Medicalized Life

IVAN ILLICH

Selections from *Medical Nemesis: The Expropriation of Health* (1975)

Part I. Clinical Iatrogenesis

1. The Epidemics of Modern Medicine

Doctor-Inflicted Injuries

[...] Unfortunately, futile but otherwise harmless medical care is the least important of the damages a proliferating medical enterprise inflicts on contemporary society. The pain, dysfunction, disability, and anguish resulting from technical medical intervention now rival the morbidity due to traffic and industrial accidents and even war-related activities, and make the impact of medicine one of the most rapidly spreading epidemics of our time. Among murderous institutional torts, only modern malnutrition injures more people than iatrogenic disease in its various manifestations.[47] In the most narrow sense, iatrogenic disease includes only illnesses that would not have come about if sound and professionally recommended treatment had *not* been applied. Within this definition, a patient could sue his therapist if the latter, in the course of his management, failed to apply a recommended treatment that, in the physician's opinion, would have risked making him sick. In a more general and more widely accepted sense, clinical iatrogenic disease comprises all clinical conditions for which remedies, physicians, or hospitals are the pathogens, or "sickening" agents. I will call this plethora of therapeutic side-effects *clinical iatrogenesis*. They are as old as medicine itself,[49] and have always been a subject of medical studies.[50]

Medicines have always been potentially poisonous, but their unwanted side-effects have increased with their power[31] and widespread use. Every twenty-four to thirty-six hours, from 50 to 80 percent of adults in the United States and the United Kingdom swallow a medically prescribed chemical. Some take the wrong drug; others get an old or a contaminated batch, and others a counterfeit; others take several drugs in dangerous combinations; and still others receive injections with improperly sterilized syringes. Some drugs are addictive, others mutilating, and others mutagenic, although perhaps only in combination with food coloring or insecticides. In some patients, antibiotics alter the normal bacterial flora and induce a superinfection, permitting more resistant organisms to proliferate and invade the host. Other drugs contribute to the breeding of drug-resistant strains of bacteria. Subtle kinds of poisoning thus have spread even faster than the bewildering variety and ubiquity of nostrums. Unnecessary surgery is a standard procedure. *Disabling nondiseases* result from the medical treatment of nonexistent diseases and are on the increase: the number of children disabled in Massachusetts through the treatment of cardiac non-disease exceeds the number of children under effective treatment for real cardiac disease.

Doctor-inflicted pain and infirmity have always been a part of medical practice. Professional callousness, negligence, and sheer incompetence are age-old forms of malpractice. With the transformation of the doctor from an artisan exercising a skill on personally known individuals into a technician applying scientific rules to classes of patients, malpractice acquired an anonymous, almost respectable status. What had formerly been considered an abuse of confidence and a moral fault can

now be rationalized into the occasional breakdown of equipment and operators. In a complex technological hospital, negligence becomes "random human error" or "system breakdown," callousness becomes "scientific detachment," and incompetence becomes "a lack of specialized equipment." The depersonalization of diagnosis and therapy has changed malpractice from an ethical into a technical problem.

In 1971, between 12,000 and 15,000 malpractice suits were lodged in United States courts. Less than half of all malpractice claims were settled in less than eighteen months, and more than 10 percent of such claims remain unsettled for over six years. Between 16 and 20 percent of every dollar paid in malpractice insurance went to compensate the victim; the rest was paid to lawyers and medical experts. In such cases, doctors are vulnerable only to the charge of having acted against the medical code, of the incompetent performance of prescribed treatment, or of dereliction out of greed or laziness. The problem, however, is that most of the damage inflicted by the modern doctor does not fall into any of these categories. It occurs in the ordinary practice of well-trained men and women who have learned to bow to prevailing professional judgment and procedure, even though they know (or could and should know) what damage they do.

The United States Department of Health, Education, and Welfare calculates that 7 percent of all patients suffer compensable injuries while hospitalized, though few of them do anything about it. Moreover, the frequency of reported accidents in hospitals is higher than in all industries but mines and high-rise construction. Accidents are the major

cause of death in American children. In proportion to the time spent there, these accidents seem to occur more often in hospitals than in any other kind of place. One in fifty children admitted to a hospital suffers an accident which requires specific treatment. University hospitals are relatively more pathogenic, or, in blunt language, more sickening. It has also been established that one out of every five patients admitted to a typical research hospital acquires an iatrogenic disease, sometimes trivial, usually requiring special treatment, and in one case in thirty leading to death. Half of these episodes result from complications of drug therapy; amazingly, one in ten comes from diagnostic procedures. Despite good intentions and claims to public service, a military officer with a similar record of performance would be relieved of his command, and a restaurant or amusement center would be closed by the police. No wonder that the health industry tries to shift the blame for the damage caused onto the victim, and that the dope-sheet of a multinational pharmaceutical concern tells its readers that "iatrogenic disease is almost always of neurotic origin.”

Defenseless Patients

The undesirable side-effects of approved, mistaken, callous, or contraindicated technical contacts with the medical system represent just the first level of pathogenic medicine. Such *clinical iatrogenesis* includes not only the damage that doctors inflict with the intent of curing or of exploiting the patient, but also those other torts that result from the doctor's attempt to protect himself against the possibility of a suit for malpractice.

Such attempts to avoid litigation and prosecution may now do more damage than any other iatrogenic stimulus.

On a second level, medical practice sponsors sickness by reinforcing a morbid society that encourages people to become consumers of curative, preventive, industrial, and environmental medicine. On the one hand defectives survive in increasing numbers and are fit only for life under institutional care, while on the other hand, medically certified symptoms exempt people from industrial work and thereby remove them from the scene of political struggle to reshape the society that has made them sick. Second-level iatrogenesis finds its expression in various symptoms of social overmedicalization that amount to what I shall call the expropriation of health. This second-level impact of medicine I designate as *social iatrogenesis,* and I shall discuss it in Part II.

On a third level, the so-called health professions have an even deeper, culturally health-denying effect insofar as they destroy the potential of people to deal with their human weakness, vulnerability, and uniqueness in a personal and autonomous way. The patient in the grip of contemporary medicine is but one instance of mankind in the grip of its pernicious techniques.[71] This *cultural iatrogen*esis, which I shall discuss in Part III, is the ultimate backlash of hygienic progress and consists in the paralysis of healthy responses to suffering, impairment, and death. It occurs when people accept health management designed on the engineering model, when they conspire in an attempt to produce, as if it were a commodity, something called "better health." This inevitably results in the managed maintenance of life on high levels of sublethal

illness. This ultimate evil of medical "progress" must be clearly distinguished from both clinical and social iatrogenesis.

I hope to show that on each of its three levels iatrogenesis has become medically irreversible: a feature built right into the medical endeavor. The unwanted physiological, social, and psychological by-products of diagnostic and therapeutic progress have become resistant to medical remedies. New devices, approaches, and organizational arrangements, which are conceived as remedies for clinical and social iatrogenesis, themselves tend to become pathogens contributing to the new epidemic. Technical and managerial measures taken on any level to avoid damaging the patient by his treatment tend to engender a self-reinforcing iatrogenic loop analogous to the escalating destruction generated by the polluting procedures used as antipollution devices.

I will designate this self-reinforcing loop of negative institutional feedback by its classical Greek equivalent and call it *medical nemesis.* The Greeks saw gods in the forces of nature. For them, nemesis represented divine vengeance visited upon mortals who infringe on those prerogatives the gods enviously guard for themselves. Nemesis was the inevitable punishment for attempts to be a hero rather than a human being. Like most abstract Greek nouns, Nemesis took the shape of a divinity. She represented nature's response to *hubris:* to the individual's presumption in seeking to acquire the attributes of a god. Our contemporary hygienic hubris has led to the new syndrome of medical nemesis. By using the Greek term I want to emphasize that the corresponding phenomenon does not fit within the explanatory paradigm now offered by bureaucrats, therapists, and ideologues for the

snowballing diseconomies and disutilities that, lacking all intuition, they have engineered and that they tend to call the "counterintuitive behavior of large systems." By invoking myths and ancestral gods I should make it clear that my framework for analysis of the current breakdown of medicine is foreign to the industrially determined logic and ethos. I believe that the *reversal of nemesis* can come only from within man and not from yet another managed (heteronomous) source depending once again on presumptious expertise and subsequent mystification.

Medical nemesis is resistant to medical remedies. It can be reversed only through a recovery of the will to self-care among the laity, and through the legal, political, and institutional recognition of the right to care, which imposes limits upon the professional monopoly of physicians. My final chapter proposes guidelines for stemming medical nemesis and provides criteria by which the medical enterprise can be kept within healthy bounds. I do not suggest any specific forms of health care or sick-care, and I do not advocate any new medical philosophy any more than I recommend remedies for medical technique, doctrine, or organization. However, I do propose an alternative approach to the use of medical organization and technology together with the allied bureaucracies and illusions.

Part II. Social Iatrogenesis

2. The Medicalization of Life

Political Transmission of Iatrogenic Disease

Until recently medicine attempted to enhance what occurs in nature. It fostered the tendency of wounds to heal, of blood to clot, and of bacteria to be overcome by natural immunity. Now medicine tries to engineer the dreams of reason. Oral contraceptives, for instance, are prescribed "to prevent a normal occurrence in healthy persons." Therapies induce the organism to interact with molecules or with machines in ways for which there is no precedent in evolution. Grafts involve the outright obliteration of genetically programmed immunological defenses. The relationship between the interest of the patient and the success of each specialist who manipulates one of his "conditions" can thus no longer be assumed; it must now be proved, and the net contribution of medicine to society's burden of disease must be assessed from without the profession. But any charge against medicine for the clinical damage it causes constitutes only the first step in the indictment of pathogenic medicine. The trail beaten in the harvest is only a reminder of the greater damage done by the baron to the village that his hunt overruns.

Social Iatrogenesis

Medicine undermines health not only through direct aggression against individuals but also through the impact of its social organization on the total milieu. When medical damage to individual health is produced by a sociopolitical mode of transmission, I will speak of "social iatrogenesis," a term designating all impairments to health that are due precisely to those socio-economic transformations which have been made attractive, possible, or necessary by the institutional shape health care has taken.

Social iatrogenesis designates a category of etiology that encompasses many forms. It obtains when medical bureaucracy creates ill-health by increasing stress, by multiplying disabling dependence, by generating new painful needs, by lowering the levels of tolerance for discomfort or pain, by reducing the leeway that people are wont to concede to an individual when he suffers, and by abolishing even the right to self-care. Social iatrogenesis is at work when health care is turned into a standardized item, a staple; when all suffering is "hospitalized" and homes become inhospitable to birth, sickness, and death; when the language in which people could experience their bodies is turned into bureaucratic gobbledegook; or when suffering, mourning, and healing outside the patient role are labeled a form of deviance.

Medical Monopoly

Like its clinical counterpart, social iatrogenesis can escalate from an adventitious feature into an inherent characteristic of the medical system. When the intensity of biomedical

intervention crosses a critical threshold, clinical iatrogenesis turns from error, accident, or fault into an incurable perversion of medical practice. In the same way, when professional autonomy degenerates into a radical monopoly[8] and people are rendered impotent to cope with their milieu, social iatrogenesis becomes the main product of the medical organization.

A radical monopoly goes deeper than that of any one corporation or any one government. It can take many forms. When cities are built around vehicles, they devalue human feet; when schools pre-empt learning, they devalue the autodidact; when hospitals draft all those who are in critical condition, they impose on society a new form of dying. Ordinary monopolies corner the market; radical monopolies disable people from doing or making things on their own.[10] The commercial monopoly restricts the flow of commodities; the more insidious social monopoly paralyzes the output of nonmarketable use-values.[11] Radical monopolies impinge still further on freedom and independence. They impose a society-wide substitution of commodities for use-values by reshaping the milieu and by "appropriating" those of its general characteristics which have enabled people so far to cope on their own. Intensive education turns autodidacts into unemployables, intensive agriculture destroys the subsistence farmer, and the deployment of police undermines the community's self-control. The malignant spread of medicine has comparable results: it turns mutual care and self-medication into misdemeanors or felonies. Just as clinical iatrogenesis becomes medically incurable when it reaches a critical intensity and then can be reversed only by a decline of

the enterprise, so can social iatrogenesis be reversed only by political action that retrenches professional dominance.

A radical monopoly feeds on itself. Iatrogenic medicine reinforces a morbid society in which social control of the population by the medical system turns into a principal economic activity. It serves to legitimize social arrangements into which many people do not fit. It labels the handicapped as unfit and breeds ever new categories of patients. People who are angered, sickened, and impaired by their industrial labor and leisure can escape only into a life under medical supervision and are thereby seduced or disqualified from political struggle for a healthier world.

Social iatrogenesis is not yet accepted as a common etiology of disease. If it were recognized that diagnosis often serves as a means of turning political complaints against the stress of growth into demands for more therapies that are just more of its costly and stressful outputs, the industrial system would lose one of its major defenses. At the same time, awareness of the degree to which iatrogenic ill-health is politically communicated would shake the foundations of medical power much more profoundly than any catalogue of medicine's technical faults.

Preventive Stigma

As curative treatment focuses increasingly on conditions in which it is ineffectual, expensive, and painful, medicine has begun to market prevention. The concept of morbidity has

been enlarged to cover prognosticated risks. Along with sick-care, health care has become a commodity, something one pays for rather than something one does. The higher the salary the company pays, the higher the rank of an *aparatchik,* the more will be spent to keep the valuable cog well oiled. Maintenance costs for highly capitalized manpower are the new measure of status for those on the upper rungs. People keep up with the Joneses by emulating their "check-ups," an English word which has entered French, Serbian, Spanish, Malay, and Hungarian dictionaries. People are turned into patients without being sick. The medicalization of prevention thus becomes another major symptom of social iatrogenesis. It tends to transform personal responsibility for my future into my management by some agency.

Usually the danger of routine diagnosis is even less feared than the danger of routine treatment, though social, physical, and psychological torts inflicted by medical classification are no less well documented. Diagnoses made by the physician and his helpers can define either temporary or permanent roles for the patient. In either case, they add to a biophysical condition a social state created by presumably authoritative evaluation. When a veterinarian diagnoses a cow's distemper, it doesn't usually affect the patient's behavior. When a doctor diagnoses a human being, it does. In those instances where the physician functions as healer he confers on the person recognized as sick certain rights, duties, and excuses which have a conditional and temporary legitimacy and which lapse when the patient is healed; most sickness leaves no taint of deviance or disorderly conduct on the patient's reputation. No one is interested in ex-allergies or ex-appendectomy patients, just as no one will be remembered as an ex-traffic offender. In

other instances, however, the physician acts primarily as an actuary, and his diagnosis can defame the patient, and sometimes his children, for life. By attaching

irreversible degradation to a person's identity, it brands him forever with a permanent stigma. The objective condition may have long since disappeared, but the iatrogenic label sticks. Like ex-convicts, former mental patients, people after their first heart attack, former alcoholics, carriers of the sickle-cell trait, and (until recently) ex-tuberculotics are transformed into outsiders for the rest of their lives.

Professional suspicion alone is enough to legitimize the stigma even if the suspected condition never existed. The medical label may protect the patient from punishment only to submit him to interminable instruction, treatment, and discrimination, which are inflicted on him for his professionally presumed benefit.

In the past, medicine labeled people in two ways: those for whom cures could be attempted, and those who were beyond repair, such as lepers, cripples, oddities, and the dying. Either way, diagnosis could lead to stigma. Medicalized prevention now creates a third way. It turns the physician into an officially licensed magician whose prophecies cripple even those who are left unharmed by his brews. Diagnosis may exclude a human being with bad genes from being born, another from promotion, and a third from political life. The mass hunt for health risks begins with dragnets designed to apprehend those needing special protection: prenatal medical visits; well-child-care clinics for infants; school and camp check- ups and prepaid medical schemes. Recently genetic and blood pressure

"counseling" services were added. The United States proudly led the world in organizing disease-hunts and, later, in questioning their utility.

In the past decade, automated multiphasic health-testing became operational and was welcomed as the poor man's escalator into the world of Mayo and Massachusetts General. This assembly-line procedure of complex chemical and medical examinations can be performed by paraprofessional technicians at a surprisingly low cost. It purports to offer uncounted millions more sophisticated detection of hidden therapeutic needs than was available in the sixties even for the most "valuable" hierarchs in Houston or Moscow. At the outset of this testing, the lack of controlled studies allowed the salesmen of mass-produced prevention to foster unsubstantiated expectations. (More recently, controlled comparative studies of population groups benefitting from maintenance service and early diagnosis have become available; two dozen such studies indicate that these diagnostic procedures —even when followed by high-level medical treatments—have no positive impact on life expectancy.) Ironically, the serious asymptomatic disorders which this kind of screening alone can discover among adults are frequently incurable illnesses in which early treatment only aggravates the patient's physical condition. In any case, it transforms people who feel healthy into patients anxious for their verdict.

In the detection of sickness medicine does two things: it "discovers" new disorders, and it ascribes these disorders to concrete individuals. To discover a new category of disease is the pride of the medical scientist. To ascribe the pathology to

some Tom, Dick, or Harry is the first task of the physician acting as member of a consulting profession. Trained to "do something" and express his concern, he feels active, useful, and effective when he can diagnose disease. Though, theoretically, at the first encounter the physician does not presume that his patient is affected by a disease, through a form of fail-safe principle he usually acts as if imputing a disease to the patient were better than disregarding one. The medical-decision rule pushes him to seek safety by diagnosing illness rather than health. The classic demonstration of this bias came in an experiment conducted in 1934. In a survey of 1,000 eleven-year-old children from the public schools of New York, 61 percent were found to have had their tonsils removed. "The remaining 39 percent were subjected to examination by a group of physicians, who selected 45 percent of these for tonsillectomy and rejected the rest. The rejected children were re-examined by another group of physicians, who recommended tonsillectomy for 46 percent of those remaining after the first examination. When the rejected children were examined a third time, a similar percentage was selected for tonsillectomy so that after three examinations only sixty-five children remained who had not been recommended for tonsillectomy. These subjects were not further examined because the supply of examining physicians ran out." This test was conducted at a free clinic, where financial considerations could not explain the bias.

Diagnostic bias in favor of sickness combines with frequent diagnostic error. Medicine not only imputes questionable categories with inquisitorial enthusiasm; it does so at a rate of miscarriage that no court system could tolerate. In one instance, autopsies showed that more than half the patients

who died in a British university clinic with a diagnosis of specific heart failure had in fact died of something else. In another instance, the same series of chest X-rays shown to the same team of specialists on different occasions led them to change their mind on 20 percent of all cases. Up to three times as many patients will tell Dr. Smith that they cough, produce sputum, or suffer from stomach cramps as will tell Dr. Jones. Up to one- quarter of simple hospital tests show seriously divergent results when done from the same sample in two different labs. Nor do machines seem to be any more infallible. In a competition between diagnostic machines and human diagnosticians in 83 cases recommended for pelvic surgery, pathology showed that both man and machine were correct in 22 instances; in 37 instances the computer correctly rejected the doctor's diagnosis; in 11 instances the doctors proved the computer wrong; and in 10 cases both were in error.

In addition to diagnostic bias and error, there is wanton aggression. A cardiac catheterization, used to determine if a patient is suffering from cardiomyopathy— admittedly, this is not done routinely—costs $350 and kills one patient in fifty. Yet there is no evidence that a *differential* diagnosis based on its results extends either the life expectancy or the comfort of the patient. Most tests are less murderous and much more commonly performed, but many still involve known risks to the individual or his offspring which are high enough to obscure the value of whatever information they can provide. Many routine uses of X-rays and fluoroscope on the young, the injection or ingestion of reagents and tracers, and the use of Ritalin to diagnose hyperactivity in children are examples. Attendance in public schools where teachers are vested with delegated medical powers constitutes a major health risk for

children.Even simple and otherwise benign examinations turn into risks when multiplied. When a test is associated with several others, it has considerably greater power to harm than when it is conducted by itself. Often tests provide guidance in the choice of therapy. Unfortunately, as the tests turn more complex and are multiplied, their results frequently provide guidance only in selecting the form of intervention which the patient may survive, and not necessarily that which will help him. Worst of all, when people have lived through complex positive laboratory diagnosis, unharmed or not, they have incurred a high risk of being submitted to therapy that is odious, painful, crippling, and expensive. No wonder that physicians tend to delay longer than laymen before going to see their own doctor and that they are in worse shape when they get there.

Routine performance of early diagnostic tests on large populations guarantees the medical scientist a broad base from which to select the cases that best fit existing treatment facilities or are most useful in the attainment of research goals, whether or not the therapies cure, rehabilitate, or soothe. In the process, people are strengthened in their belief that they are machines whose durability depends on visits to the maintenance shop, and are thus not only obliged but also pressured to foot the bill for the market research and the sales activities of the medical establishment.

Diagnosis always intensifies stress, defines incapacity, imposes inactivity, and focuses apprehension on nonrecovery, on uncertainty, and on one's dependence upon future medical findings, all of which amounts to a loss of autonomy for self-definition. It also isolates a person in a special role, separates

him from the normal and healthy, and requires submission to the authority of specialized personnel. Once a society organizes for a preventive disease-hunt, it gives epidemic proportions to diagnosis. This ultimate triumph of therapeutic culture[183] turns the independence of the average healthy person into an intolerable form of deviance.

In the long run the main activity of such an inner-directed systems society leads to the phantom production of life expectancy as a commodity. By equating statistical man with biologically unique men, an insatiable demand for finite resources is created. The individual is subordinated to the greater "needs" of the whole, preventive procedures become compulsory, and the right of the patient to withhold consent to his own treatment vanishes as the doctor argues that he must submit to diagnosis, since society cannot afford the burden of curative procedures that would be even more expensive.

PART III
Cultural Iatrogenesis

Introduction

We have dealt so far with two ways in which the predominance of medicalized health care becomes an obstacle to a healthy life: first, clinical iatrogenesis, which results when organic coping capacity is replaced by heteronomous management; and, second, social iatrogenesis, in which the environment is deprived of those conditions that endow individuals, families, and neighborhoods with control over their own internal states and over their milieu. Cultural iatrogenesis represents a third dimension of medical health-denial. It sets in when the medical enterprise saps the will of people to suffer their reality. It is a symptom of such iatrogenesis that the term "suffering" has become almost useless for designating a realistic human response because it evokes superstition, sadomasochism, or the rich man's condescension to the lot of the poor. Professionally organized medicine has come to function as a domineering moral enterprise that advertises industrial expansion as a war against all suffering. It has thereby undermined the ability of individuals to face their reality, to express their own values, and to accept inevitable and often irremediable pain and impairment, decline and death.

To be in good health means not only to be successful in coping with reality but also to enjoy the success; it means to be able to feel alive in pleasure and in pain; it means to cherish but also to risk survival. Health and suffering as experienced sensations are phenomena that distinguish men from beasts.[2] Only storybook lions are said to *suffer* and only pets to merit compassion when they are in ill health.

Human health adds openness to instinctual performance. It is something more than a concrete behavior pattern in customs, usages, traditions, or habit-clusters. It implies performance according to a set of control mechanisms: plans, recipes, rules, and instructions, all of which govern personal behavior. To a large extent culture and health coincide. Each culture gives shape to a unique *Gestalt* of health and to a unique conformation of attitudes towards pain, disease, impairment, and death, each of which designates a class of that human performance that has traditionally been called the art of suffering.

Each person's health is a responsible performance in a social script. How he relates to the sweetness and the bitterness of reality and how he acts towards others whom he perceives as suffering, as weakened, or as anguished determine each person's sense of his own body, and with it, his health. Body-sense is experienced as an ever-renewed gift of culture. In Java people flatly say, "To be human is to be Javanese." Small children, boors, simpletons, the insane, and the flagrantly immoral are said to be *ndurung djawa* (not yet Javanese). A "normal" adult capable of acting in terms of the highly elaborate system of etiquette, possessed of the delicate aesthetic perceptions associated with music, dance, drama,

and textile design, and responsive to the subtle promptings of the divine residing in the stillness of each individual's inward-turning consciousness is *ampun djawa* (already Javanese). To be human is not just to breathe; it is also to control one's breathing by yogalike techniques so as to hear in inhalation and exhalation the literal voice of God pronouncing his own name, *hu Allah.* Cultured health is bounded by each society's style in the art of living, feasting, suffering, and dying.

All traditional cultures derive their hygienic function from this ability to equip the individual with the means for making pain tolerable, sickness or impairment understandable, and the shadow of death meaningful. In such cultures health care is always a program for eating, drinking, working, breathing, loving, politicking, exercising, singing, dreaming, warring, and suffering.

Most healing is a traditional way of consoling, caring, and comforting people while they heal, and most sick-care a form of tolerance extended to the afflicted. Only those cultures survive that provide a viable code that is adapted to a group's genetic make-up, to its history, to its environment, and to the peculiar challenges represented by competing groups of neighbors.

The ideology promoted by contemporary cosmopolitan medical enterprise runs counter to these functions. It radically undermines the continuation of old cultural programs and prevents the emergence of new ones that would provide a pattern for self-care and suffering. Wherever in the world a culture is medicalized, the traditional framework for habits that can become conscious in the personal practice of the

virtue of hygiene is progressively trammeled by a mechanical system, a medical code by which individuals submit to the instructions emanating from hygienic custodians.[21] Medicalization constitutes a prolific bureaucratic program based on the denial of each man's need to deal with pain, sickness, and death.[22] The modern medical enterprise represents an endeavor to do for people what their genetic and cultural heritage formerly equipped them to do for themselves. Medical civilization is planned and organized to kill pain, to eliminate sickness, and to abolish the need for an art of suffering and of dying. This progressive flattening out of personal, virtuous performance constitutes a new goal which has never before been a guideline for social life. Suffering, healing, and dying, which are essentially intransitive activities that culture taught each man, are now claimed by technocracy as new areas of policy-making and are treated as malfunctions from which populations ought to be institutionally relieved. The goals of metropolitan medical civilization are thus in opposition to every single cultural health program they encounter in the process of progressive colonization.

3. The Killing of Pain

When cosmopolitan medical civilization colonizes any traditional culture, it transforms the experience of pain. The same nervous stimulation that I shall call "pain sensation" will result in a distinct experience, depending not only on personality but also on culture. This experience, as distinct from the painful sensation, implies a uniquely human performance called *suffering.* Medical civilization, however,

tends to turn pain into a technical matter and thereby deprives suffering of its inherent personal meaning. People unlearn the acceptance of suffering as an inevitable part of their conscious coping with reality and learn to interpret every ache as an indicator of their need for padding or pampering. Traditional cultures confront pain, impairment, and death by interpreting them as challenges soliciting a response from the individual under stress; medical civilization turns them into demands made by individuals on the economy, into problems that can be managed or *produced* out of existence. Cultures are systems of meanings, cosmopolitan civilization a system of techniques. Culture makes pain tolerable by integrating it into a meaningful setting; cosmopolitan civilization detaches pain from any subjective or intersubjective context in order to annihilate it. Culture makes pain tolerable by interpreting its necessity; only pain perceived as curable is intolerable.

A myriad virtues express the different aspects of fortitude that traditionally enabled people to recognize painful sensations as a challenge and to shape their own experience accordingly. Patience, forbearance, courage, resignation, self- control, perseverance, and meekness each express a different coloring of the responses with which pain sensations were accepted, transformed into the experience of suffering, and endured. Duty, love, fascination, routines, prayer, and compassion were some of the means that enabled pain to be borne with dignity. Traditional cultures made everyone responsible for his own performance under the impact of bodily harm or grief. Pain was recognized as an inevitable part of the subjective reality of one's own body in which everyone constantly finds himself, and which is constantly being shaped by his conscious reactions to it. People knew that they had to heal on their own,

to deal on their own with their migraine, their lameness, or their grief.

The pain inflicted on individuals had a limiting effect on the abuses of man by man. Exploiting minorities sold liquor or preached religion to dull their victims, and slaves took to the blues or to coca-chewing. But beyond a critical point of exploitation, traditional economies which were built on the resources of the human body had to break down. Any society in which the intensity of discomforts and pains inflicted rendered them culturally "insufferable" could not but come to an end.

Now an increasing portion of all pain is man-made, a side-effect of strategies for industrial expansion. Pain has ceased to be conceived as a "natural" or "metaphysical" evil. It is a social curse, and to stop the "masses" from cursing society when they are pain-stricken, the industrial system delivers them medical pain-killers. Pain thus turns into a demand for more drugs, hospitals, medical services, and other outputs of corporate, impersonal care and into political support for further corporate growth no matter what its human, social, or economic cost. Pain has become a political issue which gives rise to a snowballing demand on the part of anesthesia consumers for artificially induced insensibility, unawareness, and even unconsciousness.

Traditional cultures and technological civilization start from opposite assumptions. In every traditional culture the psychotherapy, belief systems, and drugs needed to withstand most pain are built into everyday behavior and reflect the conviction that reality is harsh and death inevitable. In the

twentieth century dystopia, the necessity to bear painful reality, within or without, is interpreted as a failure of the socio-economic system, and pain is treated as an emergent contingency which must be dealt with by extraordinary interventions.

The experience of pain that results from pain messages received by the brain depends in its quality and in its quantity on genetic endowment and on at least four functional factors other than the nature and intensity of the stimulus: namely, culture, anxiety, attention, and interpretation. All these are shaped by social determinants, ideology, economic structure, and social character. Culture decrees whether the mother or the father or both must groan when the child is born. Circumstances and habits determine the anxiety level of the sufferer and the attention he gives to his bodily sensations. Training and conviction determine the meaning given to bodily sensations and influence the degree to which pain is experienced. Effective magic relief is often better provided by popular superstition than by high-class religion. The prospect which is opened by the painful event determines how well it will be suffered: injuries received near the climax of sex or that of heroic performance are frequently not even felt. Soldiers wounded on the Anzio Beachhead who hoped their wounds would get them out of the army and back home as heroes rejected morphine injections that they would have considered absolutely necessary if similar injuries had been inflicted by the dentist or in the operating theater.

As culture is medicalized, the social determinants of pain are distorted. Whereas culture recognizes pain as an intrinsic, intimate, and incommunicable "disvalue," medical civilization

focuses primarily on pain as a systemic reaction that can be verified, measured, and regulated. Only pain perceived by a third person from a distance constitutes a diagnosis that calls for specific treatment. This objectivization and quantification of pain goes so far that medical treatises speak of painful diseases, operations, or conditions even in cases where patients claim to be unaware of pain. Pain calls for methods of control by the physician rather than an approach that might help the person in pain take on responsibility for his experience. The medical profession judges which pains are authentic, which have a physical and which a psychic base, which are imagined, and which are simulated. Society recognizes and endorses this professional judgment. Compassion becomes an obsolete virtue. The person in pain is left with less and less social context to give meaning to the experience that often overwhelms him.

The history of medical perception of pain has not yet been written. A few learned monographs deal with the moments during the last 250 years in which the attitude of physicians towards pain changed, and some historical references can be found in papers dealing with contemporary attitudes towards pain. The existential school of anthropological medicine has gathered valuable insights into the development of modern pain while tracing the changes in bodily perception in a technological age. The relationship between the medical institutions and the anxiety suffered by their patients has been explored by psychiatrists and occasionally by general physicians. But the relationship of corporate medicine to bodily pain in its real sense is still virgin territory for research.

The historian of pain has to face three special problems. The first is the profound transformation undergone by the relationship of pain to the other ills man can suffer. Pain has changed its position in relation to grief, guilt, sin, anguish, fear, hunger, impairment, and discomfort. What we call pain in a surgical ward is something for which former generations had no special name. It now seems as if pain were only that part of human suffering over which the medical profession can claim competence or control. There is no historical precedent for the contemporary situation in which the experience of personal bodily pain is shaped by the therapeutic program designed to destroy it. The second problem is language. The technical matter which contemporary medicine designates by the term "pain" even today has no simple equivalent in ordinary speech. In most languages the term taken over by the doctors covers grief, sorrow, anguish, shame, and guilt. The English "pain" and the German "Schmerz" are still relatively easy to use in such a way that a mostly, though not exclusively, physical meaning is conveyed. Most Indo-Germanic synonyms cover a wider range of meaning:[22] bodily pain may be designated as "hard work," "toil," or "trial," as "torture," "endurance," "punishment," or more generally, "affliction," as "illness," "tiredness," "hunger," "mourning," "injury," "distress," "sadness," "trouble," "confusion," or "oppression." This litany is far from complete: it shows that language can distinguish many kinds of "evils," all of which have a bodily reflection. In some languages bodily pain is outright "evil." If a French doctor asks a typical Frenchman where he has pain, the patient will point to the spot and say, "J'ai mal là." On the other hand, a Frenchman can say, "Je souffre dans toute ma chair," and at the same time tell his doctor, "Je n'ai mal nulle part." If the concept of bodily pain

has undergone an evolution in medical usage, it cannot be grasped simply in the changing significance of any one term.

A third obstacle to any history of pain is its exceptional axiological and epistemological status.[23] Nobody will ever understand "my pain" in the way I mean it, unless he suffers the same headache, which is impossible, because he is another person. In this sense "pain" means a breakdown of the clear-cut distinction between organism and environment, between stimulus and response. It does not mean a certain class of experience that allows you and me to compare our headaches; much less does it mean a certain physiological or medical entity, a clinical case with certain pathological signs. It is not "pain in the sternocleidomastoid" which is perceived as a systematic disvalue for the medical scientist.

The exceptional kind of disvalue that is pain promotes an exceptional kind of certainty. Just as "my pain" belongs in a unique way only to me, so I am utterly alone with it. I cannot share it. I have no doubt about the reality of the pain experience, but I cannot really tell anybody what I experience. I surmise that others have "their" pains, even though I cannot perceive what they mean when they tell me about them. I am certain about the existence of their pain only in the sense that I am certain of my compassion for them. And yet, the deeper my compassion, the deeper is my certitude about the other person's utter loneliness in relation to his experience. Indeed, I recognize the signs made by someone who is in pain, even when this experience is beyond my aid or comprehension. This awareness of extreme loneliness is a peculiarity of the compassion we feel for bodily pain; it also sets this experience apart from any other experience, from compassion for the

anguished, sorrowful, aggrieved, alien, or crippled. In an extreme way, the sensation of bodily pain lacks the distance between cause and experience found in other forms of suffering.

Notwithstanding the inability to communicate bodily pain, perception of it in another is so fundamentally human that it cannot be put into parentheses. The patient cannot conceive that his doctor is unaware of his pain, any more than the man on the rack can conceive this about his torturer. The certainty that we share the experience of pain is of a very special kind, greater than the certainty that we share humanity with others. There have been people who have treated their slaves as chattels, yet recognized that this chattel was able to *suffer* pain. Slaves are more than dogs, who can be hurt but cannot suffer. Wittgenstein has shown that our special, radical certainty about the existence of pain in other people can coexist with an inextricable difficulty in explaining how this sharing of the unique can come about.

It is my thesis that bodily pain, experienced as an intrinsic, intimate, and incommunicable disvalue, includes in our awareness the social situation in which those who suffer find themselves. The character of the society shapes to some degree the personality of those who suffer and thus determines the way they experience their own physical aches and hurts as concrete pain. In this sense, it should be possible to investigate the progressive transformation of the pain experience that has accompanied the medicalization of society. The act of suffering pain always has a historical dimension.