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*R. N. Singh is in the Department of Applied Physics, Institute of Technology, Banaras Hindu University, Varanasi 221 005, India.*



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### Science and society

Ever since men began to live in organised society, in which the law of the jungle was replaced by tradition and custom, there has been speculation as to the past and the future of humanity. There have been those who placed the golden age in the dim past and looked upon the successive stages of human history as years of decay and decline; others have visualised changes in society as cyclic in character; but the idea of progress which has dominated recent social thought is a child of the later eighteenth century, and it was the hope of the unlimited progress of humanity, which illumined the age of Reason in the later eighteenth century. Condorcet spoke of a 'science of man', but it was left to others like Comte and Spencer to work out in detail a science of society, which has come to be known as Sociology, whose 'laws' gave the earlier dreams of progress a body and a direction. Under the influence of the great changes of the Industrial Revolution, these early students of sociology conceived of humanity as moving towards a state of things in which industrialism would be the dominant note, and peace among mankind and goodwill towards all would prevail.

This progress was not supposed to prevail among all sections of humanity, nor was it continuous; many believed with Leslie Stephen that 'Progress is the rare exception; races may remain in the lowest barbarism or their development be arrested at some more advanced stage; actual decay may alternate with progress, and even true progress implies some admixture of decay'. The early years of the twentieth century seemed to deepen the note of interrogation, and the check to the industrial progress of some of the European countries, the rise of Japan, and the uneasy stirrings in their age-long sleep of other Eastern nations roused the apprehensions of Europe. Accordingly more than a quarter of a century ago, Mr Balfour examined the possibilities of decadence among the advanced nations of Europe and the chances of advance into the vanguard of progress by Oriental peoples, who were till then believed to be static. Mr Balfour ruled out the latter possibility, holding that 'progress is with the West; with communities of the European type'. He was of opinion that the progressive character of the nations of the West would be supported and reinforced by the social force that had come into being, 'new in magnitude if not in kind, viz. the modern alliance between pure science and industry'. We have been told how fruitful that alliance has been by Mr Keynes in his striking description of the 'extraordinary episode in the economic progress of man constituted by the age which came to an end in August 1914'.

Science had no doubt done wonders for the economic progress of men, but the same date that closed the epoch of economic munificence also opened a devastating episode in the history of man,

in which science armed man with weapons of terrific capacity for destruction. The War in which thousands of millions of capital and millions of human lives were destroyed was followed by a short period of seeming prosperity and settlement. Then came the great Depression, which revealed another aspect of science in relation to society. Mankind has been living since 1929 in the shadow of this great economic catastrophe, lacking employment and food, not because the bounty of nature has been exhausted nor because science has come to a stop in its progressive control of natural forces, but entirely because social organisation has proved itself incapable of adjustment to the new discoveries of science, which, it has been proclaimed on all sides, has placed abundance beyond dreams for the first time within the reach of mankind. Man has stood helpless, hungry and cold, before the plenty that science has produced for him. Coffee has been thrown into the sea, wheat has been burnt in furnaces, and pigs have been slaughtered by the million, and mankind is starving. . . .

It is clear that scientific discoveries have outrun man's mental and moral capacities, and we are yet a long way from the realisation of the dream of Condorcet, of 'the human race freed from all its fetters, withdrawn from the empire of chance, as from that of the enemies of progress and walking with firm and assured steps in the way of truth and virtue and happiness'. For a double problem is set to humanity by the progress of science: smooth articulation of scientific discovery with the complex machinery of social life, and the use for human advancement, and not for human destruction, of the increased control over nature that science has been placing in our hands.