to do with making the blueprint in the first place. This is related to another argument, to the effect that not only are the planners themselves part of the society they wish to sweep away but their social experience, and therefore social assumptions and aims, however critical, are bound to have been deeply conditioned by it. So really sweeping it away includes sweeping them and their plans away too. In any case a social reconstruction which is radical and, because radical, prolonged, is bound to uproot and disorient very large numbers of people, thereby creating widespread psychological as well as material adversity: and one must expect at least some people to oppose measures that threaten them with these effects. Such people will be seen by the power-holders trying to actualize the ideal society as opposing the wholly good out of self-interest - and there will be half a truth in this. So they will be seen as enemies of society. Inevitably this will make them victims in what follows. For ideal goals, being unattainable, are a long time coming, and the period over which criticism and opposition have to be stifled is prolonged more and more: so intolerance and authoritarianism will intensify, albeit with the best of intentions. And precisely because intentions and goals are thought to be ideal the persistent failure of the latter to materialize is bound to give rise to accusations that someone is rocking the boat - there must be sabotage, or foreign interference, or corrupt leadership, for all possible explanations that rule out criticism of the revolution involve malignity on somebody's part. So it becomes necessary to identify culprits, and to root them out: and if culprits there must be, culprits will be found. By now the revolutionary regime will be up to its

neck in the unforeseen consequences of its actions. For even after enemies of the revolution have received their deserts the revolutionary goals will obstinately go on not materializing: and the ruling group will be driven more and more to grasping at immediate solutions to urgent problems (what Popper calls 'unplanned planning') which is usually one of the things for which they most despised their predecessor regimes. This will open yet wider the disparity between their declared aims and what they are actually doing - the latter more and more coming to resemble the activities of the most cynically unutopian governments. The fact is, of course, that nearly all of us require the most important aspects of the social order to continue functioning through any reconstruction: people must continue to be fed and clothed and housed and kept warm: children, if they are not to be intolerably victimized, must continue to be cared for and educated; transport, medical, police and fire services must continue to operate. And in a modern society these things depend on large-scale organization. To sweep it all away at once would be to create, literally, a chaos: and to believe that somehow out of that an ideal society would emerge borders on the mad, as does even the belief that a society merely better than the one we have now is more likely to emerge from chaos than from the society we have now. However, even if we were determined to, we could never, despite our dreams of perfection, sweep everything away and begin again. Mankind is like the crew of a ship at sea who can choose to remodel any part of the ship they live in, and can remodel it entirely section by section. but cannot remodel it all at once.

The fact that change is never going to stop renders the very notion of a blueprint for the good society nonsensical, for even if society became like the blueprint it would instantly begin to depart from it. So not only are ideal societies unattainable because they are ideal, they are unattainable also because, to correspond to any sort of blueprint at all, they would have to be static, fixed, unchanging and no foreseeable society is going to be those things. Indeed, the pace of social change seems to get faster, not slower, with every year that passes. And the process is going to have, so far as we can see, no end. So to have any hope at all of corresponding to the realities a political approach must be concerned not with states of affairs but with change. Our task is not the impossible one of establishing and preserving a particular form of society: it is to maximize our control over the actual changes that occur in a process of change which is never-ending - and to use that control wisely. And because society will never be perfect, to raise questions like 'What is the ideal form of society?' is academic. Indeed, Popper condemns 'what is?' questions generally: 'What is gravity?' and 'What is life?' are as irrelevant to making progress in science (see pp. 34 and 49) as 'what is freedom?' and 'What is justice?' are to making progress in politics. Equally to be condemned are 'What is?' questions disguised by being at one remove - for instance 'Is Britain really a democracy?' which leads straight to 'What do you mean by democracy?' or 'What is democracy?'. Their quasimagical attempt to capture the essence of reality in a definition has led Popper to brand the use of such questions as 'essentialism'. In politics the essentialist approach leads almost naturally to Utopianism and doctrinal conflict. Genuinely important questions are more like 'What should we do in these circumstances? What are your proposals?' To them the answers can be fruitfully discussed and criticized: and then, if they stand up to that, tried out. Nothing

that is not a proposal can ever be put into practice. So what matters in politics, as in science, is not the analysis of concepts but the critical discussion of theories, and their subjection to the tests of experience.

Because authoritarian structures incorporate the same mistaken notions of certainty, and the same mistaken assumptions about method, as does the traditional view of science, the arguments underlying Popper's criticism of the view that in politics we even can, let alone should aim to, establish and preserve a certain state of society are in point after point the same as those underlying his criticism of the view that science even can, let alone should aim to, establish and preserve certain knowledge. And his view, by contrast, that science is scientific method, and his view of how that method is to be seen, are at all levels interrelated with his view that politics is political method, and his view of how that method is to be seen. In both cases what he asks us to use with imagination and feeling is an unending feedback process in which the bold propounding of new ideas is invariably attended by their subjection to rigorous error elimination in the light of experience. He calls this approach 'critical rationalism' in philosophy; in politics he calls it, 'piecemeal social engineering'. This phrase is trebly unfortunate: 'piecemeal' is usually pejorative anyway, and here it has the additional disadvantage of masking the radicalism of the method proposed; and 'engineering' has unpleasant connotations when applied to human beings. It sounds heartless, but nothing could be more passionate than Popper's advocacy of it, or more humane than some of his arguments. In trying to show how his philosophy is all, of a piece I have concentrated in this book on the logical arguments and their interrelationships, but even more important are the moral arguments; and for these, as for so much else that we have not dealt with, the reader is advised to turn to Popper's books.