

came through health fanaticism (no cooked foods, no drugs, no tap water, and no sex — it debilitates the brain), astrology, and a belief in reincarnation. To be fair, one should not ridicule the beliefs of others, no matter how absurd these beliefs might seem — yet it is hard to take too seriously the criticisms of one who has rejected Adventism for fanaticism and superstition. Nevertheless, Freiwirth has raised some questions that merit consideration. Sometimes Adventist preachers and writers have claimed truth only for Adventists but error for others. Sometimes Adventists have credited Mrs. White with an infallibility she never claimed. And too often the practices of Adventists have not squared with the behavior one has a right to expect from God's remnant people, and have placed in the path stumbling blocks that weaker brothers have fallen over.

The book is not put together with the care one would expect from a scholar. Many claims are made without proper documentation; people and books are alluded to without clear identification; one note is missing; and there is no index. The book has the appearance of a memoir prepared without access to other necessary books or written records. The publishers, a vanity press, must bear some of the responsibility for not insisting on recognized standards of scholarship.

The Not-So-Brave World

LEONARD N. HARE

FUTURE SHOCK

By Alvin Toffler

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Some contemporary futurists foresee a dismal tomorrow in which man will be overwhelmed by the giant institutions he has helped to create. Many look for Big Business, in its greed for larger profits, to push for increasing uniformity and standardization though it cost man his final measure of individual expression. Others anticipate that Big Government, with its insatiable lust for power, will foreclose on the remnants of personal freedom as it confines its subjects within the straightjacket of conformity.

Toffler does not agree. The message of *Future Shock* is that the Super-Industrialized Age we are now entering will be an era of diversity, innovation, and choice such as has never before been experienced. If the number of options open to individuals can be used as an index of freedom, then the people of the Super-Industrialized State will constitute the freest society the planet has ever supported!

The selection of an automobile will serve to illustrate the new freedom. There was a time when a person wishing to purchase a car would buy a Model T Ford. It came in one color — black. Today there are many manufacturers of automobiles. Each

manufacturer offers several basic "lines." Each line is available in several models. Several engine sizes are available for each model, and there are transmission options, power options, choices of body color, interior design selection, and countless more options. The total number of possible combinations soars to 25 million! Man of the Super-Industrial Era must choose not only his car, but his occupation, his friends, his hobbies, and his religion. In each category there has been a proliferation of options comparable to that of the automobile.

So inundated has modern man become with choice, so confused with conflicting value claims, and so bemused with the diversity of life styles available that he is frequently reduced to a state of blithering ineptitude. Indeed, not only the number of choices man is expected to make but the accelerating rate at which decisions must be made is rapidly approaching the upper limits of the adaptive capacity of his body and his mind. Toffler cites signs of breakdown resulting from environmental over-stimulation: the spreading use of drugs; the rise of mysticism; increasing vandalism, un-directed violence, and nihilism; and sick apathy.

It is imperative that strategies for survival be sought out. Toffler believes The Future is not to be avoided by turning back to The Past or by living only in The Present. The Future is to be ushered in — but on our own terms. Several tactics are available to ensure a "soft landing."

1. Coping with The Future can be achieved at the individual level by deliberately reducing the number of inputs that impinge on us at any one time. The concept involves "gradualism" and "half-way houses" for those who have fallen behind, and for those unable to adapt "enclaves of the past."

2. Education will provide the main thrust in preparing man to meet his Future. Toffler argues that our present educational system is a product of the Industrial Age and that our schools are modeled after factories. The raw material (the student) enters the factory (the school), where it is processed by the workers (the teachers). The finished product (the graduate) goes forth to the world to satisfy consumer needs and to help stimulate new markets. The Industrial Age was well served by the school it created, but Toffler argues that the intrusion of the Super-Industrial Age has rendered the schools obsolete. A new organization of education modeled on Super-Industrialism will prepare man for things to come.

3. A third strategy involves deliberate manipulation of the rate of technological change to keep change within the physiological and psychological limits of man.

When the reader reaches this point he might wonder whether the temptation to manipulate human beings rather than the rate of technological change might not prove irresistible to the "World Leaders" or to "Big Brother." It would probably be easier and more effective and would surely plunge us headlong into Huxley's *Brave New World* with its conditioned contentment, engineered behavior, and programmed euphoria — a world where huge hatcheries decant their daily quotas of identical Epsilons (with receding chins) predestined to work opposite other Epsilons (with protruding chins) in some factory at some time in The Future.

Even if the manipulators can successfully resist the temptation to tamper with the psyche rather than the economy, there is certain to be intense pressure from a source Toffler barely mentions, and that is the population. Overpopulation has rightly been

described as a "trap" and a "bomb." We may be approaching the upper limits of the *food production* curve now, although the upper limit of *people production* is nowhere in sight. Shortages are certain to result. Shortages will necessitate controls, and rigid controls will not produce the kind of world Toffler envisions.

One who jumps off the Empire State Building on a foggy day may be exhilarated by his acceleration due to gravity. He may report his progress in glowing terms as he passes the fiftieth floor, and he may speculate on how rapidly he will be moving in ten minutes' time as he hurtles past the twenty-fifth floor. But there below the fog is the ground that will thwart his progress and nullify his speculations.

LETTERS

Harold Clark's reply to "The Whole Truth" (Summer 1971 *SPECTRUM*) gives further support to Donald Hall's suggestion that writers on important and potentially controversial subjects in church journals be given formal and informal criticism of their ideas by qualified persons.

In discussing Hall's second point, dealing with soft-sediment slumping of the Grand Canyon walls, Clark purports to offer evidence from field geology and related activities; but in reality his evidence deals with other disciplines (physics and chemistry) and is faulty. Apparently the astrophysicist, Hall, understands the physical factors involved in sediment compaction better than the field geologist, Clark.

Water removal from soft, newly deposited clays (shales) on the scale of a geological formation is a very slow process because of the fine size of clay particles. Furthermore, the drying and hardening of the newly exposed canyon walls, if it would actually occur, would be confined to a relatively short distance from the exposed surface. On the scale of the Grand Canyon, this effect would be insignificant in modifying the bulk resistance of the surrounding sediment to deformation and flow.

The general supposition that rapidly deposited water-laid sediments harden slowly is well supported by physical and chemical reasoning and geological evidence. For an example of a sediment-like material that hardens quickly, Clark uses an unnatural product, cement, which is produced by heating limestone and shale to about 2700° F. It consists mainly of calcium silicates and aluminates that are unstable in water and hydrate, and therefore cause setting quickly. Clearly, such an example would not occur in a natural, water-laid sediment; nor, to my knowledge, has it ever been found. Unfortunately, this is probably the best example Clark can find to illustrate his thesis.

A writer discussing the geology of the Grand Canyon should consider the structure of the surrounding rocks. Field evidence indicates that these rocks have been up-warped, folded, and faulted. The differential vertical displacement of the Kaibab limestone, which forms the rim of a large part of the canyon, is about 6,500 feet in northern Arizona. The steep Kaibab monocline just north of the canyon accounts for 3,000 feet of this. The folding and faulting indicates that the strata eroded by the