Ludwig von Mises

Human Action (1949)

"The natural sciences have achieved amazing results in the last two or three hundred years, and the practical utilization of these results has succeeded in improving the general standard of living to an unprecedented extent. But, say these critics, the social sciences have utterly failed in the task of rendering social conditions more satisfactory. They have not stamped out misery and starvation, economic crises and unemployment, war and tyranny. They are sterile and have contributed nothing to the promotion of happiness and human welfare.

These grumblers do not realize that the tremendous progress of technological methods of production and the resulting increase in wealth and welfare were feasible only through the pursuit of those liberal policies which were the practical application of the teachings of economics. It was the ideas of the classical economists that removed the checks imposed by age-old laws, customs, and prejudices upon technological improvement and freed the genius of reformers and innovators from the straitjackets of the guilds, government tutelage, and social pressure of various kinds. It was they that reduced the prestige of conquerors and expropriators and demonstrated the social benefits derived from business activity. None of the great modern inventions would have been put to use if the mentality of the precapitalistic era had not been thoroughly demolished by the economists. What is commonly called the "industrial revolution" was an offspring of the ideological revolution brought about by the doctrines of the economists. The economists exploded the old tenets: that it is unfair and unjust to outdo a competitor by producing better and cheaper goods; that it is iniquitous to deviate from the traditional methods of production; that machines are an evil because they bring about unemployment; that it is one of the tasks of civil government to prevent efficient businessmen from getting rich and to protect the less efficient against the competition of the more efficient; that to restrict the freedom of entrepreneurs by government compulsion or by coercion on the part of other social powers is an appropriate means to promote a nation's well-being. British political economy and French Physiocracy were the pacemakers of modern capitalism. It is they that made possible the progress of the applied natural sciences that has heaped benefits upon the masses.

What is wrong with our age is precisely the widespread ignorance of the role which these policies of economic freedom played in the technological evolution of the last two hundred years. People fell prey to the fallacy that the improvement of the methods of production was contemporaneous with the policy of laissez faire only by accident. Deluded by Marxian myths, they consider modern industrialism an outcome of the operation of mysterious "productive forces" that do not depend in any way on ideological factors. Classical economics, they believe, was not a factor in the rise of capitalism, but rather its product, its "ideological superstructure," i.e., a doctrine designed to defend the unfair claims of the capitalistic exploiters. Hence the abolition of capitalism and the substitution of socialist totalitarianism for a market economy and free enterprise would not impair the further progress of technology. It would, on the contrary, promote technological improvement by removing the obstacles which the selfish interests of the capitalists place in its way.

The characteristic feature of this age of destructive wars and social disintegration is the revolt against economics. Thomas Carlyle branded economics a "dismal science," and Karl Marx stigmatized the economists as "the sycophants of the bourgeoisie." Quacks—praising

their patent medicines and short cuts to an earthly paradise—take pleasure in scorning economics as "orthodox" and "reactionary." Demagogues pride themselves on what they call their victories over economics. The "practical" man boasts of his contempt for economics and his ignorance of the teachings of "armchair" economists. The economic policies of the last decades have been the outcome of a mentality that scoffs at any variety of sound economic theory and glorifies the spurious doctrines of its detractors. What is called "orthodox" economics is in most countries barred from the universities and is virtually unknown to the leading statesmen, politicians, and writers. The blame for the unsatisfactory state of economic affairs can certainly not be placed upon a science which both rulers and masses despise and ignore. It must be emphasized that the destiny of modern civilization as developed by the white peoples in the last two hundred years is inseparably linked with the fate of economic science. This civilization was able to spring into existence because the peoples were dominated by ideas which were the application of the teachings of economics to the problems of economic policy. It will and must perish if the nations continue to pursue the course which they entered upon under the spell of doctrines rejecting economic thinking.

It is true that economics is a theoretical science and as such abstains from any judgment of value. It is not its task to tell people what ends they should aim at. It is a science of the means to be applied for the attainment of ends chosen, not, to be sure, a science of the choosing of ends. Ultimate decisions, the valuations and the choosing of ends, are beyond the scope of any science. Science never tells a man how he should act; it merely shows how a man must act if he wants to attain definite ends.

It seems to many people that this is very little indeed and that a science limited to the investigation of the *is* and unable to express a judgment value about the highest and ultimate ends is of no importance for life and action. This too is a mistake. However, the exposure of this mistake is not a task of these introductory remarks. It is one of the ends of the treatise itself."

The Anticapitalistic Mentality (1956)

"The result of this ignorance is that people ascribe all improvements in economic conditions to the progress of the natural sciences and technology. As they see it, there prevails in the course of human history a self-acting tendency toward progressing advancement of the experimental natural sciences and their application to the solution of technological problems. This tendency is irresistible, it is inherent in the destiny of mankind, and its operation takes effect whatever the political and economic organization of society may be. As they see it, the unprecedented technological improvements of the last two hundred years were not caused or furthered by the economic policies of the age. They were not an achievement of classical liberalism, free trade, laissez faire and capitalism. They will therefore go on under any other system of society's economic organization."

The Ultimate Foundation of Economic Science (1962)

"The wealth capitalism has brought to mankind is not an achievement of a mythical force called progress. Neither is it an achievement of the natural sciences and of the application of their teachings for the perfection of technology and therapeutics. No technological and therapeutical improvements can be practically utilized if the material means for its utilization

have not been previously made available by saving and capital accumulation. The reason why not everything about the production and the use of which technology provides information can be made accessible to everybody is the insufficiency of the supply of capital accumulated. What transformed the stagnant conditions of the good old days into the activism of capitalism was not changes in the natural sciences and in technology, but the adoption of the free enterprise principle. The great ideological movement that started with the Renaissance, continued in the Enlightenment, and in the nineteenth century culminated in Liberalism produced both capitalism—the free market economy—and its political corollary or—as the Marxians have to say, its political "superstructure"- representative government and the individuals' civic rights: freedom of conscience, of thought, of speech, and of all other methods of communication. It was in the climate created by this capitalistic system of individualism that all the modern intellectual achievements thrived. Never before had mankind lived under conditions like those of the second part of the nineteenth century, when, in the civilized countries, the most momentous problems of philosophy, religion, and science could be freely discussed without any fear of reprisals on the part of the powers that be. It was an age of productive and salutary dissent.

Modern industrial civilization, the spectacular affluence it has produced, and the unprecedented increase in population figures it has made possible are the fruits of the progressive advancement of the experimental natural sciences. The main factor in improving the lot of mankind is science, i.e., in the positivistic terminology, the natural sciences. In the context of this philosophy society appears as a gigantic factory and all social problems as technological problems to be solved by "social engineering." What, for example, is lacking to the so-called underdeveloped countries is, in the light of this doctrine, the "know-how," sufficient familiarity with scientific technology.

It is hardly possible to misinterpret mankind's history more thoroughly. The fundamental fact that enabled man to elevate his species above the level of the beasts and the horrors of biological competition was the discovery of the principle of the higher productivity of cooperation under a system of the division of labor, that great cosmic principle of becoming. What improved and still improves the fecundity of human efforts is the progressive accumulation of capital goods without which no technological innovation could ever be practically utilized. No technological computation and calculation would be possible in an environment that would not employ a generally used medium of exchange, money. Modern industrialization, the practical employment of the discoveries of the natural sciences, is intellectually conditioned by the operation of a market economy in which prices, in terms of money, for the factors of production are established and thus the opportunity is given to the engineer to contrast the costs and the proceeds to be expected from alternative projects. The quantification of physics and chemistry would be useless for technological planning if there were no economic calculation. What is lacking to the underdeveloped nations is not knowledge, but capital.

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What transformed the world of horse-drawn carriages, sailing ships, and windmills step by step into a world of airplanes and electronics was the laissez-faire principle of Manchesterism. Large savings, continuously in search of the most profitable investment opportunities, are providing the resources needed for rendering the accomplishments of the physicists and chemists utilizable for the improvement of business activities. What is called economic progress is the joint effect of the activities of the three progressive groups—or classes—of the

savers, the scientist-inventors, and the entrepreneurs, operating in a market economy as far as it is not sabotaged by the endeavors of the nonprogressive majority of the routinists and the public policies supported by them.

What begot all those technological and therapeutical achievements that characterize our age was not science, but the social and political system of capitalism. Only in the climate of huge capital accumulation could experimentalism develop from a pastime of geniuses like Archimedes and Leonardo da Vinci into a well-organized systematic pursuit of knowledge. The much decried acquisitiveness of the promoters and speculators was intent upon applying the accomplishments of scientific research to the improvement of the masses' standard of living. In the ideological environment of our age, which, driven by a fanatical hatred of the "bourgeois," is anxious to substitute the "service" principle for the "profit" principle, technological innovation is more and more directed toward the fabrication of efficient instruments of war and destruction.

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The characteristic feature of modern Western civilization is not its scientific achievements and their service for the improvement of people's standard of living and the prolongation of the average length of life. These are merely the effect of the establishment of a social order in which, by the instrumentality of the profit-and-loss system, the most eminent members of society are prompted to serve to the best of their abilities the wellbeing of the masses of less gifted people. What pays under capitalism is satisfying the common man, the customer. The more people you satisfy, the better for you.

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The history of science is the record of the achievements of individuals who worked in isolation and, very often, met with indifference or even open hostility on the part of their contemporaries. You cannot write a history of science "without names." What matters is the individual, not "team work." One cannot "organize" or "institutionalize" the emergence of new ideas. A new idea is precisely an idea that did not occur to those who designed the organizational frame, that defies their plans, and may thwart their intentions. Planning other peoples' actions means to prevent them from planning for themselves, means to deprive them of their essentially human quality, means enslaving them."