

Technology and Values

A new book, "Toward a Reasonable Society" by C. E. Ayres (Austin, University of Texas Press), is recommended reading for all engineers interested in the industrial world and particularly for those in educational pursuits who may sometimes engage in discussions of values with colleagues of lesser technological orientation or sophistication. This work was rather shortly dismissed in one review magazine as just another optimistic book, but it is much more than that. Most of us are familiar with differences in values, particularly moral ones, among peoples of differing cultural heritages, and the author of this book makes abundantly clear that such differences are to be expected. He is even more concerned, however, with the universal values that have developed with our developing society.

We have been looking in all the wrong places for values. We have been looking at the ceremonial side of life in which the magical or mystical propensities of the human race have been dominant, that side in which the priestly caste and its authoritarian descendants of many sorts have dictated what is good and what is bad. It is natural that such a history should result in confused standards and particularly in standards which differ from one culture to another. It is the thesis of this book that the right place to hunt for values is in science and technology.

The author develops this thesis by beginning with tools. A good tool and the productive use of it is recognized in any culture. It is the effective use of this good tool which brings good crops; it is not incantation before some tribal deity. Unfortunately, the latter, erroneous idea has often prevailed, with consequent confusion among various values because one group of people may have developed through chance one approach to its tribal deity and another may have developed quite the opposite.

Mankind's advance through tools and the use of symbols and words has led to science and technology. Such values as freedom, equality, security, abundance, and excellence have arisen in consequence, and their meanings are essentially the same for all

peoples. The concept of freedom as desirable in itself had no place in medieval society; it arose among the townspeople escaping feudal domination along with their primitive technologies which supported them. Slavery was ended by the machine; moreover a vast amount of drudgery has been eliminated from human life by machines and even by "gadgets." Inequality was the essence of feudal society; equality is accounted among the highest values in our society. Science and technology have played a great part in this advance—achievement in these fields was never confined to the well-born. Security against the threat of famine and disease has obviously been enhanced through technology; security against the threat of war is not so certain. It is the author's thesis that the scale of organization in our industrial world demands huge, that is world, organizations in the field of human affairs. These large organizations and their willingness to collect and deal with facts should in time diminish the threat of war. The part played by technology in achieving abundance is so clear that it requires no elaboration. Excellence has hardly been attained today, any more than in the past, and a brief consideration of television or the daily press would cause anyone to question our concept of this value. Yet excellence is rewarded today more than ever before. It is inconceivable that a Schubert should die of poverty in this world; it is unimaginable that a Galileo should have to grovel.

The industrial way of life has many obvious achievements to commend it, and many considerably less obvious matters are also very much to its credit. This book is well worth reading to reaffirm one's faith in industrial society and to strengthen his pride in playing a part in it.

One word of caution should serve to close. This book suffers from the occupational ailment of most economist authors. It is verbose; five to ten words are used when one would do. When one digs through the verbiage, on the other hand, the nugget is there, a circumstance all too rare in the field of economics.

H. B.