

September 1975

Aquinas and Education for a Just Technological Society

John O. Geiger
University of Dayton

Follow this and additional works at: <https://ecommons.udayton.edu/udr>



Part of the [Catholic Studies Commons](#), and the [Philosophy Commons](#)

Recommended Citation

Geiger, John O. (1975) "Aquinas and Education for a Just Technological Society," *University of Dayton Review*. Vol. 12: No. 1, Article 8.

Available at: <https://ecommons.udayton.edu/udr/vol12/iss1/8>

This Article is brought to you for free and open access by eCommons. It has been accepted for inclusion in University of Dayton Review by an authorized editor of eCommons. For more information, please contact mschlangen1@udayton.edu, ecommons@udayton.edu.

Aquinas and Education for a Just Technological Society*

John O. Geiger

There remains in the heart a yearning to return home to the medieval synthesis. Yet whole-hearted acceptance would be inauthentic. At the same time however, it is possible to gain enlightenment from Aquinas. Merleau-Ponty "assumes that we can clarify the choices of others through our own and ours through theirs, that we adjust one by the other and finally arrive at the truth."¹ This assumption seems valid.

It is an opportune time to examine "the choices" of Aquinas. Not only because it is the seven hundredth anniversary of his death, but also because of the time that has elapsed since many people in this country and Europe began to seriously question the relevance of Thomism for the complexities of the mid-twentieth century.

This recent challenge was similar in many respects to that of Renaissance man to scholasticism. He too questioned the relevance of the abstract concepts and precepts for his own situation. New worlds discovered by means of navigation and the telescope, new responses needed because of crowded city life created by commerce, new awareness because of the rebirth of humanistic consciousness, new laws discovered by a new science, new education to accommodate these new conditions; he concluded he was a new man needing new questions and new answers. And yet man has come to realize the continuities of history. We have come to see the debt the "new man" owed his scholastic predecessor to the point that for historical purposes the time at which the Renaissance began is hopelessly blurred.²

As historians have highlighted the debt of Renaissance to medieval man, so too an exploration of Aquinas may indicate the value of his insights and our debt to him. Perhaps we are not so different. But even if we reject his insights, still says T. S. Eliot:

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.³

The problem is where to begin. To separate for analysis the words education, technology and democracy is necessarily a distortion, given the interface of these factors in contemporary society. But since technology appears the most potent force in the environment, perhaps it is the most appropriate place to begin. And yet it is an ironic place to start since viewing technology from a scholastic position is to

*A version of this appeared in *Educational Theory* (Summer, 1974)

analyze something that arose from an apparent repudiation of that position. Francis Bacon thought science and the exaltation of technique as productive of a social utopia. David Hume challenged the concepts of stability and necessity as being knowable through reason. Subsequently, Charles Darwin seemed to reaffirm Heraclitus' concept of change and flux and the conviction that the best was possible only through constant adaptation. Science, technique, and change became watchwords.

Prosperity accompanied industrialism and so science and technology became equated with progress. Eventually, technology came to define civilization. To be undeveloped was to be technological; to lack technology was to be backward, to lack maturity, to be underdeveloped.

John Dewey taught that industrialism demanded a "new intellectual fibre" which could be developed by applying techniques of science to social problems. Today, B. F. Skinner thinks that technology can solve the basic problems facing our society. Using the principles of a technology of human behavior, he believes the society can and therefore should be remade by rearranging the environment to reinforce behaviors that will contribute to the survival of the culture. He holds that if there are areas of our life to which we have not applied technology, in personal relations as well as in political and social-economic areas, the answer is to do so. Though we will not be free since we are controlled, we will feel free since all adverse stimuli will be removed.⁴

Popular authors like Alvin Toffler tell us of the marvels possible with technology. Besides all the comforts and conveniences, personal freedom (or the feeling of freedom) in never before imagined amounts will belong to the people who can adjust themselves to technology.⁵ The people of the United States seem to agree. In a recent survey, seventy percent indicated they thought science and technology have changed life for the better; a majority thought there was no need for further control over the direction of technological development.⁶

Similarly, there are the prophets of the young who tell us the era of technology has produced a new generation. Idealistic, honest, authentic, these young people are pictured as the archetypes of a new reformation of love and truth. Process not product oriented, raised in the prosperity of technology they are dedicated to exploring the deepest elements of human relationships. They have been freed to attain levels of self-actualization because they need not be trapped, as earlier generations were, in the accumulation of possessions to insure their own safety and security.⁷

The ramifications for education of these visions and others like them have been manifold. Early in this century, educators advocated reorganizing education to develop individuals able to "man" the machines of the industrial society. "Hard-headed" educators talked about the uselessness of the traditional curriculum in the face of industrialism. It was a matter of economics. And the traditional courses were not seen as contributing to the needs of that industrial economy. "Now, the great human corporation cannot be run at a loss. It is necessary for the average man, not

only to be self-supporting, but to pay back into the human treasury the first cost of his rearing."⁸ But if he was to pay back that cost, it was not to be accomplished with the traditional arts and sciences curriculum. Rather industrial education was needed to prepare people for the machines of technology, business courses were needed to prepare men for the huge corporations, language was needed only so men could engage in trade throughout the world. In short, an industrial age demanded an industrial curriculum.

The technologists of our own age speak the same language although in much more sophisticated terms. The new technology has revealed a more efficient way of educating. The world is perhaps on the verge of destruction because of the mistaken notion that man is autonomous. Teaching machines and teachers trained in behavioral technology are essential elements in the eventual reformation of the environment. Toffler tells us that not only the methodology but the aim of education needs to be transformed. Look to the future primarily rather than to the past. The prime objective of education must be to teach people to cope with the inevitable speed and change of technology.⁹

Amidst all these prophets of technology, there are dissenting voices. Rather than equating technology with civilization, they suggest that the more technological we become, the closer we may be moving to spiritual destruction or actual extinction of man. Some say the leadership of the most technological country of the world appropriately was turned over to a technologist. He explained behavior in terms of techniques rather than principles; the technocrat needed to deny his wrong-doing rather than to authenticate his honor. And so they explain the conduct of the Vietnam war:

The increased mechanization of the brutal Vietnam war and the substitution of massive airpower for American ground troops managed to contain a growing antiwar movement. The lesson of the Cambodian invasion was rapidly learned and escalations were handled with more effective reliance on the deceptions (for example, the "protective reaction" air strikes) which where to become the stock in trade of this administration . . . The opposition to the war was fiercely countered by invoking the basest emotions of the populace—patriotism, jingoism about the American status as the "first" power in the world, animosity toward the "effete, intellectual snobs," . . .¹⁰

Many continue to wonder about this technical solution, in the same manner that they worry about the erasure of tapes as a technique of solving another major dilemma that faced the conscience of the American people.

Similarly, Jacques Servan-Schreiber seems to be answering B. F. Skinner when he warns that the fruits of technology may not be as sanguine as the American people think. He warns that the economy has its own needs which may be quite different than the needs of the people. Rather, a technological economy builds its own

imperatives: imperatives that may ignore human well-being and privacy in order to "manufacture a humanity in its own image. The producer needs a consumer as his creature." And Jacques Ellul answers Alvin Toffler when he warns that a world so dominated by technology will cause choice to disappear, and develop man into a "recording device," truly not autonomous but only reactive.¹¹ Political scientist, Mulford Sibley, has enumerated eight crises caused by technology:

These crises erupt in terms of (1) the rapidity of technological and social change and their possibly deleterious effects on human life; (2) the social and economic costs of population growth; (3) the depopulation of the countryside and the removal of most men from direct and constant access to Nature; (4) the development of megalopolitan areas of often rootless and alienated human beings; (5) the rise of what some have called the "mass" society, which represents a loss of community and an enhanced apathy; (6) the rapid depletion of natural resources, which will become particularly acute by the twenty-first century; (7) the stimulation of human desires by the kind of culture usually associated with industrialism; and (8) failure to solve the problem of distribution within industrial societies and particularly as between industrialized and non-industrialized nations.¹²

Furthermore, there are those who answer the prophets of youth brought up in the technological age. They question their apparent lack of commitment, their view of society and long-term relationships as traps. They say "polymorphic impulsivity" rather than a new reformation is what we are witnessing. A lack of appreciation for the past, violent, crude, disrespectful of authority characterize this new generation born of technology. The young are the "enemy within."¹³

Thus, a new voice has arisen on the scene which sounds more like Jonathan Swift than Francis Bacon. Technology is not a panacea. It is more akin to Dante's "dark wood" from which we must be guided by a higher light. Of course, this voice also has something to say about education. Marcus Raskin warns that schools have become "channeling colonies" for the corporations, military and government created by the technological age.¹⁴ Joyless, lifeless institutions, run for efficiency rather than human development, some say they should be destroyed, while others say they should be reformed. To prevent them from becoming arms of the technological society make them into joyfull, carefree institutions where people can explore whatever interests them whenever they want. Develop creativity, spontaneity, enthusiasm, instinct, expressiveness—all the characteristics that technological America seems so suspicious of.¹⁵

How do we make sense out of these diverse positions? If we are to gain insight from the past—in this context, from Aquinas—we need to phrase our questions in perennial ways. When we do these two central questions arise:

1. What is the nature of the person and the interrelationship of the society and the

person? How is the Aquinas' response to this question relevant to the problems we face in the technological age?

2. What is the relationship of educating agencies, particularly the school, to the person? How is the Aquinas' response to this question relevant to the problems we face for educating in the technological age?

When Aquinas spoke of "nature," he was referring to a conceptualization that indicated the central or unique characteristic(s) of a thing. Aquinas' image of man's nature was especially in teleological terms. This means two things. First, it means that Aquinas was concerned primarily with what man could become. This orientation is different from a purely anthropological view of man which stresses what man has been. This concept means that the findings of such men as Conrad Lorenz and others who find man's origin in his aggression or elsewhere do not render Aquinas' conceptualization moot. As John Dewey said, philosophy is essentially future oriented; man need not accept the idea that his end is in his beginning. Secondly, the fact that Aquinas looked at man in teleological terms refers to the idea that we cannot give an adequate explanation of man without referring to purposes or ends. Aquinas held (in addition to an end knowable theologically) that there was a natural end for man which he can discover through reflection.¹⁶

The central element in this explanation of man's nature is that the person is a substance, a being not merely a part of another. Aquinas pointed this out when speaking of man in society. He said we cannot say that man is to society like the hand is to the human body. Rather, he said we must view it as the society which flows from the nature of man even though life in society demands some surrender of egoism and concern for the common good. Society is a product of men not the other way around. Therefore, this subsistent being is the essential being whose happiness and goodness must be considered. Thus, the end of the social, economic and political processes was the same: the happiness of the person within the society.¹⁷

Aquinas thought the society or state arises out of the needs of persons. The good society will reflect the needs of man which he has because of his nature. In this sense the state was to be a macrocosm of man—embodying and eliciting the highest principles of personhood. The state should be so structured that each person can attain his end without disrupting the end of the society. There are limits therefore on the individual and there are limits upon the society.¹⁸

Immediately, therefore, we can see that Aquinas rejected a totalitarian state or anarchy. But in terms of this paper, we can see that he would reject the idea that happiness or the end of the human person can be found in mere adjustment or change as some of the advocates of the technological society would have us believe. "Copeability" in the sense of mere adjustment to society would be destructive of the person. Some stability is needed to guide changes for the development of the person.

He would have us find stability by asking what are the essential priorities for our society if the person is to reach his characteristic end.¹⁹

But what is this characteristic end for man? Aquinas rejected the idea that it could be the accumulation of wealth. In fact, he went so far as to argue that if the rich do not give away the wealth which is not necessary for their proper functioning, the destitute can take what is needed without committing a moral offense.²⁰ Applying this dictum to societies as a whole, it seems that he would reject the concept so popular in technological societies that the solution to poverty is the creation of more material goods blindly hoping that those who are in need will reap the benefits. Rather, this passage alludes to the necessity of an actual redistribution of material goods.²¹

Aquinas also rejected the concept that the end of man was to be found in the satisfaction of all desires, as the mass media in their attempt to promote the consumption of the products of technology tell us. Rather, he drew a distinction between those things which were *desirable* in some objective sense since flowing from the real needs of men and those which are simply *desired*. He rejected the idea that the end of man can be found in the satisfaction of sense pleasure for this was satisfying only part of the total person.²²

He would disagree too with those who explicitly or implicitly say that technology can bring happiness. The power of technology, he would say, cannot be man's supreme good since it is subject to abuse and fulfillment of evil ends.²³ And to those who would say technology is necessarily good since it frees man from hours of labor, he would argue that technology accentuates a most fundamental problem for man and society: what is the person to do with his time, with his life.²⁴ There is even greater demand in a technological society, with its built-in momentum toward increased inventions and increased leisure, to discover and create meaning for human life.

Man as producer of wealth, man as satisfying all desires, man as technologist, Aquinas would say, must be subjected to man's natural, characteristic telos: man as reasonable. Any other view too easily results in excess or ignoring natural limits.²⁵ Citizens and leaders must make reasonable decisions as to the naturally human and adjust the technology and the economy accordingly. Technology and economy must become branches of moral philosophy, branches of philosophy of man.

Man as a being capable of reason and having his natural telos in reason was only part of Aquinas' definition of person. Being more subject to nature, ancient and medieval man was more readily aware of man's dependence on his natural environment. Therefore, while Aquinas delimited man's uniqueness as his ability to develop reason, he was also conscious of unity within man of animal, vegetable and inorganic.²⁶ This unity demanded that while persons and society recognized their potential to transcend nature, they also recognize their dependence on it. Man needs to leave nature behind but not to the extent that he ignores the limits that his very

nature imposes on him. This concept of man that includes nature and reason has implications for the technological society that is becoming aware of the crisis created by conspicuous consumption and conspicuous waste.

In the sense of emphasizing man's dependence on nature and the need for limiting human desires, Aquinas sounds like Skinner warning us of future disaster. But in asserting that the society must be a reflection of the person, he offers us the possibility of not only securing the survival or existence of the culture (Skinner's end) but also survival that will be of a quality or essence which will be conducive to the development of the person's highest potential. Aquinas can be of benefit because he is able to direct our attention to the question of the purpose of the person. Skinner's purely scientific, technological perspective by necessity ignores this element essential to an understanding of man.

Aquinas' disagreement with Skinner's concept of man extends also to his understanding of man as free. The person is capable of choice. One cannot assume, as Skinner and others would have us believe, that the environment entirely determines man. Precisely because man is capable of reasoning, of making judgments, he is capable of freedom. Man is part inorganic and therefore limited, but all his actions are not therefore determined merely by his environment as a stone that falls. Man is animal and therefore limited, but all his actions are not therefore determined by his environment conditioning him. Persons have the potential to make judgments in particular cases not from instinct but by an act of intellectual comparison. Because man can know alternatives that are opposed but not predetermining, he knows his own freedom. Not ignoring causality as Skinner accuses him of doing, Aquinas asserts that free acts are done for a purpose in accordance with judgments of reason. This is not to say that every act a human undertakes is free, but it is to say that *the experience of freedom is necessary for an understanding of the nature of man*. Certainly, retrospectively and scientifically, it might appear that the person could not have done otherwise, but it is not a scientifically testable fact.²⁷

Aquinas would warn us that the purely scientific-technological vision of man by necessity ignores reason, judgment, purpose and freedom in favor of generalizations and statistics. Is it any wonder that anomie and the feeling of invisibility characterize mass, technological society? Is it surprising, Aquinas might say, that men feel a loss of purpose? Is not mindlessness promoted precisely because of the inability of the scientific-technological mind to seriously consider questions of purpose and the reality of reflection and contemplation?

On the other hand, he might say, why be surprised that people are looking for wisdom in superstitious places, when society rewards technique and competence rather than wisdom. Is it any wonder that excesses of freedom which ignore natural limits are engaged in by those who wish to assert their humanity? Is it any wonder that both young and old alike rebel against the constraints of the technological society that attempts to channel them into adapting? Is it surprising that those who rebel are so often irrational when the technological society ignores reason as a force

in the world? Is it any wonder that those who rebel so frequently ignore the limits of nature when technology has ignored them? Against anomie and invisibility, the human soul rebels in favor of purpose and freedom.

In summarizing Aquinas' response to the dilemmas of our technological society then, we find him upholding a golden mean, not agreeing with those who would merely have men adjust to the scientific-technological vision, nor agreeing with those who would have men blindly rebel against their natural limits and essential nature by attempting to satisfy any and every impulse. Rather he would assert the necessity of the technological society reflecting the nature of personhood in its characteristic limits, freedom and reason; that is, in its telos:

Insofar as men judge differently about the goal of human life, so will they judge differently about the character of their social life together. Those who make pleasure or power or prestige their goal, will think that the best of societies [is the one] in which they can live pleasurably or amass riches or honors or control over others. But those who put a premium upon virtue as the purpose of this earthly life will think that the best of societies [is the one] in which men can best live together in peace and goodness.²⁸

Since educators are concerned necessarily with the purpose of their students, the ramifications that flow from this consideration for the education of the person in the technological society are almost so obvious that they scarcely need be stated. But initially Aquinas would probably issue a stern warning regarding the propensity so common in the specialized technological society to equate education with schooling.

When Aquinas spoke of the teacher he used the word *instructio* not *educatio*. He used the word education to refer not exclusively to intellectual growth but to the person's total, specifically human development.²⁹ Medieval man, much more than modern man, had a tendency to recognize schooling as part of a total educational process. The purpose of the medieval universities was to promote and prepare for education. Quite literally, their purpose was to develop students capable of further educating themselves and others; "all the students in a university were technically apprentices learning to teach and . . . the universities themselves were strictly speaking, nothing but normal schools." Our word "commencement" stems from the medieval concept of the graduate beginning to teach. And the defense of the doctoral dissertation stems from the medieval notion of the full-fledged teacher, instructing on his own authority for the first time.³⁰

Thus Aquinas might agree with Ivan Illich's criticism of the technological society's belief in schools as being the only educators. He would agree with Charles Silberman's insistence that all the members of society have an educational function to perform which the schools should prepare them for.³¹ He would agree that everyone within the society has the responsibility to reflect and contemplate upon his pur-

poses and the purposes of the society, and to communicate these reflections in their actions.

He alluded to this idea when he indicated that the active life must be an extension and fulfillment of contemplation.³² As does Silberman, he thought that social and political leaders had a special responsibility to base their decisions on contemplation so that they would be able to teach the society the virtues of prudence and justice. Their decisions would be prudent in that they would *direct* citizens to acknowledge the well-being of the person in the society and the limitations of living in a society. Their actions would be just in that they would be reasonably *executed* in such a way that persons would have their needs as persons recognized.³³

Subjecting political decision to this guideline the question would not be to what extent will a given technique enhance the status or power of a politician, the office he holds or even the state he governs vis à vis other states. Rather, the question would be to what extent will a decision enhance the well-being of the person in the society and to what extent will the decision develop an awareness of prudence and justice among the citizenry? In this sense the end of the politician is not beyond the end of his own people. And lest this sound too idealistic in this age of power politics, Senator J. W. Fulbright seemed to be highlighting this point when he criticized Secretary of State Kissinger's statement that the country needs an end beyond itself. Fulbright called for prudence rather than the balancing of power, and concluded by saying "there is meaning enough in being ourselves, a meaning by no means yet fulfilled," and there is a special responsibility for political and social leaders to help us discern what this meaning is.³⁴

Though recognizing the responsibilities of others, especially political and social leaders, in the overall educational process, Aquinas nevertheless saw a significant part for the teacher to play. His vision would seem to have relevance for the teacher in the technological age.

He held that the teacher's responsibility was to guide the student to knowledge of things he did not know in the same way that a person would direct himself through the process of discovery. About this process, he said:

Now, in discovery, the procedure of anyone who arrives at the knowledge of something unknown is to apply general self-evident principles to certain definite matters, from there to proceed to particular conclusions and from there to other. Consequently, one person is said to teach another in as much as, by signs, he manifests to the other the reasoning process which he himself goes through by his own natural reason.³⁵

Therefore, for Aquinas the teacher's job is to go through the reasoning process with the student precisely in order to manifest to the student his own learning and the relevance of principles to specific conclusions. The student's natural reason acting on the material presented can realize what the teacher knows when he knows why the teacher knows what he knows. So Aquinas would say it is not sufficient to pre-

sent conclusions and facts, but rather it is necessary to present the subject matter in such a way that the student understands the intelligible order, the principles which have been the guide through the learning process.³⁶

Now undoubtedly, this process would have to be modified by what we currently know about the development of cognition at different ages. But I think we should recognize the value of this conceptualization for educating in the technological age. Often we are told that this is an age of complexity. But the question remains what is it that makes the age so complex. Ultimately, it is not merely the increase in the number of variables or possibilities as Alvin Toffler and others would have us believe. Rather it is the increase in the number of variables without basic principles through which they can be arranged. "Change becomes manageable if there are principles that do not change—or change very slowly compared to the flux of events to which they are relevant. Education that facilitates adjustment to change is a search for general truths about nature, man, and society."³⁷ Thus, Aquinas would argue with those who would say the end of education is adjustment to technology. Rather the end of education is the person making decisions regarding the changes of technology based on principles.

Similarly, Aquinas would reject the notion of some modern educators who would have school become a bastion against technology by making no requirements other than that the desires of the students be satisfied. Because a thing is desired does not make it desirable. This notion is frequently overlooked by those who would tell teachers their only responsibility is to respond to what the students say interest them. Aquinas would point out that man is a part of primitive nature and yet can transcend it. Education being concerned with the person must recognize the control of desire as an educational function. If the truly human being is one who suppresses certain desires in favor of the development of his personhood, then this must be reflected in and reinforced by educational institutions.³⁸ Aquinas might agree with Harry Broudy when he sardonically says:

... activities that pupils hail with glee may be more appropriate to the playground than to the classroom. Unfortunately, pleasure is not a reliable index either of the educational value of the activity or of the learning that accrue from it. Adolescents engaged in titillating encounters with the opposite sex in school will truthfully report that school is fun, but so may a good student who is doing well in physics. So whether or not joyousness is an appropriate criterion of schooling depends on what is generating the joy. As an accompaniment to growth in mastery, fun is fine; but as delight with something other than mastery, perhaps not so fine.³⁹

The truly person-oriented education is not the one that attempts to destroy all limits in the name of freedom. Rather it is the one that helps persons consider the limits characteristic of the person and those which are improper. Whereas many educators would educate to promote rebellion against technological society, Aquinas would

ask the school to develop the intellectual abilities which can “wrest” personhood from the unnatural constraints of an all-powerful technology.⁴⁰

A final point needs to be made about the teacher in the technological age. It is increasingly common to hear representatives of educational industries touting the value of technology in the classroom. So-called “teacher-proof materials” are presented as being the salvation of the learning process. Teaching machine of one form or another, many of them stemming from the research of Skinner and other behavioral psychologists, are said to be capable of relieving the teacher of many of his traditional responsibilities.

Aquinas might have us respond in several ways. One way would be to ask the educational technologist the same question he would have us ask of any technologist: to what extent will this machine promote the well-being of the person? And here we must consider the well-being of the teacher as well as the student. A second question he might ask us to consider is to what extent technology can be used as a substitute for the interaction of the teacher and student. As we have seen he placed a great deal of emphasis on the teacher as a guide in the student’s discovery of the relevance of principles to conclusions. This concept combined with his awareness that part of man was trainable would perhaps lead him to see a limited value for technology in education, especially in the mastery of specific skills. But the decision as to when and how these techniques could be useful would have to be determined by a teacher and student who have sufficiently reflected upon the purpose of the school vis à vis the natural telos of the person. He would warn that the technological innovation cannot come to determine the structure of learning or the aim.

While there are several other points that could be made about the purpose of the school in the technological age, I wish to conclude by discussing Aquinas’ allegiance to the arts and sciences.⁴¹ The thesis of this concluding remark is that because he sees a necessity for an understanding of personhood, society and the universe as a prerequisite to decisions, he would reject the idea that the arts and sciences are no longer valuable to mankind. Since activity must be subjected to contemplation, he would reject the notion that our technological society demands specialization and vocationalism at an earlier age. The end of the educational process must be the development of the person in his freedom and intelligence. Every person, he would say, as person is oriented toward this educational goal. For it is the development of intelligence that allows man to be more than just what the environment says he shall be.

On this point, Aquinas might agree with Broudy when he says that specialization for vocations in the modern technological society should not be viewed as the chief responsibility of schools, especially considering the demands of a democracy:

First, as the writings on the low correlation between school and jobs show, success on the job involves many factors that are beyond the power of

formal schooling to supply. The implication of this finding, if it is true, is not that the schools should supply these qualities, but rather that people should go to school for other reasons. Second, for a vast array of jobs, specific vocational training can be secured in a relatively short time, as adequately on the job, perhaps, as in the school. This means that general education, to facilitate receptivity to specific training and to a variety of such training is the more important resource to be supplied by the . . . school . . . Finally, I am apprehensive about the ready acquiescence of minority groups, the poor, and other disadvantaged segments of the population to the notion that training for jobs—any jobs—as soon as possible, is the panacea for their difficulties. Far from being a panacea, this notion leads to the drastic reduction in the amount of general education available to the children of the disadvantaged, and this condemns them to perpetuating their disadvantages indefinitely.⁴²

Furthermore, the increased hours of leisure that accompany technology do not necessarily mean that men are happy. Rather it requires that persons be able to reflect upon their nature and purpose to determine what activities they shall engage in. And since the technological society is a mass society with either the mass of consumers or the imperatives of the technological economy limiting what is available in the market place, it becomes even more imperative that wisdom on the part of consumer-citizens become a reality.

Thus, when the element of democracy is combined to technology even a greater necessity for the arts and sciences emerges. If the decision-making power is to remain at least ultimately in the hands of the citizens and not be turned over to a technologist, those decisions must be made in the light of personhood in society. Citizens will need to spend time thinking about the nature of the person, the society, and the universe. They will need to develop principles for judging the worth of changes. They will need to learn how these principles are relevant to technological and political questions. In short, the technological democracy demands wisdom and justice of its citizens. And while the arts and sciences do not teach wisdom and justice, they may act as a catalyst to the achievement of these virtues which can develop “as one tries to use the concepts of the disciplines and the insights of the arts” to make the problems of life in a technological democracy intelligible.⁴³

Relevance is a slippery, elusive word. As Renaissance man rejected scholasticism because he thought his world so unique, we find it hard to conceive that anything that has been said before could have relevance for our technological world. But I would suggest and hope this analysis demonstrates that we are really not so different. While we may reject the totality of the medieval synthesis, we should not ignore the framework or the prophetic warnings of Aquinas. We need to reflect upon and

define an image of the person so that we can promote the kind of technological changes that will be productive of a just technological democracy.

University of Dayton

NOTES

- ¹ Quoted in Maxine Greene, *Teacher As Stranger: Educational Philosophy for the Modern Age* (Belmont, California: Wadsworth Publishing Company, 1973), p. 27. The insights in this book have been invaluable in thinking through this paper.
- ² See, for instance, Wallace K. Ferguson, *The Renaissance* (New York: Holt, Rinehart and Winston, 1940).
- ³ Quoted in Greene, *Teacher*, p. 27.
- ⁴ B. F. Skinner, *Beyond Freedom and Dignity* (New York: Alfred A. Knopf, 1971).
- ⁵ Alvin Toffler, *Future Shock* (New York: Random House, 1970).
- ⁶ National Science Board, *Science Indicators, 1972* (Washington: U. S. Government Printing Office, 1972).
- ⁷ Barry N. Schwartz, "Youth in the Technological Era," in *Affirmative Education*, ed. Barry N. Schwartz (Englewood Cliffs, New Jersey), pp. 10-15.
- ⁸ Carl C. Marshall, "Usefulness: The Keynote of Modern Education," *Proceedings of the Wisconsin Teachers Association, 1912* (Madison, Wisconsin, 1913), pp. 172-173. This comment was typical of many so-called reformers who viewed education as a means of producing the "industrial man" who would secure the benefits of his skills for himself and country.
- ⁹ Toffler, *Future Shock*, pp. 398-427.
- ¹⁰ Jagdish Bhagwati, "The United States in the Nixon Era: The End of Innocence," *Daedalus* 101 (Fall, 1972), 30.
- ¹¹ Jean-Jacques Servan-Schreiber and Michel Albert, *The Radical Alternative* (New York: W. W. Norton and Company, 1971) and Jacques Ellul, *The Technological Society* (New York: Alfred A. Knopf, 1964).
- ¹² Mulford Q. Sibley, "The Relevance of Classical Political Theory for Economy, Technology, and Ecology" (Paper delivered at the 1972 Annual Meeting of the American Political Science Association, Washington, D.C., September 5-9, 1972), p. 7. I am indebted to Dr. Sibley's insights into the relevance of ancient and medieval philosophers to technological questions.
- ¹³ See John J. Conger, *Adolescence and Youth: Psychological Development in a Changing World* (New York: Harper and Row, 1973), p. 3 for an explanation of this mentality.
- ¹⁴ Marcus G. Raskin, *Being and Doing* (New York: Random House, 1970).
- ¹⁵ See Ivan Illich, *Deschooling Society* (New York: Harper and Row, 1970) and Everett Reimer, *School Is Dead* (New York: Doubleday, 1972) for the case for destroying schools. See John Holt, *How Children Fail* (New York: Pitman Publishing, 1964), and George B. Leonard, *Education and Ecstasy* (New York: Dell Publishing, 1968) and Schwartz, *Affirmative Education* for the case for joy as the end of education.
- ¹⁶ Frederick C. Copleston, *Aquinas* (Baltimore: Panquin Books, 1955), pp. 157-193.

- 17 Maurice de Wulf, *The System of Thomas Aquinas* (New York: Dover Publications, 1959), pp. 53-65, 117-128.
- 18 See Jacques Maritain, *The Person and the Common Good*, trans. by John J. Fitzgerald (Notre Dame, Indiana: Notre Dame Press, 1966), p. 50; "The end of society is the good of the community, of the social body. But if the good of the social body is not understood to be a common good of *human persons*, just as the social body is a whole of human persons, this conception also would lead to errors of a totalitarian type."
- 19 Sibley, "The Relevance," p. 14 states that the classical tradition saw the task of politics in the following terms: "Politics endeavors, in so far as it attains its implicit end, by ordering the soul and the community, to establish priorities which naturally have first order values to them. It tries to impose limits on the tendency for material wants to become insatiable in order that spiritual and intellectual quests may not be lost."
- 20 Thomas Aquinas, *Summa Theologica*, II-II, Q. 46, 7; Sibley, "The Relevance," pp. 18, 39.
- 21 Sibley, "The Relevance," pp. 18-21.
- 22 Copleston, *Aquinas*, pp. 203-206.
- 23 *Ibid.*
- 24 Sibley, "The Relevance," p. 40 points to Marcuse in *Eros and Civilization* as equating technology with the end of repression.
- 25 Copleston, *Aquinas*, pp. 203-206.
- 26 *Ibid.*, pp. 156-198; de Wulf, *The System*, pp. 80-89; Sibley, "The Relevance," pp. 27-29.
- 27 Robert B. Nordberg and Ester Zaret, "Skimming Skinner—A Skeptical Sketch," *Educational Theory*, 20 (Fall, 1973), 333-342.
- 28 Quote of Aquinas in John W. Donohue, *St. Thomas Aquinas and Education* (New York: Random House, 1968), p. 107.
- 29 *Ibid.*, pp. 58-59.
- 30 Walter J. Ong, *The Barbarian Within* (New York: Macmillan Co., 1962), pp. 149-163.
- 31 Charles Silberman, *Crisis in the Classroom* (New York: Random House, 1970).
- 32 Peter M. Collins, "Some Philosophical Reflections on Teaching and Learning," *The Record* 71 (February, 1970), 419.
- 33 John O. Riedl, "Thomas Aquinas on Citizenship," *Proceedings of the American Catholic Philosophical Association* (Washington, D.C., 1963), pp. 159-167.
- 34 J. W. Fulbright, "Aspects of the National Interest," (Paper delivered at Pacem in Terris Convocation to Consider New Opportunities for United States Foreign Policy, October 8, 1973), p. 8.
- 35 Quoted in Francis C. Wade, "Saint Thomas Aquinas and Teaching," in *Some Philosophers on Education*, ed. Donald A. Gallagher (Milwaukee: Bruce Publishing Co., 1956), p. 71.
- 36 Collins, "Some Philosophical Reflections," 413-421.
- 37 Harry S. Broudy, *The Real World of the Public Schools* (New York: Harcourt Brace Jovanovich, 1972), p. 174.
- 38 Sibley, "The Relevance," pp. 18, 28.
- 39 Broudy, *The Real World*, p. 178.
- 40 *Ibid.*, pp. 199-222.
- 41 Pierre H. Conway and Benedict M. Ashley, "The Liberal Arts in St. Thomas Aquinas," *The Thomist* 22 (October, 1959), 1-74.
- 42 Broudy, *The Real World*, pp. 158-159.
- 43 *Ibid.*, pp. 161-165.