

Cancer is generally thought an inappropriate disease for a romantic character, in contrast to tuberculosis, perhaps because unromantic depression has supplanted the romantic notion of melancholy. "A fitful strain of melancholy," Poe wrote, "will ever be found inseparable from the perfection of the beautiful." Depression is melancholy minus its charms—the animation, the fits.

Supporting the theory about the emotional causes of cancer is a growing literature and body of research, and scarcely a week passes without a new article announcing to some general public or other the scientific link between cancer and painful feelings. Investigations are cited—most articles refer to the same ones—in which out of, say, several hundred cancer patients, two-thirds or three-fifths report being depressed or unsatisfied with their lives, and having suffered from the loss (through death or rejection or separation) of a parent, lover, spouse, or close friend. But it seems likely that of several hundred people who do *not* have cancer, most would also report depressing emotions and past traumas: this is called the human condition. And these case histories

are recounted in a particularly forthcoming language of despair, of discontent about and obsessive preoccupation with the isolated self and its never altogether satisfactory "relationships," which bears the unmistakable stamp of our consumer culture. It is a language many Americans now use about themselves.*

Investigations carried out by a few doctors in the last century showed a high correlation between cancer and that era's complaints. In contrast to contemporary American cancer patients, who invariably report having feelings of isolation and loneliness since childhood, Victorian cancer patients described overcrowded lives,

* A study by Dr. Caroline Bedell Thomas of the Johns Hopkins University School of Medicine was thus summarized in one recent newspaper article ("Can Your Personality Kill You?"): "In brief, cancer victims are low-gear persons, seldom prey to outbursts of emotion. They have feelings of isolation from their parents dating back to childhood." Drs. Claus and Marjorie Bahnson at the Eastern Pennsylvania Psychiatric Institute have "charted a personality pattern of denial of hostility, depression and of memory of emotional deprivation in childhood" and "difficulty in maintaining close relationships." Dr. O. Carl Simonton, a radiologist in Fort Worth, Texas, who gives patients both radiation and psychotherapy, describes the cancer personality as someone with "a great tendency for self-pity and a markedly impaired ability to make and maintain meaningful relationships." Lawrence LeShan, a New York psychologist and psychotherapist (*You Can Fight for Your Life: Emotional Factors in the Causation of Cancer* [1977]), claims that "there is a general type of personality configuration among the majority of cancer patients" and a world-view that cancer patients share and "which pre-dates the development of cancer." He divides "the basic emotional pattern of the cancer patient" into three parts: "a childhood or adolescence marked by feelings of isolation," the loss of the "meaningful relationship" found in adulthood, and a subsequent "conviction that life holds no more hope." "The cancer patient," LeShan writes, "almost invariably is contemptuous of himself, and of his abilities and possibilities." Cancer patients are "empty of feeling and devoid of self."

burdened with work and family obligations, and bereavements. These patients don't express discontent with their lives as such or speculate about the quality of its satisfactions and the possibility of a "meaningful relationship." Physicians found the causes or predisposing factors of their patients' cancers in grief, in worry (noted as most acute among businessmen and the mothers of large families), in straitened economic circumstances and sudden reversals of fortune, and in overwork—or, if the patients were successful writers or politicians, in grief, rage, intellectual overexertion, the anxiety that accompanies ambition, and the stress of public life.*

Nineteenth-century cancer patients were thought to get the disease as the result of hyperactivity and hyperintensity. They seemed to be full of emotions that had to be damped down. As a prophylaxis against cancer, one English doctor urged his patients "to avoid overtaxing their strength, and to bear the ills of life with

* "Always much trouble and hard work" is a notation that occurs in many of the brief case histories in Herbert Snow's *Clinical Notes on Cancer* (1883). Snow was a surgeon in the Cancer Hospital in London, and most of the patients he saw were poor. A typical observation: "Of 140 cases of breast-cancer, 103 gave an account of previous mental trouble, hard work, or other debilitating agency. Of 187 uterine ditto, 91 showed a similar history." Doctors who saw patients who led more comfortable lives made other observations. The physician who treated Alexandre Dumas for cancer, G. von Schmitt, published a book on cancer in 1871 in which he listed "deep and sedentary study and pursuits, the feverish and anxious agitation of public life, the cares of ambition, frequent paroxysms of rage, violent grief" as "the principal causes" of the disease. Quoted in Samuel J. Kowal, M.D., "Emotions as a Cause of Cancer: 18th and 19th Century Contributions," *Review of Psychoanalysis*, 42, 3 (July 1955).

equanimity; above all things, not to 'give way' to any grief." Such stoic counsels have now been replaced by prescriptions for self-expression, from talking it out to the primal scream. In 1885, a Boston doctor advised "those who have apparently benign tumors in the breast of the advantage of being cheerful." Today, this would be regarded as encouraging the sort of emotional dissociation now thought to predispose people to cancer.

Popular accounts of the psychological aspects of cancer often cite old authorities, starting with Galen, who observed that "melancholy women" are more likely to get breast cancer than "sanguine women." But the meanings have changed. Galen (second century A.D.) meant by melancholy a physiological condition with complex characterological symptoms; we mean a mere mood. "Grief and anxiety," said the English surgeon Sir Astley Cooper in 1845, are among "the most frequent causes" of breast cancer. But the nineteenth-century observations undermine rather than support late-twentieth-century notions—evoking a manic or manic-depressive character type almost the opposite of that forlorn, self-hating, emotionally inert creature, the contemporary cancer personality. As far as I know, no oncologist convinced of the efficacy of polychemotherapy and immunotherapy in treating patients has contributed to the fictions about a specific cancer personality. Needless to say, the hypothesis that distress can affect immunological responsiveness (and, in some circumstances, lower immunity to

disease) is hardly the same as—or constitutes evidence for—the view that emotions cause diseases, much less for the belief that specific emotions can produce specific diseases.

Recent conjecture about the modern cancer character type finds its true antecedent and counterpart in the literature on TB, where the same theory, put in similar terms, had long been in circulation. In his *Morbidus Anglicus* (1672), Gideon Harvey declared “melancholy” and “cholera” to be “the sole cause” of TB (for which he used the metaphoric term “corrosion”). In 1881, a year before Robert Koch published his paper announcing the discovery of the tubercle bacillus and demonstrating that it was the primary cause of the disease, a standard medical textbook gave as the causes of tuberculosis: hereditary disposition, unfavorable climate, sedentary indoor life, defective ventilation, deficiency of light, and “depressing emotions.”* Though the entry had to be changed for the next edition, it took a long time for these notions to lose credibility. “I’m mentally ill, the disease of the lungs is nothing but an overflowing of my mental disease,” Kafka wrote to Milena in 1920. Applied to TB, the theory that emotions cause diseases survived well into this century—until, finally, it was discovered how to cure the disease. The theory’s fashionable current application—which relates cancer to

* August Flint and William H. Welch, *The Principles and Practice of Medicine* (fifth edition, 1881), cited in René and Jean Dubos, *The White Plague* (1952).

emotional withdrawal and lack of self-confidence and confidence in the future—is likely to prove no more tenable than its application to tuberculosis.

In the plague-ridden England of the late sixteenth and seventeenth centuries, according to the historian Keith Thomas, it was widely believed that “the happy man would not get plague.” The fantasy that a happy state of mind would fend off disease probably flourished for all infectious diseases, before the nature of infection was understood. Theories that diseases are caused by mental states and can be cured by will power are always an index of how much is not understood about the physical terrain of a disease.

Moreover, there is a peculiarly modern predilection for psychological explanations of disease, as of everything else. Psychologizing seems to provide control over the experiences and events (like grave illnesses) over which people have in fact little or no control. Psychological understanding undermines the “reality” of a disease. That reality has to be explained. (It really means; or is a symbol of; or must be interpreted so.) For those who live neither with religious consolations about death nor with a sense of death (or of anything else) as natural, death is the obscene mystery, the ultimate affront, the thing that cannot be controlled. It can only be denied. A large part of the popularity and persuasiveness of psychology comes from its being a sublimated spiritualism: a secular,

ostensibly scientific way of affirming the primacy of "spirit" over matter. That ineluctably material reality, disease, can be given a psychological explanation. Death itself can be considered, ultimately, a psychological phenomenon. Groddeck declared in *The Book of the It* (he was speaking of TB): "He alone will die who wishes to die, to whom life is intolerable." The promise of a temporary triumph over death is implicit in much of the psychological thinking that starts from Freud and Jung.

At the least, there is the promise of a triumph over illness. A "physical" illness becomes in a way less real—but, in compensation, more interesting—so far as it can be considered a "mental" one. Speculation throughout the modern period has tended steadily to enlarge the category of mental illness. Indeed, part of the denial of death in this culture is a vast expansion of the category of illness as such.

Illness expands by means of two hypotheses. The first is that every form of social deviation can be considered an illness. Thus, if criminal behavior can be considered an illness, then criminals are not to be condemned or punished but to be understood (as a doctor understands), treated, cured.* The second is

* An early statement of this view, now so much on the defensive, is in Samuel Butler's *Erewhon* (1872). Butler's way of suggesting that criminality was a disease, like TB, that was either hereditary or the result of an unwholesome environment was to point out the absurdity of condemning the sick. In *Erewhon*, those who murdered or stole are sympathetically treated as ill persons, while tuberculosis is punished as a crime.

that every illness can be considered psychologically. Illness is interpreted as, basically, a psychological event, and people are encouraged to believe that they get sick because they (unconsciously) want to, and that they can cure themselves by the mobilization of will; that they can choose not to die of the disease. These two hypotheses are complementary. As the first seems to relieve guilt, the second reinstates it. Psychological theories of illness are a powerful means of placing the blame on the ill. Patients who are instructed that they have, unwittingly, caused their disease are also being made to feel that they have deserved it.

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Punitive notions of disease have a long history, and such notions are particularly active with cancer. There is the "fight" or "crusade" against cancer; cancer is the "killer" disease; people who have cancer are "cancer victims." Ostensibly, the illness is the culprit. But it is also the cancer patient who is made culpable. Widely believed psychological theories of disease assign to the luckless ill the ultimate responsibility both for falling ill and for getting well. And conventions of treating cancer as no mere disease but a demonic enemy make cancer not just a lethal disease but a shameful one.

Leprosy in its heyday aroused a similarly disproportionate sense of horror. In the Middle Ages, the leper was a social text in which corruption was made visible; an exemplum, an emblem of decay. Nothing is more punitive than to give a disease a meaning—that meaning being invariably a moralistic one. Any important disease whose causality is murky, and for which treatment is ineffectual, tends to be awash in significance. First, the subjects of deepest dread (corruption, decay, pollution, anomie, weakness) are identified with the disease. The disease itself becomes a metaphor. Then, in the name of the disease (that is, using it as a metaphor), that horror is imposed on other things. The disease becomes adjectival. Something is said to be disease-like, meaning that it is disgusting or ugly. In French, a moldering stone façade is still *lépreuse*.

Epidemic diseases were a common figure for social disorder. From pestilence (bubonic plague) came “pestilent,” whose figurative meaning, according to the *Oxford English Dictionary*, is “injurious to religion, morals, or public peace—1513”; and “pestilential,” meaning “morally baneful or pernicious—1531.” Feelings about evil are projected onto a disease. And the disease (so enriched with meanings) is projected onto the world.

In the past, such grandiloquent fantasies were regularly attached to the epidemic diseases, diseases that were a collective calamity. In the last two centuries,

the diseases most often used as metaphors for evil were syphilis, tuberculosis, and cancer—all diseases imagined to be, preeminently, the diseases of individuals.

Syphilis was thought to be not only a horrible disease but a demeaning, vulgar one. Anti-democrats used it to evoke the desecrations of an egalitarian age. Baudelaire, in a note for his never completed book on Belgium, wrote:

We all have the republican spirit in our veins, like syphilis in our bones—we are democratized and venerealized.

In the sense of an infection that corrupts morally and debilitates physically, syphilis was to become a standard trope in late-nineteenth- and early-twentieth-century anti-Semitic polemics. In 1933 Wilhelm Reich argued that “the irrational fear of syphilis was one of the major sources of National Socialism’s political views and its anti-Semitism.” But although he perceived sexual and political phobias being projected onto a disease in the grisly harping on syphilis in *Mein Kampf*, it never occurred to Reich how much was being projected in his own persistent use of cancer as a metaphor for the ills of the modern era. Indeed, cancer can be stretched much further than syphilis can as a metaphor.

Syphilis was limited as a metaphor because the disease itself was not regarded as mysterious; only awful. A tainted heredity (Ibsen’s *Ghosts*), the perils

of sex (Charles-Louis Philippe's *Bubu de Montparnasse*, Mann's *Doctor Faustus*)—there was horror aplenty in syphilis. But no mystery. Its causality was clear, and understood to be singular. Syphilis was the grimmest of gifts, "transmitted" or "carried" by a sometimes ignorant sender to the unsuspecting receiver. In contrast, TB was regarded as a mysterious affliction, and a disease with myriad causes—just as today, while everyone acknowledges cancer to be an unsolved riddle, it is also generally agreed that cancer is multi-determined. A variety of factors—such as cancer-causing substances ("carcinogens") in the environment, genetic makeup, lowering of immunodefenses (by previous illness or emotional trauma), characterological predisposition—are held responsible for the disease. And many researchers assert that cancer is not one but more than a hundred clinically distinct diseases, that each cancer has to be studied separately, and that what will eventually be developed is an array of cures, one for each of the different cancers.

The resemblance of current ideas about cancer's myriad causes to long-held but now discredited views about TB suggests the possibility that cancer may be one disease after all and that it may turn out, as TB did, to have a principal causal agent and be controllable by one program of treatment. Indeed, as Lewis Thomas has observed, all the diseases for which the issue of causation has been settled, and which can be prevented and cured, have turned out to have a simple

physical cause—like the pneumococcus for pneumonia, the tubercle bacillus for tuberculosis, a single vitamin deficiency for pellagra—and it is far from unlikely that something comparable will eventually be isolated for cancer. The notion that a disease can be explained only by a variety of causes is precisely characteristic of thinking about diseases whose causation is *not* understood. And it is diseases thought to be multi-determined (that is, mysterious) that have the widest possibilities as metaphors for what is felt to be socially or morally wrong.

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TB and cancer have been used to express not only (like syphilis) crude fantasies about contamination but also fairly complex feelings about strength and weakness, and about energy. For more than a century and a half, tuberculosis provided a metaphoric equivalent for delicacy, sensitivity, sadness, powerlessness; while whatever seemed ruthless, implacable, predatory, could be analogized to cancer. (Thus, Baudelaire in 1852, in his essay "*L'Ecole païenne*," observed: "A frenzied passion for art is a canker that devours the rest. . . .") TB was an ambivalent metaphor, both a scourge and an emblem of refinement. Cancer was never viewed other than as a scourge; it was, metaphorically, the barbarian within.

While syphilis was thought to be passively incurred, an entirely involuntary disaster, TB was once, and cancer is now, thought to be a pathology of energy, a

disease of the will. Concern about energy and feeling, fears about the havoc they wreak, have been attached to both diseases. Getting TB was thought to signify a defective vitality, or vitality misspent. "There was a great want of vital power . . . and great constitutional weakness"—so Dickens described little Paul in *Dombey and Son*. The Victorian idea of TB as a disease of low energy (and heightened sensitivity) has its exact complement in the Reichian idea of cancer as a disease of unexpressed energy (and anesthetized feelings). In an era in which there seemed to be no inhibitions on being productive, people were anxious about not having enough energy. In our own era of destructive overproduction by the economy and of increasing bureaucratic restraints on the individual, there is both a fear of having too much energy and an anxiety about energy not being allowed to be expressed.

Like Freud's scarcity-economics theory of "instincts," the fantasies about TB which arose in the last century (and lasted well into ours) echo the attitudes of early capitalist accumulation. One has a limited amount of energy, which must be properly spent. (Having an orgasm, in nineteenth-century English slang, was not "coming" but "spending.") Energy, like savings, can be depleted, can run out or be used up, through reckless expenditure. The body will start "consuming" itself, the patient will "waste away."

The language used to describe cancer evokes a different economic catastrophe: that of unregulated, abnormal, incoherent growth. The tumor has energy,

not the patient; "it" is out of control. Cancer cells, according to the textbook account, are cells that have shed the mechanism which "restrains" growth. (The growth of normal cells is "self-limiting," due to a mechanism called "contact inhibition.") Cells without inhibitions, cancer cells will continue to grow and extrude in a "chaotic" fashion, destroying the body's normal cells, architecture, and functions.

Early capitalism assumes the necessity of regulated spending, saving, accounting, discipline—an economy that depends on the rational limitation of desire. TB is described in images that sum up the negative behavior of nineteenth-century *homo economicus*: consumption; wasting; squandering of vitality. Advanced capitalism requires expansion, speculation, the creation of new needs (the problem of satisfaction and dissatisfaction); buying on credit; mobility—an economy that depends on the irrational indulgence of desire. Cancer is described in images that sum up the negative behavior of twentieth-century *homo economicus*: abnormal growth; repression of energy, that is, refusal to consume or spend.

TB was understood, like insanity, to be a kind of one-sidedness: a failure of will or an overintensity. However much the disease was dreaded, TB always had pathos. Like the mental patient today, the tubercular was considered to be someone quintessen-

tially vulnerable, and full of self-destructive whims. Nineteenth- and early-twentieth-century physicians addressed themselves to coaxing their tubercular patients back to health. Their prescription was the same as the enlightened one for mental patients today: cheerful surroundings, isolation from stress and family, healthy diet, exercise, rest.

The understanding of cancer supports quite different, avowedly brutal notions of treatment. (A common cancer hospital witticism, heard as often from doctors as from patients: "The treatment is worse than the disease.") There can be no question of pampering the patient. With the patient's body considered to be under attack ("invasion"), the only treatment is counterattack.

The controlling metaphors in descriptions of cancer are, in fact, drawn not from economics but from the language of warfare: every physician and every attentive patient is familiar with, if perhaps inured to, this military terminology. Thus, cancer cells do not simply multiply; they are "invasive." ("Malignant tumors invade even when they grow very slowly," as one textbook puts it.) Cancer cells "colonize" from the original tumor to far sites in the body, first setting up tiny outposts ("micrometastases") whose presence is assumed, though they cannot be detected. Rarely are the body's "defenses" vigorous enough to obliterate a tumor that has established its own blood supply and consists of billions of destructive cells. However "radical" the surgical intervention, however many "scans"

are taken of the body landscape, most remissions are temporary; the prospects are that "tumor invasion" will continue, or that rogue cells will eventually regroup and mount a new assault on the organism.

Treatment also has a military flavor. Radiotherapy uses the metaphors of aerial warfare; patients are "bombed" with toxic rays. And chemotherapy is chemical warfare, using poisons.* Treatment aims to "kill" cancer cells (without, it is hoped, killing the patient). Unpleasant side effects of treatment are advertised, indeed overadvertised. ("The agony of chemotherapy" is a standard phrase.) It is impossible to avoid damaging or destroying healthy cells (indeed, some methods used to treat cancer can cause cancer), but it is thought that nearly any damage to the body is justified if it saves the patient's life. Often, of course, it doesn't work. (As in: "We had to destroy Ben Suc in order to save it.") There is everything but the body count.

The military metaphor in medicine first came into

* Drugs of the nitrogen mustard type (so-called alkylating agents)—like cyclophosphamide (Cytosan)—were the first generation of cancer drugs. Their use—with leukemia (which is characterized by an excessive production of immature white cells), then with other forms of cancer—was suggested by an inadvertent experiment with chemical warfare toward the end of World War II, when an American ship, loaded with nitrogen mustard gas, was blown up in the Naples harbor, and many of the sailors died of their lethally low white-cell and platelet counts (that is, of bone-marrow poisoning) rather than of burns or sea-water inhalation.

Chemotherapy and weaponry seem to go together, if only as a fancy. The first modern chemotherapy success was with syphilis: in 1910, Paul Ehrlich introduced an arsenic derivative, arsphenamine (Salvarsan), which was called "the magic bullet."

wide use in the 1880s, with the identification of bacteria as agents of disease. Bacteria were said to "invade" or "infiltrate." But talk of siege and war to describe disease now has, with cancer, a striking literalness and authority. Not only is the clinical course of the disease and its medical treatment thus described, but the disease itself is conceived as the enemy on which society wages war. More recently, the fight against cancer has sounded like a colonial war—with similarly vast appropriations of government money—and in a decade when colonial wars haven't gone too well, this militarized rhetoric seems to be backfiring. Pessimism among doctors about the efficacy of treatment is growing, in spite of the strong advances in chemotherapy and immunotherapy made since 1970. Reporters covering "the war on cancer" frequently caution the public to distinguish between official fictions and harsh facts; a few years ago, one science writer found American Cancer Society proclamations that cancer is curable and progress has been made "reminiscent of Vietnam optimism prior to the deluge." Still, it is one thing to be skeptical about the rhetoric that surrounds cancer, another to give support to many uninformed doctors who insist that no significant progress in treatment has been made, and that cancer is not really curable. The bromides of the American cancer establishment, tirelessly hailing the imminent victory over cancer; the professional pessimism of a large number of cancer specialists, talking like battle-weary officers mired down in an interminable colonial

war—these are twin distortions in this military rhetoric about cancer.

Other distortions follow with the extension of cancer images in more grandiose schemes of warfare. As TB was represented as the spiritualizing of consciousness, cancer is understood as the overwhelming or obliterating of consciousness (by a mindless It). In TB, you are eating yourself up, being refined, getting down to the core, the real you. In cancer, non-intelligent ("primitive," "embryonic," "atavistic") cells are multiplying, and you are being replaced by the non-you. Immunologists class the body's cancer cells as "nonself."

It is worth noting that Reich, who did more than anyone else to disseminate the psychological theory of cancer, also found something equivalent to cancer in the biosphere.

There is a deadly orgone energy. It is in the atmosphere. You can demonstrate it on devices such as the Geiger counter. It's a swampy quality. . . . Stagnant, deadly water which doesn't flow, doesn't metabolize. Cancer, too, is due to the stagnation of the flow of the life energy of the organism.

Reich's language has its own inimitable coherence. And more and more—as its metaphoric uses gain in

credibility—cancer is felt to be what he thought it was, a cosmic disease, the emblem of all the destructive, alien powers to which the organism is host.

As TB was the disease of the sick self, cancer is the disease of the Other. Cancer proceeds by a science-fiction scenario: an invasion of “alien” or “mutant” cells, stronger than normal cells (*Invasion of the Body Snatchers*, *The Incredible Shrinking Man*, *The Blob*, *The Thing*). One standard science-fiction plot is mutation, either mutants arriving from outer space or accidental mutations among humans. Cancer could be described as a triumphant mutation, and mutation is now mainly an image for cancer. As a theory of the psychological genesis of cancer, the Reichian imagery of energy checked, not allowed to move outward, then turned back on itself, driving cells berserk, is already the stuff of science fiction. And Reich’s image of death in the air—of deadly energy that registers on a Geiger counter—suggests how much the science-fiction images about cancer (a disease that comes from deadly rays, and is treated by deadly rays) echo the collective nightmare. The original fear about exposure to atomic radiation was of genetic deformities in the next generation; that was replaced by another fear, as statistics started to show much higher cancer rates among Hiroshima and Nagasaki survivors and their descendants.

Cancer is a metaphor for what is most ferociously energetic; and these energies constitute the ultimate insult to natural order. In a science-fiction tale by

Tommaso Landolfi, the spaceship is called “Cancer-queen.” (It is hardly within the range of the tuberculosis metaphor that a writer could have imagined an intrepid vessel named “Consumptionqueen.”) When not being explained away as something psychological, buried in the recesses of the self, cancer is being magnified and projected into a metaphor for the biggest enemy, the furthest goal. Thus, Nixon’s bid to match Kennedy’s promise to put Americans on the moon was, appropriately enough, the promise to “conquer” cancer. Both were science-fiction ventures. The equivalent of the legislation establishing the space program was the National Cancer Act of 1971, which did not envisage the near-to-hand decisions that could bring under control the industrial economy that pollutes—only the great destination: the cure.

TB was a disease in the service of a romantic view of the world. Cancer is now in the service of a simplistic view of the world that can turn paranoid. The disease is often experienced as a form of demonic possession—tumors are “malignant” or “benign,” like forces—and many terrified cancer patients are disposed to seek out faith healers, to be exorcised. The main organized support for dangerous nostrums like Laetrile comes from far-right groups to whose politics of paranoia the fantasy of a miracle cure for cancer makes a serviceable addition, along with a belief in UFOs. (The John Birch Society distributes a forty-five-minute film called *World Without Cancer*.) For the more sophisticated, cancer signifies the rebellion

of the injured ecosphere: Nature taking revenge on a wicked technocratic world. False hopes and simplified terrors are raised by crude statistics brandished for the general public, such as that 90 percent of all cancers are "environmentally caused," or that imprudent diet and tobacco smoking alone account for 75 percent of all cancer deaths. To the accompaniment of this numbers game (it is difficult to see how any statistics about "all cancers" or "all cancer deaths" could be defended), cigarettes, hair dyes, bacon, saccharine, hormone-fed poultry, pesticides, low-sulphur coal—a lengthening roll call of products we take for granted have been found to cause cancer. X-rays give cancer (the treatment meant to cure kills); so do emanations from the television set and the microwave oven and the fluorescent clock face. As with syphilis, an innocent or trivial act—or exposure—in the present can have dire consequences far in the future. It is also known that cancer rates are high for workers in a large number of industrial occupations. Though the exact processes of causation lying behind the statistics remain unknown, it seems clear that many cancers are preventable. But cancer is not just a disease ushered in by the Industrial Revolution (there was cancer in Arcadia) and certainly more than the sin of capitalism (within their more limited industrial capacities, the Russians pollute worse than we do). The widespread current view of cancer as a disease of industrial civilization is as unsound scientifically as the right-wing fantasy of a "world without cancer" (like a world without subver-

sives). Both rest on the mistaken feeling that cancer is a distinctively "modern" disease.

The medieval experience of the plague was firmly tied to notions of moral pollution, and people invariably looked for a scapegoat external to the stricken community. (Massacres of Jews in unprecedented numbers took place throughout Europe in 1347 and 1348, then stopped as soon as the plague receded.) With the modern diseases, the scapegoat is not so easily separated from the patient. But much as these diseases individualize, they also pick up some of the metaphors of epidemic diseases. (Diseases understood to be simply epidemic have become less useful as metaphors, as evidenced by the near-total historical amnesia about the influenza pandemic of 1918-19, in which more people died than in the four years of World War I.) Presently, it is as much a cliché to say that cancer is "environmentally" caused as it was—and still is—to say that it is caused by mismanaged emotions. TB was associated with pollution (Florence Nightingale thought it was "induced by the foul air of houses"), and now cancer is thought of as a disease of the contamination of the whole world. TB was "the white plague." With awareness of environmental pollution, people have started saying that there is an "epidemic" or "plague" of cancer.