Beyond methodology

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In Search of a Better World: Lectures and Essays from Thirty Years. By Karl Popper. *Routledge: 1992. Pp. 245. £25.*

ON 28 July this year, a friend and I were discussing the work of Sir Karl Popper. We wondered how old he was. I looked in his autobiography. That very day was his ninetieth birthday! But the essays in this volume are far from 'last words'. Some are recent, but others go back to the 1950s. Their only common feature is that they were mostly written originally in German, and were evidently published together recently in that language, from which they have been specially (and very expertly) translated. But they cover the wide waterfront of his interests, and therefore invite what could be called a 'retrospective' of his work.

Popper would surely like to be known principally for his determined advocacy of criticism as an intellectual method. Following Socrates, he insists that the most important thing we know is that we know very little, and that only uncertainly. I am not sure that I agree factually with his assertion that "all the great natural scientists were intellectually modest", but it is a laudable fiction. For that reason, it is surprising that he says in one place in this book that he has "solved a whole string of really fundamental philosophical problems" — a belief other philosophers might fairly take leave to doubt.

Popper has actually influenced the climate of contemporary thought in three ways. Most importantly, in works such as *The Open Society and Its Enemies*, which was published in 1950, he thoroughly debunked political historicism. In the present essays, he continues the attack on intellectuals such as Plato, Hegel and Marx, who set themselves up as prophets on the basis of pretentious theories of social action. Popper's deflation of such gurus is based on a deep moral appreciation of the chaotic forces and unfathomable sources of historical change. I strongly recommend the chapter entitled "Emancipation through knowledge" (broadcast in German, in Bavaria, in 1961), where he reaffirms the goal of the Enlightenment as giving meaning to our lives through our own efforts, rather than trying to discover meanings that could never be there *a priori*. In the light of his own critical stance, this can only be an article of faith, but it sits well with his repeated rejection of intellectual pessimism about the imminent fate of the world. I admire his courage in risking comparison with Voltaire's Dr Pangloss by publicly celebrating contemporary progress in the conquest of poverty, cruelty and disease.

Most readers of *Nature* know of Popper mainly for his philosophy of science. In the public mind, this is strongly associated with the concept of 'falsification' — that is, the power of awkward facts to put paid to cherished theories. This concept was developed by Popper in *Die Logik der Forschung*, published in 1934, although it did not become widely appreciated in the scientific world until it appeared in English as *The Logic of Scientific Discovery* in 1959. This eloquent work, and others that followed in the same vein, made sense of the intuitive strategy of good research by seeing it as a continual process of conjecture and refutation. As every scientist knows, a plausible web of hypotheses cannot be accepted as a serious account of scientific truth unless it can be fitted reasonably well to all the known facts, as well as to any new facts that research could be designed to reveal.

Interestingly enough, none of these essays mentions 'falsification' as such: presumably this concept is subsumed under more general notions of the need to subject scientific theories to critical tests. These notions, with their implication that all scientific knowledge is provisional and corrigible, are so natural in themselves, and so much part of our contemporary attitude to science, that it is difficult now to say how much they are due directly to Popper's advocacy. Certainly, many of us who read him in the 1960s were delighted that a philosopher had at last understood in principle how we often worked as scientists, and have been happy to cite his authority as a justification of our peculiar ways.

What these essays do show, however, is Popper's disappointing failure to pursue this insight further. For example, his repeated advocacy of the search for 'truth' merely echoes the average working scientist's conviction that there is indeed just such a something to be pursued and captured. His only part in the serious philosophical debates that still go on about the status of scientific knowledge is to cheer on the 'realists' with strongly partisan slogans. In fact, many of these essays contain robotic sneers at all 'relativists', as if all the diverse, sincere, often wrong-headed but sometimes telling arguments that come under this heading were downright vicious and treasonable. As the champion of rational pluralism, Popper does himself a disservice by voicing such a sweeping condemnation of a whole variety of legitimate academic concerns. Incidentally, this is why everybody has ignored his attempt, in 1962, to discuss "The Logic of the Social Sciences". As the reprint here shows, it was embarrassingly insensitive to the impossibility of giving an account of social actions that is independent of the language and perceptions of the actors.

Finally, I would particularly commend his stress on the concept of "world 3" — that is, the world of books, works of art, manufactured goods and other "products of the human mind". This concept is not discussed much by philosophers or social scientists, and yet it could turn out to be the missing link between them. In effect, it provides a bridge between the subjectivity of the individual and the apparent objectivity of social institutions. Here again, Popper's instinctive recognition of an important idea is sound, but he holds back from the hard work of defining and refining it so that it can be used analytically as well as rhetorically.

Each of these essays speaks out in Popper's firm, clear, unambiguous voice. They do not pretend to cohere, but taken separately they are very readable and persuasive on important issues. Some readers may be interested in the chapter that provides the title to the book, where Popper presents his views on biological evolution — views that are so idiosyncratic that I do not feel qualified to comment on them. Otherwise, this book can scarcely be regarded as an important addition to his already impressive contributions to human understanding. □

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■ Popper's life and works were celebrated by Hermann Bondi in a Commentary article published earlier this year to mark the philosopher's ninetieth birthday (*Nature* **358**, 363; 1992).

New in paperback

■ *Stephen Hawking: A Life in Science* by Michael White and John Gribbin. Penguin, £6.99. For a review see *Nature* **356**, 25 (1992).

■ *The Third Chimpanzee: The Evolution and Future of the Human Animal* by Jared Diamond. Winner of the Rhone-Poulenc Science Book Prize. Harper Perennial, $12. For a review see *Nature* **352**, 676 (1991).

■ *German National Socialism and the Quest for Nuclear Power* by Mark Walker. Cambridge University Press, £13.95. See *Nature* **343**, 421 (1990).