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Information Ethics in a Complicated Age

INTRODUCTION

The old order of kinship and social class in Europe broke apart during the nineteenth century. Two revolutions gave the final blow: mass democracy and industrialism. Together, these explosive forces reversed the direction of Western society on the Continent and in North America.

The political revolution in France and the Industrial Revolution in Great Britain and the United States shifted the course of history around the North Atlantic. Presently, another revolution equal in power is reshaping the social contours. Past revolutions highlight the transformation taking place now: a cultural metamorphosis comparable in importance to mass democracy and technological industry one century earlier. The years may not appear as volatile, but the present modifications in our social structure are as extensive and substantial as those of the 1800s.

A DUALITY

How shall this contemporary phenomenon be labelled? Post-industrialism? A communications revolution? The information age? Telematics? A paperless society?

Such designations are insufficient. Unique to the modern day is global technology on a worldwide scale, and the two most decisive are in fundamental contradiction. Information technology has created global communication networks that potentially involve us all in each other's business. But its opposite, military technology, threatens the human race with annihilation. Today's global age has the technological sophistication dialectically to destroy all humanity while simultaneously binding all

nations into a worldwide information network. Since imminent destruction is now a possibility, scholarship in information ethics needs an urgency about it unlike any previous theorizing. Principial claims must henceforth embrace the needs of the entire human race within their purview.

1945: Nuclear technology, in principle, is now able to totalize the planet. 1957: Sputnik rockets into space, but not merely as a satellite fired from the U.S.S.R. in secret; the whole world is watching. The late Marshall McLuhan (1974) noted that Sputnik bound together humankind for the first time electronically. Lincoln's assassination took months to reach the London streets; a century later, Russian technology was paraded instantly before an admiring world. November 1963: The world participates as one in President Kennedy's funeral. Television, radio, and satellites gather us around the casket with all the emotion and ceremony of every burial. The parade down Pennsylvania Avenue occurs on Main Street, the World.

Since those heady days, Earth's orbits are loaded with satellites of information and for military deployment. In era number three, global technology stands in counterpoint: As information is increased, facilitation of global understanding is presumed. When the nuclear arms race is successfully curbed, these two technologies are put on the proper trajectory. Open information unfettered globally and destructive technology restrained politically yields a working formula for sustaining the globe at this auspicious moment of human history, although the relationship between improved information and decreased danger is porous at best.

That, in sanitized form, is the San Andreas fault line on which our technological civilization rests. But the problem is slightly more complicated.

Jacques Ellul (1981) developed the argument that the technological phenomenon is decisive, though not exclusive, in defining twentieth-century culture. As an explanatory element, it plays the part of capital in Marx's interpretation of the nineteenth century. This does not mean that technology has the same function as capital nor that the capitalist system is a thing of the past. It still exists, but capital no longer fulfills the role Marx claimed for it. Whereas work produces value for him, in industrially condensed societies the determining factor is technology. This creates value now and is not peculiar to capitalism. The characters have changed. Society can no longer be divided into capitalists and workers; the phenomenon is completely different and more abstract. Technological systems are now on one side and all humanity is on the other, the former driven by necessity and the human demand for freedom. Ellul concludes that the world in which we live must be read,

not in terms of political-economic structures, but in terms of technology (ch. 2). While this analysis privileges the industrial order, even that three-fourths of the world which is not yet technological finds itself defined within technological parameters.

Thus the bipolar model needs to be restated. Global technologies of communications and extinction have given the present age its peculiar resonance; but the fundamental issue is the technological artifice within these boundaries which now defines the human habitat. The revolution today is that the world has entered a technological civilization. Technology is not merely one more arena for philosophers and sociologists to investigate, but a new foundation for understanding the self, human institutions, and ultimate reality. A society is technological, Ellul argues, not because of its machines, but from the pursuit of "machineness" in every area of human endeavor. Mechanistic techniques are applied not just to nature, but to social organizations and one's understanding of personhood. A technological society with global parameters separates itself from previous ones, including industrial civilizations, "through its historical consciousness that society is not fixed and given with the order of nature, but is an artificial human creation" (Fasching, n.d.). In this sense, finding an orientation in a technological civilization is fundamentally a religious problem. Unable to establish a meaningful existence outside the artificial ambience of a technological culture, human beings place their ultimate hope in it. Seeing no other source of security and failing to recognize the illusoriness of their technological freedom, they become slaves to the exacting determinations of efficiency.

Whereas previous social orders operated with a triad—humans/tools/nature—in technological societies, nature recedes and humans perceive themselves as living in a technical artifice, existing not in nature but in culture.

Man does not any longer live in a natural environment but rather in a milieu composed of the products of his technology. . . . He can no longer take any significant action without technological intermediation. Technology constitutes an engulfing universe for man, who finds himself in it as in a cocoon. (Ellul, 1978, p. 216)

Our symbolic formations, or cultures, are now dominated by technological structures. In Ellul's framework, communications media represent the meaning-edge of the technological system, the arena where the latter's soul is most clearly exposed. Though exhibiting the structural elements of all technical artifacts, their particular identity as a technology inheres in their function as bearers of symbols. Information technologies thus incarnate the properties of technology while serving as agents for interpreting the meaning of the very phenomenon they embody. Ellul (1969) calls our communication systems the "innermost, and most elusive

manifestation” of human technological activity (p. xvii). All artifacts communicate meaning in an important sense, but media instruments carry this role exclusively. As the media sketch out our world, organize our conversations, determine our decisions, and influence our self-identity, they do so with a technological cadence, massaging in our souls a technological rhythm and predisposition.

Over the centuries, in Western scholarship at least, ethicists could take divine command theories seriously or, at a minimum, presume various versions of Platonic absolutes. Even as these presumptions unraveled in the nineteenth century, the immutability of nature, which took care of itself and demonstrated physical permanence, made norms of semi-enduring status at least imaginable. In other words, all previous ethics reckoned only with noncumulative phenomena, directly or indirectly. Morality could conceivably be the property of all, living as humanity did on *terra firma* before the face of an Eternal Being, or at least with a first principle that ordered the vacillations of everyday affairs. But as Jacques Ellul, Ivan Illich and others have demonstrated, a technological age is cumulative, expanding, and augmentative. Therefore, while endeavoring to form a new order of world understanding through communications, one can simultaneously augment an artifice where traditional ethical principles carry no resonance.

In his celebrated book, *The Imperative of Responsibility*, Hans Jonas (1984) contends that today's ominous trends demand an entirely new ethics: "Modern technology has introduced actions of such novel scale, objects and consequences that the framework of former ethics can no longer contain them" (p. 6). Jonas calls for a brawny, long-range ethics commensurate with the extent of contemporary technological power. But this presentation is not intended merely as a reprieve from minuscule ethics. It takes Jonas' ideas full strength and resonates in somber tones about the formidability of his challenge.

Conferences such as this are a priceless resource in a complicated age. It is a hopeful sign that the same academic unit sponsoring the *Artificial Intelligence and Expert Systems* (Lancaster & Smith, in press) conference also organized this seminar on ethics. Professionals in information storage and transmission face a firestorm of issues at present, and there are many impacted levels on which a sophisticated library system operates today. Developing a library profession with integrity is akin to building a home in a hurricane: the roof can never be safely put in place given the whirlwind of demands and unending technological innovations. And while a nine-session, two-day conference can help to hammer out policy guidelines, get the ethical problems straight, and stimulate each other's moral imagination, the larger context within which we work is determined by the contours of the technological

civilization sketched above. It is essential that professional ethics—whether of librarians, journalists, engineers, doctors, or lawyers—be integrated into the common morality. Information ethics will prosper to the degree professional ethics as a whole develops a substantive and generative framework. Information professionals work in a fortuitous area that represents the quintessence of several axial issues at present, and are in a golden position to contribute to the debates in social ethics generally.

With praise to those who are lighting the proverbial candle rather than cursing the darkness, the author will describe the heavy clouds nonetheless—trusting that those in ethics for the long haul will use the seminal work this week to help unravel a conundrum and a paradox which makes our task in applied ethics nearly intractable.

A CONUNDRUM

In their commonplaces, industrialized countries presume that technology is merely a tool open to proper or improper use. As Oxford's R. A. Buchanan (1965) has written, "Technology is essentially amoral, a thing apart from values, an instrument which can be used for good or ill" (p. 163). A knife in a surgeon's hand saves a life and destroys it when used by a murderer. The same projector shows pornography and *National Geographic* specials. One is reminded of the familiar slogan, "Guns don't kill people, people do." In Swedish Lapland, snowmobiles are used for reindeer herding, among Canada's Eskimos for trapping, and in Wisconsin for leisure. Technological products are supposedly neutral and independent; they can support completely different cultures and lifestyles.

The presumption of neutrality has been very costly. It leads to an exaggerated, unbalanced emphasis on magnitude, control, uniformity, and integration—what Arnold Pacey calls the "virtuosity values" (p. 102). As a result, electronic communications are unreflectively trumped as the technological sublime and invested with divine significance. In its heaviest form, neutrality promotes a version of technological determinism in which technology's own inner logic appears to drive its development. This narrow view fosters the working rule that "If it can be done, it should be," eradicating other significant dimensions from decision-making.

The prevailing opinion that technology is neutral typically focuses on hardware—on tools and mechanical artifacts. That definition is starkly deficient in scope compared to technology as a value-laden human process. Technology is the distinct cultural activity in which

human beings form and transform natural reality for practical ends. Given this perspective, valuing penetrates all technological activity, from the analytical framework used to understand technological issues, through the processes of design and fabrication, to the resulting tools and products. Although valuing surely involves the uses to which people put these technological objects, valuing saturates every phase prior to usage as well (Christians, 1989; Mosma, 1984).

There can be no isolated, neutral understanding of technology as though it exists in a presuppositionless vacuum. Instead, technology proceeds out of the whole of human experience and is directed by ultimate human commitments. Technology is value-laden, the product of the primordial valuing activities of humankind. It not only arises as technology interacts with political and social factors, but also emerges from the basic fact that technological objects are unique, not universal.

Technological products are particular. They combine specific resources into distinctive entities with unique properties and capabilities. Technological objects embody decisions to develop one kind of knowledge and not another, to use certain resources and not others, to use energy of a specific form and quantity and not some other. There is no purely neutral rationale for all these decisions. Instead, they arise from conceptions of the world related to such issues as permissible uses, good stewardship, and justice.

Contrary to slogans, technological objects do impose on users the way they can be used. Clearly there is latitude in function, but never complete freedom. Advances in medical technology, for example, condition medical practice. A simple tool such as a can opener must be used in a certain way to be effective. Air travel opens up several options but closes others, such as schedule and destination flexibility or the chance simply to stop and enjoy the scenery. The unique entity called the computer embodies specific capabilities and restrictions which homogenize the heterogeneous; it classifies according to its own internal rules. One's available choices are never randomly susceptible to unlimited genius, but depend on the regimen of technology's structure.

The Frankfurt School, from Herbert Marcuse to Jurgen Habermas, has demonstrated compellingly that modern technology, far from being neutral, embodies values incompatible with democracy's core values and operational demands. Martin Heidegger's (1977) seminal essay, "What is Technology," establishes in the existentialist mode that a technological society is at odds with human freedom. And Jacques Ellul (1969a) develops these ruminations into a full-scale critique, demonstrating that technology's efficiency breeds a climate of amorality.

In Ellul's view, industrialized civilizations have their own recognizable "Geist" or characteristic consciousness which he calls *la technique*.

This ethos of efficiency appears everywhere, fully as important to wheat farmers and napalm companies as to communication engineers searching out a channel capacity of one billion bits per second to replace our present 600,000. "Whatever the diversity of countries and methods, they have one characteristic in common: Concern with effectiveness. . . . This is the supreme law which must never be forgotten" (p. x). Ellul exhaustively portrays one thesis: We are so beguiled by machine productivity that we almost unconsciously reconstruct all our social institutions on this model.

Society has entered a new moral posture, designed "to bring human behavior into harmony with the technicized world, to set up a new scale of values in terms of 'la technique'" (Ellul, 1969b, p. 184). Moral values are thus precluded, since *la technique* and judgments about rightness or wrongness are mutually exclusive. *La technique* acts tyrannically as "a spiritual guillotine, decapitating other values, depriving them of social power" (Shriver, 1972, p. 537). A civilization engrossed in means eliminates all moral obstructions to its ascendancy, as "in ancient days men put out the eyes of nightingales in order to make them sing better" (Ellul, 1967, p. 75). Moral judgment lies ruined within the ashes of a meansified civilization. An ethic of efficiency replaces moral goods with averages and probabilities mathematically computed.

Certainly, political and business structures are ravaged by the spirit of machineness, but the situation is doubly ruinous with regard to communications. As the media sketch out one's world, determine one's conversations, and shape one's decisions and self-identity, they foster in the Western soul a technicized view of life. If the burgeoning state and industrial order are *la technique's* supreme embodiments, our communication systems are its "innermost, and most elusive, manifestation" (Ellul, 1969a, p. xvii). The media are the means to prevent increasing technique "from being felt as too oppressive and to persuade men to submit with good grace" (p. xviii). The devastating invasion of democracy's lifeblood results in people welcoming with enthusiasm the very mechanized constraints which rob them of their freedom. The information system stands powerless with respect to the efficiency motif, but instead subtly adjusts the citizenry to accept it, even to welcome it eagerly. A surfeit of data, far from permitting people to make judgments and form opinions, actually paralyzes them.

Ultimate triumph is sought almost invariably in more streamlined methods, faster computer banks, complex multivariate scales, and electronic consoles of unlimited news and entertainment. Moral purpose is sacrificed to technological excellence. Thus, once the printing press was invented, a process was set in motion for constantly increasing its

capacity, speeding its production, and refining it organizationally. Obeying the same autonomous development, electronics is expanded from Atlantic cable to communication satellites, from seven TV channels to thirty, from specialized companies to multi-national conglomerates. And there is a failure to recognize that this self-augmenting process is alien to moral imperatives. Thus the conundrum: Whatever is gained in transmission is lost in ethics. In the process of fabricating expert mechanical systems, the world is sanitized of moral imperatives. Efficiency and morality are polar opposites, in fact, a contradiction in terms.

The stouthearted must hasten to the philosophical trenches. What could normativity possibly mean in an amoral age? Recovering the idea of norms is the catalyst for an authoritative information ethics in a global context. The debate in metaethics over the nature of norms is the open door through which a significant ethics can advance.

In contemporary parlance, one must decenter the concept of normativity; this long way around is the best path home. As Hans Jonas (1984) writes:

The very same movement which put us in possession of the powers that we now have to be regulated by norms—the movement of modern knowledge called science—has by a necessary complementarity eroded the foundations from which norms are derived; it has destroyed the very idea of norm as such. (p. 22)

This is the conundrum in its starkest terms. Global realities demand global communications. The human race cannot be stitched together effectively by politics or transnational economics. Information is a social necessity for the modern planetary system, but as the system is expanded, its content thickened, and its transmission speeded up, a normative base is being undermined which is needed now more than ever, given the complexities of a global technological civilization. Society is increasingly trapped in Kurt Vonnegut's conundrum: As he reaches into his repertoire of commitments, wisdom, and intelligence, he comes up emptyhanded precisely at the moment he needed them most (Vonnegut, 1952).

In a medieval fable, a dragon is urgently summoned to defend a castle. He pulls together his mighty frame and reaches deep inside for a torrent of fire to scorch the attackers. Nothing happens. The flames in his stomach have died. At the moment of challenge, he becomes little more than a puffing hulk with his fire gone out.

Today, when the demands are most intense, the great information enterprise rouses itself for battle. Ethics committees crop up in professional associations. Alarmists demand more responsible performance. Books and magazines appear on professional virtue, decency, *prime facie* duties, and compassion. The dragon is rumbling, heaving, and puffing—

but the fire has died. At the critical moment, instead of roaring flames, the blaze inside has sputtered out.

Analogously, the long-burning fires of normative thinking are flickering down. At the point where a definitive axiology is most needed for confronting the rage outside, its fundamental inspiration falls away. Principal foundations were designed in a secure Newtonian world with more settled meanings. Now the Enlightenment world view has collapsed, its view of rational being assaulted by Freud and its static universe destroyed by Darwin. The stakes have escalated, the whirlwind is here, and the storm is confronted without a solid theoretical mooring. Obviously, it is foolish to look for a quick fix and unacceptable to hide under fancy rhetoric. But the normativity domain can still be worked as an act of conscience, driven by the need for a vantage point from which to evaluate, judge, and reconstruct all phases of professional morality. ✓ 4/4p

PARADOX

Unfortunately, this dualism and conundrum are exacerbated by a paradox. Norms must be imbedded within culture and history. With this intellectual strategy, transcendental criteria are shifted from a metaphysical, vertical, punctiliar plane to the horizon of community, world, and being; but norms with abiding power they remain, nonetheless. In this view, cultures are sets of symbols that organize the human kingdom and are, therefore, *ipso facto* evaluative. Societies are embodiments of institutions, practices, and structures recognized internally as legitimate. Without allegiance to a web of ordering relations, society becomes inconceivable. A culture's continued existence depends on identifying and defending its normative base. And such a framing of human identity can only be rooted in a proto-norm of universal solidarity. Helmut Peukert (1981) properly insists on universal humanness as the basic principle of ethics and the epicenter of all communication (p. 11).

Refusing to confront normative issues on every level weakens the agenda of universal humanness. How can one legitimately appeal to the supreme value of human life, to an affirmation of unmitigated human dignity, without accepting a network of primal norms—justice, compassion, reciprocity, stewardship—that are nonnegotiable? Everything else comes and goes, both ideologies and the cultures they sustain. If temporality exhausts one's intellectual vistas, wherein lies the possibility of justifying an ethics of human mutuality in the face of anarchy, dialecticism, or equivocation? Without norms that are more than contingent, one cannot finally condemn oppression and dehumanization ✓ ?

except on the grounds of personal prejudice or emotional makeup. Absent a defensible conception of the good, praxis will be vitiated by arbitrariness. In fact, without a commitment to norms, an emancipatory intention is radically jeopardized and the byproduct is moral agnosticism. As Basil Mitchell (1980) maintains, the cultural ethos can be decisive without being exclusive. Determinate human beings are not dissolved in a sea of cultural history.

The debate centers, of course, on a philosophy of history. A cultural history with an anthropological bearing predicates an understanding of history in which universals are the problematic and the radically human is epicenter. This is a theory of culture which privileges the human, and in so doing rests on unresolved arguments. If, for example, we maintain one another as humans only in culture, how is it logically possible that humans who themselves are constituted by culture could fully explain the process by which they are enabled to do the explaining? It is an old dilemma in new clothes: Can a theory of something contain itself? As semiotics teaches, there is not the self and language, but one is ultimately inextricable from the other, the first but a manifestation of the second. As one comprehends culture and its catalytic agent, communication, one thereby makes ontological claims about human being.

But that very conundrum contends for history as a normed process. To establish a transformational ethics, it is necessary to articulate an understanding of human being. And any such attribution, no matter how unintended, carries with it one's moral complicity because beingness is conditioned by the language concerning it. Culture encapsulates what humanity values; but undeveloped, that remains only an opening approximation. Universal claims have worked themselves into historical time. No society, as far as is known, has ever declared open hunting season on humans; that is, none exists where three people can be shot during October. All people create life under the presumption of responsibility for those conceived. As a sign of distinctive humanness, one generates symbolic patterns along the boundaries between moral norms and actual behavior, the deepest self and one's collective role, the intentional and the inevitable. There are epiphanal moments suspended outside of oneself, and one can identify them and believe them to be true. The very possibility of universal norms forces a choice among options conducive to universal solidarity. In an ironic twist on conventional skepticism, history as a normed process is not an ancient remnant but the catalyst for conceptual innovation.

The paradox should be evident. In a post-Newtonian, counter-Enlightenment age, norms can only be recovered culturally, can only be situated in history. They are apprehended *in locis*, yet universal proto-norms beyond region and language are essential to maintaining human

societies and preventing anti-cultural directions in our indigenous institutions. Master-norms are of the first order, conceptually speaking, yet human beings enter them only through that second-order reality known as ethnicity, geography, and ideology. The first and second orders are distinguished as with a windowpane—knowing there is a decisive break, yet both realms are transparent to each other as well.

In April 1989, the author joined twenty-five others from around the globe in Geneva at the United Nations. The group debated the 1948 Human Rights Declaration—that ingenious appeal to universal human dignity which has survived forty years with surprising resilience. The group worked to solidify it ethically and conceptually for a new worldwide thrust, each group member arrogant enough to speak on behalf of an entire nation.

In October of 1989, in Rizal outside Manila, the author toured a harbor in a small fishing boat, observing how international fisheries had fenced off the productive areas for themselves and destroyed for Filipino subsistence fishermen the meager existence which at least had kept them from starving to death. Through People in Communications, these fishermen were gaining a voice, producing pamphlets, drawing cartoons, holding town meetings, shooting eight-minute videos—hoping to gain a hearing in the capital city where they had no access before. As they presented their case in a small room of a cement-block building, they sounded like the Geneva debates in miniature. The Rizal fishermen appealed for minimal justice; they defied those who did not merely steal their fish but stripped away their rights and dignity. And along the chocolate waters of Rizal Bay rather than the splashing fountains of Geneva, the temporary structure rather than the marble Palace of the Nations, the wooden fishing boats of Asia rather than the chauffeured limousines of Europe, the broken English of October 14 rather than the streamlined electronic translations of April 14, proto-norms were being fashioned incarnate in history.

Yet, without the universal, international mode, there is no opportunity to protect the environment, prevent economic bankruptcy, control dizzying population growth, or reduce the weapons of global destruction. Those who plead for preserving local cultures and those envisioning a global information order are both right. However, these are parallel movements, interconnected in a way that makes folklore from the ground up the *sine qua non* for universal norms rooted in our solidarity as a human race. Thus the paradox: In pursuing high technology as the sinews which bind humanity together, the impassioned need for cultural diversity must be nurtured as well. In the absence of empowering indigenous groups, an elitist, paternalistic system is created at odds with the very social ethics constructed in its name. }

At his Guildhall lecture in London in the summer of 1989, Ronald Reagan used the upheaval in China and its vicious repression to celebrate freedom. "You cannot massacre an idea," he said. "You cannot run tanks over hope. You cannot riddle people's yearning with bullets" (Broder, 1989, p. 13).

Mr. Reagan was undoubtedly correct. But he ignored the paradox as he doomed tyranny through the communications revolution. "The biggest of Big Brothers is helpless," he insisted, "against the technology of the information age. Electronic beams blow through the Iron Curtain as if it were lace" (p. 13). But this is not so. Even in open societies, local histories resist intrusion from an anonymous messenger (Broder, 1989). Until symbols resonate from the ground up, the free flow of information remains alien and amorphous. All the sophistication used in negotiating a new world information order between New York City and Mexico City, London and New Delhi, Paris and Caracas, ought to concern itself intraculturally, be it in the villages, between Bangkok and the remote people groups in the mountains, or among a burgeoning ethnic diversity here in the United States.

An assumption of this paper is the elementary distinction between cultural and ethical relativism—the contention that cultural divergence is a source of convergence ethically. The cheerful relativists cannot escape Mannheim's paradox:

Truth, the relativists say, is culture-bound. But if it were, then they, within their own culture, ought not to see their own culture-bound truth as absolute. They cannot proclaim cultural relativism without rising above it, and they cannot rise above it without giving it up. (Quine, 1975, pp. 327-28)

Dietrich Bonhoeffer (1955), the German ethicist martyred in one of Hitler's concentration camps, challenges the reader to keep his or her penultimate concerns from becoming ultimate. He understood them to be organically unified as a whole, just as the Filipino fisherman's insistence on dignity is a universal truth. Cut loose from the ultimate, penultimate concerns are merely self-serving; substituted for the ultimate domain, they become a strident claim at the expense of another's dignity, a plea for justice now transformed into an abrogation of other moral obligations.

CONCLUSION

Technological civilization is grounded in a duality that often mal-functions. Global media for understanding is in conjugant relationship with instruments of annihilation, the tools for peace themselves solidi-

ying a technological order that makes principial claims alien intruders. This technological order is itself confronted by a conundrum and a paradox, the conundrum being the loss of normativity abetted by the very tools required for any semblance of interconnection on a worldwide scale. Paradoxically, the norms which need recovering are appropriate indigenously but must function universally. Perhaps this duality, conundrum, and paradox can be connected through Ronald Sider's (1979, pp. 203-04) story of Dailyville.

In this story, a small town is surrounded by mountains. A steep and winding highway is its only entrance, and many are injured or die coming down the dangerous road. The good people of the village provide a volunteer ambulance service and maintain an efficient hospital twenty-four hours a day. Then an engineer discovers a likely opening for a short tunnel and everyone applauds the idea. But the local Rockefeller owns a service station along the mountain route, and the mayor has a prosperous restaurant halfway down. Soon, the villagers begin doubting the cost estimates for the new tunnel, and a few harass the idea as too visionary. So, to this day, ambulances continue to scream up the road and medical supplies at the Dailyville hospital are fully stocked. The emergency crews vote badges and honors to one another for a job well done.

A theory of normative ethics proposes to dig a tunnel through the mountain. Instead of bandages and antiseptic on the wounds, structural changes are needed in our world view, fundamental transformations in the way information institutions function. Putting this thesis in its most innocuous form: Substantive advance in information ethics depends on validating the idea of normativity as a necessary though insufficient condition. Discussion of ethics is merely an ideological exercise in the absence of normative criteria. While making norms philosophically unassailable may be impossible, a discourse is needed in which normativity as a minimum becomes *herausforderend*—in Heidegger's terms—pressing itself upon us with compelling force. Only when students of information ethics see normativity as *herausforderend* will the research and writing of information professionals be of enduring significance.

While the profession is busy hammering out more ethical practices and siding with those oppressed or cheated by the system, it must continue to raise a prophetic voice on behalf of the tunnel. Research libraries should be ransacked for the great debates over absolutes, and those serious recent attempts to recover the idea of normativity read, e.g., Hans Jonas' (1984) *The Imperative of Responsibility*, Thomas Nagel's (1986) *View from Nowhere*, Michael Polanyi's (1966) *The Tacit Dimension*, and Frederick Will's (1988) *Beyond Deduction*.

Human reality is structured by ideas. In Heidegger's profound

sense, we live in the house of language. Our presuppositions are the grid through which we view the world and act upon it. As we participate in the common task of generating a normative discourse, we contribute to the first-order domain of proto-norms and thereby make possible a meaningful second-order entree to this arena. Providentially, interstices or open spaces still exist in the pointillist canvas called technological civilization. While pure, universal truth is never encountered, attending this territory gives one continuity over space and across time. At least phenomenologically speaking, working on norms enables one to integrate a duality, turn a conundrum into an inspiration, and reconceive a paradox into a mandate for thinking globally while making a difference locally.

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