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Technology as a Deterrent to Dehumanization

Technology, particularly the newer technologies such as those of computers, automation, and communications, are often cited as principal causes of dehumanization. This is unfortunate but understandable. It is unfortunate in its short-sightedness and the harm it does to any real progress in utilizing the new technologies in a personalized way to improve the lot of the individual. It is understandable in that we have assigned to computers, in particular, such varying and contradictory roles that honest confusion, mistrust, and fear surrounds them in most people's minds. Students, for example, feel dehumanized when assigned numbers with their records keyed to these numbers for computer processing. "I'm not an individual, I'm just a number," is a favorite lament.

And yet, these same computers are making some deprived, underprivileged students feel human and happy perhaps for the first time. Surveys have shown that inner-city minority and female students prefer computer-aided instruction to the traditional human teacher. They feel that they are treated like everyone else when computers are the "teacher." Certainly, we have never been able to program prejudice into a computer so that it can differentiate its output on the basis of concern or lack of concern with human values.

The confusion with respect to the causal or curative features of these new technologies is especially apparent in dehumanization characterized by tedious, repetitive, and boring jobs. Examples of jobs cited by people themselves that fit this description include "waiting-on-other-people" jobs such as are performed by waiters, store clerks, and garbage collectors; they include assembly-line jobs, clerical jobs, and mailroom jobs. Because of dislike for the job, people do poorly in such tasks; they see themselves as "inferior," they affiliate themselves with the dehumanized set, their productivity decreases, and customers pay more and get less.

At the same time and under the same banner of dehumanization, the assembly-line workers at the Lordstown (Ohio) Vega plant sabotaged the automated assembly line being installed to help decrease the tediousness of their jobs. Consumer groups are protesting the introduction of automated check-out counters in supermarkets and threatening boycotts of the stores. This action is occurring in spite of the better service and more accurate pricing possible through automation as contrasted with clerks not liking their work. It is happening because the consumer groups and their interests were not accorded consideration during the planning stages of supermarket automation.

Is technology the real culprit in making the automobile workers, the students, and the supermarket shoppers feel dehumanized? Emphatically no! Technology is neutral. It does not come with a label specifying its end product or intended use.

A first step in ensuring humane applications of the new technologies is to distinguish between instances when technology is threatening individual rights by abetting dehumanization and instances when technology is being made the scapegoat for failures in human ethics. To make sure that this first step is indeed taken, scientists and technologists familiar with the newer technologies of computers, automation, and communications must invade the ranks of senior scientific advisers: The proper perspective and potential of these technologies in making headway against today's problems, highlighted by the prominent role of the needs of the individual, needs to be provided to policy-makers. It is not presently and will not be until the ranks of scientific spokesmen are appropriately augmented.—RUTH DAVIS, *Director, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234*