

Persons and Technology

John Lachs

Vanderbilt University

The natural mind simplifies the world, seeing unity where there is only complex process. It is in this way that historical ages acquire their name and essence, gravity comes to be seen as a cause, nationalities are reduced to a stereotype. In this spirit, we speak of technology as a powerful force in the modern world. We endow it (the single reality) with properties, tendencies, dispositions, even a personality. We hold serious discussions about whether it is good or bad, whether we should accelerate its development or learn to do without its benefits.

The sophisticated intellect in us may think it trivial to be told that there is no single being that answers to the name "technology." But the natural mind that pulses under the skin of sophistication never ceases to hypostatize; reminders about what constitutes good ontology are, therefore, rarely out of place. Technology is not some impersonal force that causes difficulties for us or else makes life comfortable. It is but a set of skills and activities--skillful activities--of human beings.

Such skilled activity is the application of knowledge aimed at achieving human ends. Science, therefore, is by no means the only body of knowledge that has or can have such practical results. The arts have a technology for the production of plays and paintings: there are identifiable rules that aid in the creation of what is interesting, beautiful or funny. Religion has a technology consisting of, among other things, chants, prayer wheels and the administration of bread and wine. Even philosophy is developing its own application to the world through critical involvement in governmental, business and medical decision-making. The technology employed consists

THE PERSONALIST FORUM

of searching conversation, the analysis of concepts, the exploration of alternative modes of thought. The expected result is a greater sensitivity to the value dimensions in deliberation, and hence better decisions.

One could object that this idea of technology is too broad, for in the current or ordinary sense technology always involves the use of physical instruments. No doubt it does, as does virtually every human act. But we must not have too narrow a conception of tools and physical instrumentality. Demosthenes was more effective with his words than other persuaders with the sword. In any case, the techniques of convincing people constitute a technology no less than do the techniques of operating on them; whether we transplant ideas through eloquent speech or organs by surgery, we engage in skilled activity with the aid of physical objects.

Admittedly, there are differences between activities whose performance requires no physical object beyond the organs of the body (such as speech-making) and those which require both skilled body parts and external instruments. But these divergences cannot constitute the distinction between what is technology and what is not. For if they did, playing music would involve a technology but singing it would not, listening for the pulse with stethoscope would be a technological act but taking it with one's hand would not. From the standpoint of the use of instruments, it makes little difference whether they happen to be made of cells or metal; although using my hands to make scissors cut cloth comprises a double instrumentality, I still use tools if I rip it directly myself.

A more useful distinction emerges if we relate technology to technique. Perhaps all of our actions involve a technique, that is, a proper or expeditious manner of performing them. But no single technique is a technology, not even such an

THE PERSONALIST FORUM

advanced but single industrial operation as imprinting microchips. If we want to be precise, we might say that a technology consists of a set of interconnected techniques and that the "technology" of which we sometimes speak as though it were a single entity is a system of such interconnected technologies.

But let me say again that this entire system is nothing beyond the skilled activities (or types of activities) which constitute it, along with their complex relations. Yet we find technology an alien force and the world it creates in many ways an uncomfortable home. It is not, of course, that we lack comforts in this world. On the contrary, human life has, on the whole, never been more pampered and secure. But these pleasures seem to come at a cost, even though the cost is ill-defined and little understood. Nevertheless, it is experienced with an intensity matched only by the wide divergence of specific complaints it generates. Some feel frustrated or impotent in a system that appears designed for machines, not sensitive human beings. Others feel manipulated, as though they were machines themselves. Many think that the system itself is the machine which, ill-suited to take account of subjective needs, reduces us to insignificant fragments of its gigantic being. Nearly everyone agrees that in dealing with each other in social institutions we have ourselves become depersonalized and stiff biological replicas of the machine.

The recurrent theme through all the complaints is the contrast between the machine-like and the human or the technological and the personal. How could technology, our own systematic activity aimed at fulfilling our purposes, come to be viewed as a separate and threatening, non-human force? The fact that the application of science has brought us a longer lifespan, better health, abundant food and ample leisure, that we can do what prior generations could not even dream, should make technology our proudest possession. And, to be sure, we are glad to partake of its

THE PERSONALIST FORUM

benefits, though not without the sense that something has gone awry. This feeling is due not to the strangeness or novelty of our tomorrows; under favorable circumstances, the most unusual can become commonplace overnight. It is, rather, a result of the growing, and devastating, suspicion that in this world we made for ourselves, no one of us matters much anymore.

Denouncing technology and smashing the machines would no doubt solve this problem but create in its place intense misery, which would be the harder to bear for the memory of rich and easy days. Returning to some plateau of low technology and small productive units is as impossible--and undesirable--as the more radical solution. Its appeal is the result of the romance of rustic existence combined with the illegitimate assumption of the continuing benefits of large-scale society. Without stable laws, universal commerce and the economics of scale, most modern improvements in health and nutrition, to say nothing of the optional goods that enhance the quality of life, would simply evaporate. The momentum of the industrial world makes a reversal of course excessively unlikely; a just assessment of its benefits suggests that any major change would be unwise.

Are we, then, left defenseless against an overwhelmingly powerful, depersonalizing technology? If we put the matter in this way, we will be left without understanding, not defense. Much as we may experience it that way, technology is, as I have said, not an alien or independent force that offers comfort for slavery. Since it is nothing but human activity, to understand it we must understand ourselves. In order to counteract its ill effects, we must now what they are, what causes them and what would cure them. The first step toward accomplishing these tasks is a systematic account of what is wrong with technology.

The most primitive but emotionally most satisfying methodological approach here, as elsewhere, is to attribute ill effects to ill will.

THE PERSONALIST FORUM

If we could show that the evils of the industrial world are due to some giant conspiracy, everyone could understand at once. Simple people attempt to do this time and again, with generally laughable results. More sophisticated minds prefer explanations which relate what goes wrong to a single flaw or a small cluster of malfunctions. Single-flaw analyses (such as Marxism) are particularly satisfying because of their simplicity, the unitary vision they provide and the exhilaration of supposing that we have discovered the secret of the modern world. But such hypotheses lack initial probability, tend to involve tacit value commitments and frequently end by manipulating the evidence to make it fit.

The most sensible and best methodological hypothesis is that the ill-effects of technology, along with its desirable outcomes, are all equally normal consequences of it. If we start with this assumption, it becomes unnecessary to search for some implausible single cause of our problems. We can, instead, view society as a part of the natural order generating regular effects, some of which are seen as costs and some as benefits by those concerned. And this, incidentally, is the only way values function in such a theory: they are important facts to be taken into account. In embracing the hypothesis we make no tacit or explicit value commitments; what count as costs and what are benefits is determined by looking at what people do and feel, not by reference to the theory or the preferences of the theorist. This means that if people freely and intelligently ever come to place positive value on what now appears to ail us, the attempt to explain the costs of technology will be superfluous. The view I develop in what follows presupposes both that there is something wrong with industrial civilization and also substantial agreement about the nature of the complaints.

How does technology become the source of a variety of ill effects? To understand this, we

THE PERSONALIST FORUM

must focus on the use of tools and on the increasing size and complexity of technological tasks. A careful analysis of these two factors will go a long way toward explaining the source of much of our current frustration and unhappiness. In the process, a remarkably divergent collection of phenomena will be seen to have a unitary foundation.

The human body is a sentient tool. When we use it or some part of it to accomplish a task, we gain as much conscious, immediate contact with the world as our frame allows. Under such circumstances, our relation to things and to others is direct and we know firsthand the feel and disposition of what we encounter. Whatever sceptical objections philosophers may devise, the palate when tasting wine, the doctor's hand on the fevered brow, the total embrace of love reveal relevant realities and bring us close to the pulse of being.

The introduction of additional tools that intervene between the body and its tasks changes the situation profoundly. The immediacy of the contact between person and world is lost and we learn to experience things at a remove. When we don gloves to clean the compost heap and poke a stick at the small garden snake that wanders by, we know that the experiential difference between firsthand encounter and distanced or mediated contact is momentous.

The mediating presence of an inanimate third between agent and projected act has obvious advantages. It can greatly enhance safety and convenience, and frequently it multiplies the power of the human arm. The experiential loss differs with the circumstances: it is minimal when the intervening tool, such as eyeglasses, is designed to improve the natural experience, but much more serious where its function is to shield the sense or augment effectiveness. Nevertheless, there is some change in every case and some of the changes have pernicious side-effects.

THE PERSONALIST FORUM

This is best seen in those instances of tool-use, by far the most numerous, where our purpose is not to improve the quality of our experience, but to effect changes in the world. The human hand is sensitive and thus tends to know what it causes. By contrast, inanimate instruments do not convey adequate information about their effects: the jockey does not know the power of his whip until, by mistake perhaps, he uses it on his own leg. As a result, people who operate with even the simplest tools tend to be unaware of the full consequences of their acts. Of course, they are conscious of much of what they do: they see that when the dog is hit, it quits howling at the moon. But the knowledge is selective; not only does it fail to be centered at the point of the act's impact on the world, it is also focused on the question of whether or not the desired effect is achieved.

Even on this rudimentary level, therefore, interest is in effectiveness and not in its costs. We want to make the dog stop howling so we can sleep; we hit it hard with a stick, unmindful of how it feels to be so whipped. We show the child candy to get her away from the comic book shelves. Once out of the store, we claim that candy is bad for the teeth and refuse to deliver, with no awareness of how such deception hurts. When we deal with other sentient creatures, we lose reciprocity; if I whacked the dog with my bare hands, its pain would instantly be measured by my own.

The tendency of inorganic tools to enhance effectiveness at the cost of increased ignorance can, of course, be counteracted. But, as all ignorance, this too arrives unannounced, riding at the tail end of the glorious feeling that we are getting things accomplished. And the nescience grows with each increase in the size and complexity of our physical instruments. When tools reach the level of being entire systems, such as that involved in drilling for, pumping, refining and

THE PERSONALIST FORUM

delivering the gas I use in my car, our understanding of their nature and their costs approaches zero.

There are two related factors that keep us in touch with the consequences of our tool-mediated actions when our instruments are simple. Hammers and sticks and pens are used by single individuals to fulfill their own purposes. Since they both plan their activities and execute them, they tend, on the whole, to know what is going on. Since the effects of their actions, moreover, are rarely distant, they can at least observe them, even if firsthand bodily experience of them is reduced. In this way, planning, physical execution and acquaintance with results all reside in a single person, and integration of them into an intelligible human act requires relatively little effort.

Increase in the magnitude of technological tasks and of the machines needed to perform them demands cooperation from many individuals. It is only when large-scale technology lingers on a primitive level that all the participants do the same thing, for example square, pull and stack big stones. It is much more efficient to break down complex tasks into small constituent activities and apportion each to different groups of people. The natural consequence is that some persons design and others coordinate, some perform and others supervise our larger social acts. The physical action itself is severed into fragments: some bend metal, others bolt pieces of it together, some add plastic parts, others install upholstered seats to make the cars we drive. And if we view the entire production of an automobile as a vastly complex but single social act, typically the effects of it are enjoyed and endured by those who did not participate in it.

The division of the social task into segments each of which is performed by someone else destroys the easily intelligible unity of human acts. For now each knows mainly his or her own

THE PERSONALIST FORUM

narrow role in the system and few understand complex relations between the parts. Planners, doers and enjoyers/sufferers have little access to each others' work and experience. As a consequence, they fail to understand their interconnectedness in a larger whole, view each other with suspicion, and find their own actions disjointed and without any meaning.

Let me remind us again that technology involves much more than the physical machinery we use in such activities as growing food and going places. The institutions we create for designing, operating and maintaining the machines are also a part of our technology, if we mean by this a set of interconnected skilled human activities. These institutions consist of chains of mediation--human beings connected to one another by performing actions on each others' behalf. We function in the chains as if we had a tacit contract with each other: each makes a small contribution to what is of benefit to some or all in return for what is needed for a comfortable life. In a sense, though for the most part without consciousness of it, we use others as tools to make our existence secure and pleasant, and offer in payment the opportunity of using us.

Primitive men interposed sticks and rocks between themselves and what was to be done; we thrust an entire system of intermediary agents and machines between ourselves and our actions. The difference is in quantity of mediation, which affects the quality of life. Some effects are benefits but others are costs: the growing mastery over nature must be measured against depersonalization and endemic loss of meaning in life. The important consideration is that both costs and benefits are natural consequences of mediation; only by viewing our problems in this context can we hope to understand them and to make intelligent plans for remediation.

THE PERSONALIST FORUM

The social shattering of the natural unity of actions, so that purpose, execution and consequence fall to different people to perform or enjoy, makes it difficult for individuals to see their work as a significant part of a meaningful whole. The size of mediated chains makes tight control over their products impossible; consequently, planners regard workers as people who frustrate their designs. Workers, in turn, have little knowledge of grand plans. They feel restricted by arbitrary rules and moved like pawns in pursuit of purposes they neither share nor understand. Those who enjoy or endure the results are also ignorant; they feel passive in the face of what the huge machinery of the modern world visits upon them, and when what happens does not please them, they feel victimized.

No one quite fathoms the intricacy of the social act. Everyone feels impotent against the weight of the whole: we think there is nothing any one person can do. Everyone feels manipulated and valued only for what he or she can contribute to the social good. And, viewing things out of context, everyone feels the insignificance or senselessness of his or her contribution. When it comes to assuming responsibility for the social act or at least for our part in it, the planners point to their good intentions but frustrated purposes. Those who did the deed claim to have acted on orders and without an understanding of what they advanced. And the enjoyers and endurers maintain that they have done nothing at all; whatever happened merely befell them.

The result of large-scale mediation is the growth of passivity, manipulativenness and irresponsibility. Ignorance of the complex world begets ignorance of our own actions in it and this, in turn, yields a desperate sense of the meaninglessness of it all. As if by a perverse paradox, the larger the social act, the smaller and more insignificant each person's contribution becomes. And the more firmly mediation cements us

THE PERSONALIST FORUM

into a social whole, the less we feel that we belong to a community.

The depersonalization we endure in industrial society is, in this way, clearly the result of technology. For the technology we developed for meeting our needs and wants involves machine-mediated integrated social acts. These acts require large mediated chains in which individuals function merely by filling roles. The interest in persons in this context, moreover, is restricted to those of their features essential to playing their roles. Their responsibilities are defined in terms of their function in the chain and not by reference to what human decency or moral maturity might demand. Their development as persons is held of little account and is at best allowed as an optional activity so long as it does not interfere with reliable social function. We embody the insignificance of persons in the contrast we draw between essential role-responsibility and what is "merely" the view or preference of the person: extermination camp guards can, in this way, maintain that they have "nothing personal" against the people they murder in the line of duty.

The increased scope and efficacy of the social act is possible only at the expense of reducing the range of the skilled activity of each individual. This leads to a great growth in narrow specializations and to the rule of the expert. Mediated chains consist of specialists each of whom is competent in a circumscribed area of operations. This slender beam of knowledge is bathed on all sides in a sea of ignorance. We know little of what our fellows do in the same chain, how others live, what skills distant specialities require. Experts tend, moreover, to extol this ignorance; professionals in our society manage to combine the claim to sovereignty in their chosen field with ostentatious reliance on others everywhere else.

THE PERSONALIST FORUM

It is only now that we are beginning to recognize the destructive effects of this institutionalized fragmentation of skills and knowledge on the development of persons. To suggest that certain tendencies in the modern world are depersonalizing is to presuppose that there are persons who may be damaged or debased. There is also a deeper and more distressing point to note: some consequences of our technology make the very creation of persons difficult. Individual personhood is, of course, always an achievement. But it presents a particularly arduous task if the social conditions necessary to foster it are absent. And large-scale mediation tends to undercut the formative conditions of at least three essential structures of personhood.

Persons must be dynamic epistemic centers, sensitive observers and responsible agents. To be a center of knowledge involves more than being a warehouse of information: it requires the organization of what is known in accordance with general principles. The generality of these axioms leaves room for the indefinite expansion of knowledge, which the person with vigorous inquisitiveness undertakes. Specialization and satisfaction in one's specialty, with attendant reliance on experts everywhere else, eliminates the motive for continued inquiry and for the formulation of autonomous beliefs. Curiosity becomes centered in one field and the rest of the world drops out as subject of interest and informed critical judgment. This lamentable development is confirmed by the cognitive void in the soul of some of our great experts.

Sensitivity can be learned only by the doing. It is potentially omnimodal, relating the imagination to possibilities everywhere. But the imagination must be sensitized by actual exposure to different ways of thought and divergent forms of life. Direct experience of others, immediacy with their suffering and joy are indispensable means to developing the ability to recognize alien goods and to appreciate them. Without this fountainhead

THE PERSONALIST FORUM

of sympathy, the equal legitimacy of the different could never achieve plausibility. Yet it is just this immediacy that our mediated chains destroy. Confined within roles, denied sense-experience of the important skills and the sacraments of life by the encircling ministrations of experts, and educated with facts and concepts unconnected to practice, we lose contact with the richness of existence and cannot think that things could be otherwise. The result is a human being who does not see the sky: his insensitivity to the world makes it impossible for him to gather stable resources for his soul.

Taking responsibility for one's acts presupposes the ability to appropriate them. Being held responsible for something I cannot think I did engenders charges of unfairness and results in resentment. In order to appropriate an action I must stand in an intimate relation to it: I must have done it with intention, or planned it and had it done, or at least made a significant contribution to its possibility. The ideal here, as elsewhere, is the unity in one person of intention, physical performance and enjoyed/suffered results. For whoever understands how what we do is connected with what we get is likely to choose his actions by what they yield and, in turn, accept the consequences of his acts.

Mediated chains destroy this unity of actions. The magnitude of the social act and the sensed fragmentation of its elements make it difficult for us to see it as an action at all. At any rate, it does not look and feel like anyone's act. And since we understand little of its purpose, structure and consequences, we cannot locate our own contribution in it, nor can we assign significance to what we do. Because we hold minuscule jobs in colossal institutions, because our roles call for narrow repertoires of routine operations, we simply cannot grasp the purpose we advance. No one plans the social act and no one performs it; sine we do not see the whole, we cannot regard our work as a part of it. The result

THE PERSONALIST FORUM

is that we do not identify with the social act and cannot embrace it as our own. But without such appropriation we cannot take responsibility for it or its consequences. Our psychologically accurate but morally empty disclaimer is that we did not mean it and did not do it and perhaps did not even intend for it to come about.

To create persons without epistemic autonomy, sensitivity and responsibility is as difficult as it is to make bodies without muscle and backbone. Our mediational technology makes it ever more difficult to raise children so they become self-possessed individuals with the intellectual courage to frame their own opinions and the moral daring to act them out. All of this is, of course, open to the objection that it amounts to a surrender of my initial plan to endorse no values, because it presupposes a value-laden conception of personhood. I respond by admitting the facts but rejecting their interpretation. The idea of personhood I utilize, like all such ideas, involves valuational elements. According to it, a fully developed human individual must possess certain desirable capacities. But I have not arbitrarily determined what these features must be, nor is the success of my theory in any way dependent on viewing these, only these, or any traits as good.

My claim is that large-scale mediation undercuts the conditions necessary to foster epistemic autonomy, sensitivity and responsibility. This relationship between our technology and the sorts of people it raises is a natural one which obtains whether we think that forming our own opinions and taking responsibility for our acts is good or bad. The function of mediation-analysis is to note the connections; they would still be there if we came to believe that it is best to act as if we were insensitive blobs. It so happens, however, that judged by our shared ideal of what a person should be, lack of inquisitiveness, courage and accountability are execrable traits. Although I am in person accord with this ideal, its alteration or decline would not render my theory wrong, only

THE PERSONALIST FORUM

uninteresting or unnecessary. For then we would perhaps not consider these personality features costs of social life, and hence might show little concern for understanding how they come about and none for their amelioration.

It is only fair to remark that not everything in mediated chains makes for sensory impoverishment and desensitization. There are impressive technical achievements which can be used to counteract some of the tendencies of modern life most damaging to the development of mature persons. High-speed travel opens the world to us and television brings immediacy with the distance into the livingroom. The media of communication, if well utilized, exercise enormous educational power by the graphic and virtually instant presentation of the consequences of what we do. And the most basic obstacles to the development of persons, inadequate nutrition and disease, have been largely eliminated in the industrial countries.

While all of this is true and heartening, there is a dark side even to these benefits of technology. Travel may well lay the world with all its diversity at our feet, but multinational corporations and universal commerce work hard at hammering it into uniformity: we fly to Hong Kong but eat hamburgers at McDonald's there. The immediacy television provides is itself mediated and controlled by others: the presence is primarily visual, not omnimodal, and even our eyes are not allowed to follow their natural instincts but must settle for what the camera presents. The media combat the frustration of mediated life not by helping us understand, but by the escape of entertainment. And the food, physical health and possessions technology makes possible overrun their humble role as means and usurp the place of higher, final goods.

Is there, then, any way to make peace between persons and those of their activities which constitute large-scale mediated technology? I have already indicated that to hope for the removal of

THE PERSONALIST FORUM

mediation is absurd. It is equally wrong-headed to suppose that technology can be left to satisfy our desires without any reference to the essential structures of personhood. Techniques are skilled acts aimed at reaching our ends; the sound ordering of what we need and want is therefore presupposed by the work of technology.

We must, accordingly, settle for counteracting the undesirable results of mediation. In general terms, this means that we have to reestablish the greatest possible immediacy with the world, with each other and with ourselves. Direct encounter with the world is sensory exposure to its variety, along with a sensitive appreciation of our relation to it as transforming, yet profoundly dependent. Immediacy with others involves sustained contact with a wide range of individuals as persons, that is, outside their official roles in mediated chains. Exposure to ourselves is a resolute reflectiveness on what we do and how we feel, in addition to sincerity about our motives. Such widespread immediacy would serve as a constant spur to personality development; it would render the atrophied organs of our invisible selves lithe again.

Immediacy without understanding, however, is not enough. We must find ways of learning our precise location in mediated chains, the products they yield and the consequences they cause, and the manner in which our actions contribute to these results. There are at least three institutional measures that would tend to stimulate and advance this quest for understanding. Openness in government, a devotion to education in corporations and stress on the development of epistemic autonomy in the educational system would go a long way toward equipping us with the information necessary to grasp our place in the mediated world and to incline us to accept responsibility for it.

The three levels of government in this country constitute the most extensive and most powerful set of our mediated chains. The government

THE PERSONALIST FORUM

technology for undertaking communal projects and providing social services is so complex and pervasive that passive openness to citizen queries is not enough: most of us would not know where to start the questioning. What we need, instead, is for politicians and civil servants alike to take an educative stance and actively instruct us in the public's business.

Specialization of function and restricted information flow in a hierarchical structure have long been thought essential for efficiency in corporations. But the less workers understand their contribution, the less they care; the result is inefficiency born of disregard. To overcome this, we must short-circuit mediated chains and expose each part to all the others. The free and ample flow of information, along with a generous appreciation of everyone for his or her contribution, would help us become not only better employees but also better persons.

Our educational system stresses familiarity with facts. Even processes and procedures are presented with dead factuality: they represent established skills to be mastered and deployed on demand. In this way, we teach largely results and very little of the dynamic process of uncovering them on our own. This tends to institute habits of repetition and to crush whatever is playful, adventuresome and inquisitive in the mind. A partial change in emphasis designed to give the logic and delight of discovery their due would give students the sense that they are partners in human inquiry, instead of empty vessels to be filled. And if we encouraged young people to reach for cognitive integrity by framing their own opinions, the task of forming persons would be eased. For the foundation of personhood is an open and agile mind ever aware that it must make its own decisions.