Book Reviews

Melodramatic Questions

Toward Century 21. Technology, Society, and Human Values. C. S. WALLIA, Ed. Basic Books, New York, 1970. xviii + 318 pp. $8.95.

The Children of Frankenstein. A Primer on Modern Technology and Human Values. HERBERT J. MULLER. Indiana University Press, Bloomington, 1970. xvi + 432 pp. $10.

Here we have two more efforts, each excellent in its own way, to chart the various directions in which contemporary technology is moving and to assess the effects upon man's prospects for a life worth living.

Written with expertise for general readers by 30 specialists, the Wallia book is particularly stimulating. I find that the writers tend to fall into two groups (with differences within each group), and therein lies a story which I would like to explore a little.

On the one hand, we have men who are investigating scientific frontiers that have profound technological potentialities, in the usual sense of the word "technological." These scientists report on their own and other undertakings. David Krech, for example, shows how current brain research is increasing the possibilities for influencing the human mind. Joshua Lederberg carefully analyzes the question of whether, in what sense, and to what extent the experimental replication of DNA opens up prospects for altering the genetic structure of individuals and groups, and of creating life itself. John McCarthy explores the efforts now under way to push artificial intelligence beyond its present already impressive attainments.

These writers are notable for their sensitivity to the dangers and opportunities implicit in their activities and those of their colleagues. They ask: Who shall control the quality and direction of the human mind, for what end? What social institutions shall be modified, created, or abolished? What individuals and groups shall have their genes altered, and why? Who shall be permitted to be born, to live, to die? (Yes, it is conceivable that one may need permission to die.) Melodramatic as these questions may sound, they are already in fact with us to a degree, and will become even more pervasive in a short time. These writers ask them with a sense of urgency.

On the other hand is a group of specialists whose investigations are technological in a less orthodox sense. They include, among others, Christian Bay, writing on law and justice, Alan Watts, on religion, and James F. T. Bugental, on inner human experience. Some of these men and others like them are investigating new dimensions of consciousness, new modes of personal encounter, new religious practices, and are setting up new undertakings such as the experimental colleges and the Esalen Institute. Are such activities technological? Well, they certainly require technique. And they have their own logic. They are technologies that produce psychic rather than material wealth.

Now it seems to me that this particular group of humanistic technologists, writing in this particular book, are with some exceptions less inclined to moral skepticism and questioning about the implications of their own activities than are the first group of scientists. In fact, there is at least in some cases an unspoken assumption that the technology of inner experience, affective behavior, and interpersonal relations has a built-in moral rectitude that is lacking in the mindless, amoral Frankenstein of the natural scientists. And yet one may surely raise questions about the risks of traumatic psychic exposure in encounter groups, of reality disorientation in the exploration of inner experience, and of unconscious damage to personality in the name of love, sincerity, and relevance.

Consider the case of Christian Bay. He argues that present social institutions such as the law, economic arrangements, and even the language we speak are largely controlled by a self-serving "gerontocracy" of vested interests. Thus the law, being by nature institutionalized, is largely corrupt. But there is emerging a new concept of citizenship defined not by obedience to law but by commitment to justice:

> "Citizen" should refer exclusively to politically alive and responsible participants in political contests and controversies; politically alive are those and only those who care deeply about justice for the oppressed, the defenseless, and the yet unborn; politically responsible are those and only those whose concern for justice outweighs any other public allegiance, and thus, for example, consider themselves not only free to but obligated, in Socratic fashion, to violate the law or any other social institution if this should be necessary in order to promote justice, or forestall grievous injustice.

Those who accept obedience to law rather than justice as the first commandment, Bay continues, should be regarded as subjects rather than citizens. The older concept and terminology, assiduously promoted by the educational system, are, one assumes, an example of gerontocratic linguistic tyranny.

Now besides misrepresenting Socrates, who, in refusing his friends' offer to help him escape from prison, made it clear that he was dying just as much to uphold the principle of law as to uphold his allegiance to the principle of dissent that led to his imprisonment in the first place, the foregoing view errs in its separating of law and justice. Law, ideally, at least in democratic societies, is a way of codifying whatever generations of human experience have taught man to recognize as just rather than unjust behavior. As a human institution law is imperfect and sometimes has to be challenged by dissent, including in extremity illegal dissent and even force. But such extremities only become an occasion for modification of the law so that it will better codify the consensual judgment as to what is just.

Bay's own attitude toward intervention against the law by force ("violence") is significant. He is against it. But not on the grounds that violence might be accompanied by some injus-

tice, such as, say, depriving some innocent person of his life. His opposition is strictly pragmatic, and is based only on the assumption that violence won't work in view of the superior physical power of the "gerontocracy." Thus Bay unwittingly betrays his own allegiance to justice. He also fails to notice that a revolutionary group, after throwing off the shackle of an unjust law, immediately establishes its own rule of law, embodying its own concept of justice.

Bay's theory is morally deficient. It fails to realize that all moral questions arise out of conflict of interest. Thus it fails to provide any theory of conflict-resolution. The resolution of conflict in such a way that justice is done all parties is the *sine qua non* of the idea of justice. Law properly conceived establishes due process for such resolution. Thus it works hand in hand with justice, even though, guided by a sense of justice, one must sometimes, perhaps often, challenge misconceived laws. Just systems of law even provide, must provide, machinery for their own challenging. Unjust systems without such provision must be met with force, and properly so, on grounds of justice, not mere expediency.

However, it must be said that some of the natural scientists do give their more humanistic colleagues cause for legitimate concern. Lederberg, for example, writes:

> The view that living organisms must have rules of their own, and that we cannot apply the simple laws of chemistry and physics or mathematics, is one that has been stubbornly held by a certain fraction of biologists but one that has been constantly retreating against the onslaught of scientific advance. . . . And that stubbornness, that unwillingness to reduce living systems to a materialistic framework, more than anything else accounts for the delay in the development of a chemistry of life.

It is my impression that this kind of reductiveness no longer bears critical examination. No sophisticated worker wants a conception of life not thoroughly grounded in the chemical-physical base, and none wants a conception of the noosphere not thoroughly grounded in the biosphere. But at the same time there is recognition by those who have done much thinking about it that every biological and psychic phenomenon must be studied at its own level of functioning and in its own contextual field. Such phenomena indeed *do* have their own laws, not reducible to chemical-physical laws, although they must be consistent with the latter. Yet the atomists, mechanists, and Skinnerians are still around, perhaps even predominate, and they are the ones who give the more humanistically inclined a feeling that, however sensitively humane a scientist may be personally and however productive he may be professionally, he may still adhere to an outmoded Newtonian-based ontology which is prejudicial to the recognition of uniquely human qualities. In any case, against the mechanistic technology spawned by natural science arises a counter-technology of personal relationship, psychic expansion, and esthetic sensitivity.

Herbert Muller, in his book, does not join this battle. He is well aware of it, and writes of it at length. His basic stance is melioristic, and he is inclined to believe that each side needs the other. His is a book of refreshing balance, and this is both its strength and weakness. This quality prevents him from offering any sharply provocative theses or any well-defined schemata that, even if wrongheaded, might challenge us to reorganize our thinking. The result is a certain blandness, even though one admires the soundness of his judgment and the humanity of his instincts. Looking at hunger, pollution, urban overload, and racism, he repeatedly avows pessimism. Yet some of the positive potentialities of the new technology and his own sturdy humanism prevent him from abandoning hope. If brain research opens up ways of manipulating the human mind, it also creates the possibility of greater human intelligence, shared by all. Information storage and retrieval technology threatens to destroy privacy, but offers the possibility of the consumer's rather than the producer's controlling what he receives, which in turn implies an individualizing of programming that might ultimately make dinosaurs of the mass media. In the end, life is going to be pretty much what we make it. Thus human nature is crucial. Up to now there has been little reason to be optimistic about human nature. But to some extent man makes himself and can remake himself, so who can tell . . . ? Somehow through his pessimism, Muller's old-fashioned faith in at least the possibility of human reasonableness shines through. If he is a pessimist, he is a genial pessimist.

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A Participant in Great Events

My Several Lives. Memoirs of a Social Inventor. JAMES B. CONANT. Harper and Row, New York, 1970. xvi + 702 pp. + plates. $12.50.

Martin Duberman has written of the wisdom that lies embedded in the "uncompleted past." If ever there was a rich source for a part of that uncompleted past—a part whose influence is still significant in contemporary affairs and yet which is just distant enough that it lies undiscovered by most of those who are now assuming dominant positions in our society—it is this autobiography, an autobiography as intense and complex as the life of its writer. The book is, indeed, three or more autobiographies in one, interwoven to correspond to the several intermeshed lives its author has led. It is not an easy book to read or to comprehend. But it is a most rewarding one, and its value as a contemporary archive of American history, spanning as it does the most dynamic and one of the most critical eras of transformation, must grow with time.

If the men and women who have worked closely over the last half-century with James Bryant Conant were, by some magic, gathered together, the company would be diverse indeed. Natural scientists, college presidents, educators concerned with American secondary schools, government officials, businessmen, diplomats, all would be included, with many another profession and focus of interest. Yet the members of that company would surely share one characteristic: admiration of two qualities in the man for and with whom they worked. The first is the rare capacity for combining thought with vigorous action which has characterized all his undertakings. The second is subtler and harder to define, but even more important. It is the remarkable capacity, displayed on numerous significant occasions, to "see around the corner" of events: to reach conclusions and to take critical decisions which, though they often were puzzling to his colleagues, in the ultimate event proved right.

It is these qualities in the author that unite the several lives. It is the striking view it gives of many aspects of American life in which he has exercised them that provides cohesiveness in a book which appears superficially diverse, and the thread of whose discourse, following the chronology of an amazingly full life, at times seems to wander tortuously and often to double back upon itself.