

Man The Knowable

Following a better critic, I caption thus the discussion of Alexis Carrel's *Man the Unknown*. This research scientist's literary venture into the field of human progress as a whole has startled the scientific and intellectual world. The obvious criticism is, that a biologist cannot judge humanity; but an unprejudiced reader is forced to admit that Carrel has judged rather well.

Not pedantically, but in scholarly fashion and with literary tastefulness, Carrel presents his view of today's human being. As he sets forth, he "has studied the hidden mechanisms which, in the depth of the tissues and in the immensity of the brain, are the substratum of organic and mental phenomena. . . is indebted to the techniques of modern civilization for the possibility of witnessing such a gigantic spectacle."

His criticism is, no student of modern problems apprehends man as a whole. "The slow progress of the knowledge of the human being as compared with the splendid ascension of physics, astronomy, chemistry and mechanics" he attributes to the narrowness of mortal view and to the freakishness of scientific discovery.

"Modern civilization finds itself in a difficult position because it does not suit us," says Carrel. "It has been erected without any knowledge of our real nature. It was born from the whims of scientific discoveries, from the appetites of men, their illusions, their theories, and their desires."

For example, "although physicians, educators, and hygienists most generously lavish their efforts for the benefit of mankind, they do not attain their goal. For they deal with schemata containing only a part of reality. The same may be said of all those who substitute their desires, their dreams, or their doctrines for the concrete human being. These theorists build up civilizations which, although designed by them for man, fit only an incomplete or monstrous image of man. The systems of government, entirely constructed in the minds of doctrinaires, are valueless. The principles of the French Revolution, the visions of Marx and Lenin, apply only to abstract men. It must be clearly realized that the laws of human relations are still unknown. Sociology and economics are conjectural sciences."

So Carrel attempts, within the confines of one volume, to describe the real human being insofar as scientific knowledge is available. As experiment gnaws its way into the physiologically unknown, Carrel concludes that "all our activities cannot be expressed in chemical terms."

In the chapter, *Mental Activities*, Carrel upsets some traditional views. "Dualism has weighed heavily upon the entire history of our knowledge of man," he states. "Neither the soul nor the body can be investigated separately. We observe merely a complex being, whose activities have been arbitrarily divided into physiological and mental. What is thought, that strange being, which lives in the depths of ourselves without consuming a measurable quantity of chemical energy? Is it related to the known forms of energy? Could it be a constituent of our universe, ignored by the physicists, but infinitely more important than light? Is it produced by the cerebral cells, like insulin by the pancreas and bile by the liver?"

"The existence of telepathic phenomena, as well as other metapsychic phenomena, is not accepted by most biologists and physicians. The attitude of these scientists should not be blamed. For these phenomena are exceptional and elusive. They cannot be reproduced at will. Besides, they are hidden in the enormous mass of the superstitions, lies, and illusions accumulated for centuries. It is, nevertheless, a fact that they are a normal, although rare, activity of the human being."

In discussion of the emotions, Carrel has this to say, in

part: "It seems that the violence of the emotional moods diminishes when wealth increases, when education is generalized, when diet becomes more elaborate. At the same time, affective functions are observed to separate from intelligence, and to exaggerate unduly certain of their aspects. The forms of life, of education, or of food brought by modern civilization perhaps tend to give us the qualities of cattle, or to develop our emotional impulses inharmoniously."

"Envy, hate, fear, when these sentiments are habitual, are capable of starting organic changes and genuine diseases. The instability of modern life, the ceaseless agitation, and the lack of security create states of consciousness which bring about nervous and organic disorders. The diseases of the mind are a serious menace. They are more dangerous than tuberculosis, cancer, heart and kidney diseases, and even typhus, plague and cholera."

Pessimism stands forth in one bold paragraph: "The distribution of mental activities varies greatly in the different social groups. Most ci-

vilized men manifest only an elementary form of consciousness. They produce, they consume, they satisfy their physiological appetites. They also take pleasure in watching, among great crowds, athletic spectacles, in seeing childish and vulgar moving pictures, in being rapidly transported without effort, or in looking at swiftly moving objects. They have no moral, esthetic or religious sense. They are extremely numerous. They have engendered a vast herd of children whose intelligence remains rudimentary."

He summarizes: "The sciences of inert matter have led us into a country that is not ours. We have blindly accepted all their gifts. The individual has become narrow, specialized, immoral, unintelligent, incapable of managing himself and his own institutions. But at the same time the biological sciences have revealed to us the most precious of all secrets—the laws of the development of our body and of our consciousness. This knowledge has brought to humanity the means of renovating itself. As long as the hereditary qualities of the race remain present, the strength and the audacity of his forefathers can be resurrected in modern man by his own will.

"We will be faced by a single obstacle, our inertia. The economic crisis came before the complete destruction of our ancestral qualities. The spontaneous crash of technological civilization may help to release the impulses required for the destruction of our present habits and the creation of new modes of life. The spirit and the techniques of science are our most precious possessions."

The suggested remaking of man has many phases. Carrel would begin with a key profession the world over—medicine. It could "enlarge its field, embrace the relation of the body with the material and mental world. . . guide the development of all our organic, mental, and sociological activities."

A high council of science would be established. "It should perpetuate itself automatically, in such manner as to radiate ever young ideas. Democratic rulers, as well as dictators, could receive from this course of scientific truth the information that they need in order to develop a civilization really suitable to man."

By their singling out children endowed with high potentialities, and remodelling education, a non-hereditary aristocracy of intellect would be set up. Eugenics would be used to conserve the best qualities of a generation. Social classes would be synonymous with biological classes.

Finally, "Culture without comfort, beauty without luxury, machines without enslaving factories, science without the worship of matter, would restore to man his intelligence, his moral sense, his virility, and lead him to the summit of his development."—E. S.



Men can be measured



Science Discovers Thought
Wave