Popper's Views on Natural and Social Science
by Colin Scrimgeour

CONTENTS

Brill 1993

six reprints. In 1989 a sixth edition appeared. Philosophers themselves have praised it highly,—Russell, Ryle and Berlin among them. The reason for its success may well be that it gives much more than a thorough exposure of the fallacies of historicism and collectivism—it gives the soundest case for a liberalism that is suffused with both rational and humane values. But it should be read together with the *Poverty*—because, as this account shows, in spite of the *Poverty's* less lively style and narrower range, both are aspects of the same analysis.

That, too, is the case with the *Logic* and its *Postscipt.* In this sense, Karl has written only two books, both master works, as the others[11] can be regarded as collections of important essays. For all of them, the main assistance Karl had was given by his remarkable wife, and especially during the difficult times for the first three—the *Logik, The Open Society,* and *The Poverty.* Times so difficult, and the tasks so great, that I regard these books as a triumph of spirit as well as a triumph of mind.

[11] Except for *The Self and Its Brain,* a joint work with John Eccles.

APPENDIX TWO

POPPER AND HAYEK ON PIECEMEAL SOCIAL ENGINEERING

But never, and this is the essential point in the matter under review, may science dispense with testing for their suitability those institutions which have come about 'organically'. It must, when careful investigation so requires, change and better them according to the measure of scientific insight and the practical experience at hand. No era may renounce this 'calling'.

Carl Menger

When Hayek and Popper were young men both were socialists, Hayek a Fabian and Popper a communist. It has been said that anyone with a heart is a socialist in his youth, and they had special reasons to be one. Even before World War I, when Vienna was the glittering capital of a large empire, it had much poverty, and that stirred their consciences. After that war there was far worse poverty and a great ferment of Marxist ideas, stimulated by the Russian Revolution and by enthusiasm for idealistic policies of the Social Democrats who governed the city.

But the Marxists, of course, did not have it all their own way, even in Vienna. Their ideas were sharply challenged by some members of the Austrian School of Economics, and especially by Ludwig von Mises who, seizing without acknowledgment ideas of his teacher, Wieser, published a seminal article, *Economic Calculation in the Socialist Commonwealth* (1922). It demonstrated the impossibility of rational economic calculation, and so of rational decision making, in a centrally planned economy. Hayek, who had graduated from the University of Vienna with two doctorates, participated in Mises' famous seminar, and became a complete convert to his views about the superior merits of a competitive economy.

Popper had a different conversion to a similar viewpoint. After his father's fortune was lost in the postwar inflation he had gone to live in a kind of commune at a disused military hospital, and became a communist activist. But he was soon repelled by the egotistical assumption of his bourgeois comrades that, after the revolution, *they* would become commissars, and tried to make himself more of a proletarian by apprenticeship to an old cabinet maker. He became still more repelled by the irresponsibility of Party leaders who led young people to stage a demonstration that

provoked the police to fire and kill some of them. Already a keen interest in science had brought him to reject dogmatic theories, such as Marxism had become, theories that claimed infallible knowledge of the workings and future of capitalist society. So he ceased to be a communist, nor did he become a member of the Social Democratic Party because it, too, was dogmatically Marxist. Yet he admired much of the Party's social work for the people of Vienna, saw them as the only possible defence against the dire threat of fascism, and retained a strong belief in equality. Before, long, however, he became convinced that social equality, much as he valued it, was incompatible with the superior value of liberty.

Hayek and Popper, then, seem to have come, in their different ways, to much the same view of socialism. And, near the close of World War II, each published an important book defending libertarian and democratic institutions against totalitarian propaganda and influences. Hayek's *The Road to Serfdom* came out in 1944, and Popper's *The Open Society and Its Enemies* in 1945, although it had been completed two years earlier.

At this time their views were much in harmony. Both gave devastating, although somewhat different, critiques of collectivist planning. Hayek was most concerned to argue the merits of competition or, as he later called it, 'the extended order of cooperation', and Popper those of 'piecemeal social engineering'. Yet Hayek, at that time, was not an unqualified believer in *laissez-faire.* Early in his book he said: 'Probably nothing has done more harm to the liberal cause than the wooden insistence of some liberals on certain rules of thumb, above all on the principles of *laissez-faire.* (p. 13) He stressed, of course, that because competition is 'the only method by which our activities can be adjusted to each other without coercive or arbitrary intervention of authority' we should 'make the best possible use of forces of competition as a means of coordinating human efforts'. (p. 27) Nevertheless measures to control the use of dangerous substances, to require certain sanitary arrangements, or to limit working hours are 'fully compatible with the preservation of competition', provided that 'they affect all potential producers equally and are not used as an indirect way of controlling prices or quantities'. (p. 28) There are, too, cases where some services cannot be provided at a price so that competition is impracticable, and other cases where use of property inflicts uncompensated damage on third parties; e.g. some types of farming, deforestation, or smoke and noise from factories. In such cases, other arrangements have to be made. (pp. 28–29) 'Nor', he said, 'is the preservation of competition incompatible with an extensive system of social services—so long as the organization of these services is not designed in such a way as to make competition ineffective over wide fields.' (p. 28)

Popper's emphasis was more on liberty and rationality than on economic efficiency. He did not doubt that there are social evils, notably mass unemployment, poverty and preventable disease. Nor did he doubt that Marx's view about such evils increasing under capitalism had been made obsolete, in democratic countries, by successful social reforms. But he warned that, although such evils could be reduced by piecemeal social engineering, this has to be attempted in ways which do not damage democracy by increasing unduly the coercive power of the state, and in ways which allow for critical discussion and possible revision, or even scrapping, of attempted reforms. Only if reform or innovation of social institutions is undertaken in a critical and experimental way can rational results be expected.

This view reflects the primacy of individual liberty in Popper's scale of social values. He did not, however, entirely give up the ideal of equality which had been, for him, the main attraction of communism. It was modified to a high priority for protecting the poor, and to an emphasis on alleviating remediable human suffering. There is a footnote in *The Open Society* which says that, because 'all moral urgency has its basis in the urgency of suffering or pain' we should replace the Utilitarian prescription of maximizing happiness by that of minimizing suffering.[1] It is, surely, quite monstrous to hold that some people's pain can be symmetrically offset by other people's pleasure. Any full-scale attempt, moreover, to realize the Utilitarian prescription would tend to promote dictatorship because individual tastes differ and so would have to be moulded or suppressed under any serious attempt to promote general happiness or welfare. But Popper saw no reason against attempts to shape social institutions in ways that would reduce suffering, and even advocated that that this aim should become a fundamental principle of public policy, although not the only one. Preservation of democracy and liberty would rank higher.

That was one strain of Popper's thought about piecemeal social engineering. Another came from his epistemological view that science is all a matter of trial and error in reaching better

[1] Fourth edition, Vol II p. 304.

approximations to truth about the phenomena which it studies. Trial involves bold conjectures about the behaviour of phenomena, not blind guesses but ones based on some familiarity with the phenomena and with other theories that have been tried to explain them. Trials are then attempted to see if such bold conjectures can be refuted by empirical tests of deductions made from them together with initial premisses and assumptions from 'background knowledge'. That holds for even the most advanced science; everything is tentative, subject to critical revision in the light of tests and further experience. Far more does it hold for the comparatively primitive social sciences; they have a much less secure basis of tested knowledge in drawing blueprints for further social reform. It is important, therefore, to have critical examination and discussion of such blueprints before corresponding social reforms are put into operation, and at all stages to monitor results carefully. If the reform goes badly it should be appropriately adjusted, or even scrapped pending revision of relevant theories and the production of a better blueprint.

Both Hayek and Popper were struck by the similarity of their views after each had read the the other's book and cognate articles. But Popper was uneasy about Hayek's stress on markets which seemed to concede too much to *laissez-faire*, at least in what is now Chapter 10 of *The Counter-Revolution of Science*. He urged that, although most social institutions had evolved rather than resulted from deliberate creation, they are not sacrosanct and have to be regarded from a functional standpoint—reformed if they are proving to be unsatisfactory or inadequate. In particular, he doubted that mass unemployment was simply due to clumsy intervention of governments into economic affairs, and warned that failure to deal with this or other serious social problems could be dangerous to both democratic institutions and economic rationality. Hayek reassured him that there was no disagreement between them on theoretical issues.

Later, however, Hayek expressed some reservations, in *Law, Legislation and Liberty*, about Popper's piecemeal social engineering. 'Even it', he wrote, 'suggests to me too much a technological problem of reconstruction on the basis of the total knowledge of the physical facts, while the essential point about the practical improvement is an experimental attempt to improve the functioning of some part without a full comprehension of the structure of the whole.'[2]

[2] Op. cit, p. 157.

When he wrote this, Hayek could not have fully remembered what Popper had said about piecemeal social engineering. A major reason for his advocacy of it was that social scientists,—including Austrian economists—were far from having an adequate understanding of their phenomena. That was underlined by his stress on open criticism and careful monitoring of any social reform, —of regarding it as an experiment which could give unexpected results that might well require modification of the reform.[3] And, of course, a reform could seek to extend the scope for competitive markets by scrapping some controls or else to curtail that scope by introducing new controls.

For above all, Popper is a fallibilist who insists on our inevitable ignorance,—on a Socratic approach to all our problems. His fallibilist scepticism extends, not only to social reformers, but just as much to those who are so impressed by the undesigned system of competitive markets that they oppose any attempt to remedy its deficiencies. I refer particularly to those who follow Ludwig von Mises in asserting, on what must be *a priori* grounds, the infallibility of consumer sovereignty and the optimality of free markets. Murray Rothbart, for example, claims that Mises' praxeology 'can indeed demonstrate that laissez-faire will lead to harmony, prosperity and abundance, while government intervention leads to conflict and impoverishment.'[4]

Hayek long ago gave up this extreme view, if he ever held it. In *The Road to Serfdom*, he had recognized that competitive markets could not do everything that a society needed, and that there is 'a wide and unquestioned field for state activity' to 'create conditions in which competition will be as effective as possible, to supplement it where it cannot be made effective, and to provide services which, in the words of Adam Smith, "though they may be in the highest degree advantageous to a great society, are, however, of such a nature that the profit could never repay any individual or small number of individuals" '.[5]

In an address which he gave in 1956, Popper listed some of the social evils which he considered had been remedied or relieved by social cooperation.[6] In addition to mass unemployment and poverty, he mentioned sickness and pain, penal cruelty, slavery or serfdom, religious or racial discrimination, lack of educational opportunities, rigid class differences and war.

[3] *The Poverty of Historicis*, pp. 83–84.
[4] *The Foundations of Modern Austrian Economics*, p. 105.
[5] See *New Studies in Philosophy, Politics and Economics*, p. 111 and p. 69.
[6] *Conjectures and Refutations*, Chapter 19.

Hayek moved closer to Popper's position again when, in an IEA paper of 1973, he acknowledged a *growth* of collective wants which a government can and should satisfy, provided that these wants related to the whole community, that the government did not try to monopolize services to meet them but allowed opportunity for alternative provision by private enterprise, and that these services were financed by non-discriminatory means. Yet in his last book, *The Fatal Conceit*, Hayek seems to have moved closer again to Mises' position. Approval of 'piecemeal improvement' is much less explicit, and examples are limited to reforms which bear on copyright, contract and property. (p. 69) A difference also seems to emerge in regard to what Popper has condemned as moral historicism,—'the philosophy of the identity of facts and standards.' For Hayek argues that morals, 'standing between instinct and reason', are identical with the abstract rules of an extended order, and change as it evolves. (p. 12) Is there a disturbing similarity here to the Marxian view that morals depend upon economic evolution? If so, Hayek had taken up a position that is both inconsistent with his own liberalism and discouraging to social reform. Liberalism, Popper maintains, is based on a *dualism* of facts and standards, 'for an essential part of this tradition is the recognition of the injustice that does exist in this world, and the resolve to try to help its victims'[7]. If, moreover, gaps between facts and standards are allowed to become too great, democracy, and so liberalism itself, can be threatened; the Weimar Republic, after all, did elect Hitler to power during a period of severe unemployment.

Differences like this between Hayek and Popper could, I think, have been ironed out by conversation between these two old friends. I would have no such optimism in regard to those dogmatists who claim that Austrian economic science, as they have developed it, shows with apodictic certainty the folly of any interference with a completely free, and so quite unregulated, market system. They claim for this imaginary system virtues that no other conceivable economic arrangements could possibly match, and see attempts to regulate or restrict it as necessarily leading to dire consequences, both economic and political.

It is doubtful if such views should really be called 'Austrian'. The older Austrians would not have subscribed to them. Carl Menger, founder of the School, criticized economists, like Say, who had an erroneous view of the concepts 'theory' and 'system' as they understood them to be 'nothing more than theorems obtained deductively from a *priori* maxims'.[8] His successor, Wieser, according to Erich Streissler, 'was an interventionist liberal'[9], and his successor, Mayer, 'insisted that Austrian theory was value-free, and was sceptical of Mises distortion of it.[10] Nor did all those who had attended Mises' seminar fully share his views about the folly of intervention in free markets. Fritz Machlup, for example, spoke of the error of identifying liberalism with *laissez-faire*, and held that 'the preservation of a maximum amount of freedom may call for government measures to maintain competition, which private contracts might restrict, to provide services which private enterprise cannot supply, and to prevent misery which private charity cannot cope with'.[11]

There can be no sound basis for prejudging all possible reforms. Final truth has not been reached by any of the rival schools of economics,—nor will it ever be. Their theories, as Popper has shown, must always be subject to falsification or improvement in the light of experience. To show that collectivism is incompatible with liberty, and that it gives poor economic results, does not, by itself, establish a case for pure *laissez-faire*. We would still have to ask, as Menger and Popper insist, how far an existing situation could be improved or worsened by removing or introducing some kinds of intervention, and how far it might be further improved by better piecemeal social engineering.

And, as Popper stresses, improvement must involve reference to more than economic efficiency. It also involves considerations of such moral and intellectual values as individual freedom, democratic tradition, protection of the poor or suffering, advancement of knowledge and education, and promotion of some basic aesthetic values. Civilization, no doubt, depends very much upon Hayek's extended order of cooperation, but the two are hardly identical. If they were, we should have to deny that Gupta India or Sung China were civilized because their economies were highly regulated.

---

[7] *The Open Society*, Volume 2, p. 393.

[8] *Investigations into the Method of the Social Sciences*, p. 37n.

[9] *Die Weiner Schule der Nationalökonomie*, 1986, p. 86.

[10] Earlene Carver, 'The Emigration of Austrian Economists', *History of Political Economy*, 18.1, p. 10.

[11] *Roads to Freedom*, pp. 127–28.

APPENDIX THREE

ADVICE TO RUSSIAN READERS OF *THE OPEN SOCIETY*

In 1992 Karl Popper was preparing a Russian edition of *The Open Society*, and kindly allowed me to write about his English version of a message to his Russian readers. It declared that the main idea of *The Open Society* is *The Rule of Law.*

The West has become wealthy because of the development of free markets, and these have required both a Civil Law, which includes property and mercantile laws, and a Criminal Law, whose most important aspect is that no one can be punished before his guilt has been proved beyond reasonable doubt.

Criminal Law is a necessary evil. Civil Law, however, is a great good because it aims at personal freedom—at enabling people to live together without the use of violence. It has enabled free markets to develop with great benefits to living standards. They need a framework of law to provide for the making, and enforcement, of numerous contracts between independent producers, suppliers, customers and workers. The Civil Law of Western societies has thus had a parallel growth with that of free markets and the industries which use and serve them.

The Revolution of 1917 destroyed this legal tradition in Russia, together with free markets. It would take a very long time to re-establish it unless Russia now copies one of the West's systems of Civil Law, just as Japan did after the Meiji restoration by quickly adopting the German legal system. Popper suggests that Russia should choose either the French or the German codes; the British never developed a code of law that could be taken over *en bloc*, and in the United States there are different state codes which were themselves developed from British law.

Adoption of the French or German codes could not fit Russia anything like perfectly, so that its Parliament would have to make changes as the need appeared for them, just as Western states have had to continuously revise or up date their own established codes of law.

A much greater difficulty is to make real the Rule of Law. To achieve this the Russian State would have to educate its legal officers in the newly adopted code and persuade them to take it seriously, especially judges and other members of the courts of law. In times of peace, no higher interest than that of the State should be allowed to prevail. This most difficult task is really that of establishing an Open Society—of bringing about a new, flexible and living tradition of the Rule of Law, as opposed to 'the rigid tradition of the Rule of Fear' that had characterized the Communist bureaucracy. It might be hastened and assisted if Russia were to follow Japan's old example of sending very good post-graduate law students abroad to study and gain experience of a Western system of Civil Law.

It is unthinkable that Russia can approach Western standards of living until it establishes a Rule of Law to serve a free market economy. Popper regards this insight as 'fundamental, and of the greatest urgency'. For a market economy is extremely complex, involving millions of 'peaceful, hard-working citizens', and can function properly only if they can trust one another, 'and as long as they know what honesty and decency and truth demand'. For that they need trust in the law, in the officers who enforce it, and in the judges who administer it.

Among the serious risks of privatising Russia's state industries, is that this process can involve serious corruption and swindling unless there are effective systems of Civil and Criminal Laws to hold them in check. Without them privatisation is unlikely to promote beneficial development of free markets and could well bring political dangers that would undermine attempts at economic reform.