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## What Is an Epidemic? AIDS in Historical Perspective

E USE THE TERM *epidemic* in a variety of ways—most of them metaphorical, moving it further and further from its emotional roots in specific past events. Even in relation to health, we employ the word in contexts decreasingly related to its historical origins. Medical historians speak of an epidemic of tuberculosis in Europe between 1700 and 1870 and of an epidemic of rheumatic fever in the century and a quarter after 1800. In the mass media every day, we hear of "epidemics" of alcoholism, drug addiction, and automobile accidents.<sup>1</sup> These clichéd usages are disembodied yet at the same time tied to specific rhetorical and policy goals. The intent is clear enough: to clothe certain undesirable yet blandly tolerated social phenomena in the emotional urgency associated with a "real" epidemic.

Defining aspects of that millennia-old reality are, of course, fear and sudden widespread death. It is plague and cholera, yellow fever and typhus that we associate viscerally with the experience of epidemics, not alcohol and automobiles. AIDS has reminded us forcefully of that traditional understanding. But there is another defining component of epidemics that needs emphasis, and this is their episodic quality. A true epidemic is an event, not a trend. It elicits immediate and widespread response. It is highly visible and, unlike some aspects of humankind's biological history, does not

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proceed with imperceptible effect until retrospectively "discovered" by historians and demographers.

Thus, as a social phenomenon, an epidemic has a dramaturgic form. Epidemics start at a moment in time, proceed on a stage limited in space and duration, follow a plot line of increasing and revelatory tension, move to a crisis of individual and collective character, then drift toward closure. In another of its dramaturgic aspects, an epidemic takes on the quality of pageant—mobilizing communities to act out proprietory rituals that incorporate and reaffirm fundamental social values and modes of understanding. It is their public character and dramatic intensity—along with unity of place and time—that make epidemics as well suited to the concerns of moralists as to the research of scholars seeking an understanding of the relationship among ideology, social structure, and the construction of particular selves.

For the social scientist, epidemics constitute an extraordinarily useful sampling device—at once found objects and natural experiments capable of illuminating fundamental patterns of social value and institutional practice. Epidemics constitute a transverse section through society, reflecting in that cross-sectional perspective a particular configuration of institutional forms and cultural assumptions. Just as a playwright chooses a theme and manages plot development, so a particular society constructs its characteristic response to an epidemic.

Contemporary America's experience with AIDS has already provided materials in abundance for analysis based on such assumptions. In many ways we have reenacted traditional patterns of response to a perceived threat. But if we are to understand our contemporary reaction to a traditional stimulus, we must distinguish between the unique and the seemingly universal, between this epidemic at this time and this place and the way in which communities have responded to episodic outbreaks of fulminating infectious disease in the past. We have become accustomed in the last half century to thinking of ourselves as no longer subject to the incursions of such ills; death from acute infectious disease has seemed—like famine—limited to the developing world. Life-threatening infectious ills had become, almost by definition, amenable to therapeutic or prophylactic intervention. AIDS has reminded us that this sense of assurance might have been premature, the attitudinal product of a particular historical moment. AIDS has shown itself both a very traditional and a very modern sort of epidemic, evoking novel patterns of response and at the same time eliciting—and thus reminding us of—some very old ones.

#### EPIDEMIC INCIDENT AS DRAMATURGIC EVENT

The narrative of Camus's Plague begins on a strikingly circumstantial note. "When leaving his surgery on the morning of April 16, Dr. Bernard Rieux felt something soft under his foot. It was a dead rat lying in the middle of the landing. On the spur of the moment he kicked it to one side and, without giving it a further thought, continued on his way downstairs."<sup>2</sup> The dead rat symbolizes and embodies the way in which epidemics seemingly begin with minor events-little noticed at the time, yet often revealing in retrospect. The rat's plague-stricken body underlines as well the way in which man is bound in a web of biological relationships not easily comprehended or controlled. From a very different point of view, it also illustrates the way in which the implacable circumstantiality of an epidemic coexists with-in fact necessarily invokes-larger frameworks of meaning. The peculiar texture of any epidemic reflects continuing interaction among incident, perception, interpretation, and response.

No matter what Camus's philosophical intentions, he chose to embed that intellectual agenda in the morally and historically resonant structure of an ongoing epidemic. And his narrative in fact follows closely the archetypical pattern of historical plague epidemics.<sup>3</sup> Like the acts in a conventionally structured play, the events of a classic epidemic succeed each other in predictable narrative sequence. The first of these acts, which I term progressive revelation, turns on the initial appearance and gradual recognition of the intruding disease.<sup>4</sup>

## Act I. Progressive Revelation

Like the citizen of Camus's plague-stricken Oran, most communities are slow to accept and acknowledge an epidemic. To some extent it is a failure of imagination; perhaps even more it is a threat to interests, to specific economic and institutional interests and, more generally, to the emotional assurance and complacency of ordinary

men and women. Merchants always fear the effect of epidemics on trade; municipal authorities fear their effect on budgets, on public order, on accustomed ways of doing things.

Only when the presence of an epidemic becomes unavoidable is there public admission of its existence. Bodies must accumulate and the sick must suffer in increasing numbers before officials acknowledge what can no longer be ignored. The pattern has repeated itself in century after century. Whether in early modern Italy, seventeenthcentury London, or nineteenth-century America, whether the unwelcome visitor was plague, yellow fever, or cholera, the first stage of an epidemic acts itself out in predictable fashion. Physicians find a few "suspicious" cases and then either suppress their own anxiety or report their suspicions to authorities, who are usually unenthusiastic about publicly acknowledging the presence of so dangerous an intruder.

The stakes have always been high, for to admit the presence of an epidemic disease was to risk social dissolution. Those who were able might be expected to flee contaminated neighborhoods, while men and women remaining in stricken communities could be expected to avoid the sick and the dying. And disruption of trade and communication was certain. Ever since the fourteenth century, the institution of quarantine has provided a feared vet politically compelling administrative option for communities during an epidemic. Even when-as has frequently been the case-physicians have questioned the contagiousness of a particular disease, most laymen have simply assumed that epidemic disease was almost by definition transmissible from person to person and have shunned those who might be potential sources of infection. In the United States, this pattern was regularly acted out during epidemics of yellow fever and cholera in the late eighteenth and early nineteenth century. Yet physicians then were often skeptical about contagion.<sup>5</sup>

In any severe epidemic, inexorably accumulating deaths and sicknesses have brought ultimate, if unwilling, recognition. If we were in fact writing the story of an epidemic in conventional dramatic form, that recognition might be an appropriate conclusion to a first act increasingly ominous in mood.

#### Act II. Managing Randomness

Accepting the existence of an epidemic implies—in some sense demands—the creation of a framework within which its dismaying

arbitrariness may be managed. Collective agreement on that explanatory framework may be seen as the inevitable second stage in any epidemic. For most previous centuries that framework was moral and transcendent; the epidemic had to be understood primarily in terms of man's relationship to God; consolation was grounded in submission to the meaning implicit in that framework. In plaguestricken London in the seventeenth century, for example, and eighteenth-century New England villages afflicted with diphtheria, most individuals construed an ongoing epidemic in just such otherworldly terms.<sup>6</sup> The sudden outbreaks of mortal illness were epiphenomena, forceful reminders of more fundamental realities. Since at least the sixteenth century, however, such spiritual assumptions have always coexisted with—and gradually yielded in emphasis to—more secular and mechanistic styles of explanation.<sup>7</sup>

Men and women have often expressed moral convictions as they have sought to explain and rationalize epidemics, but such values have ordinarily been articulated in terms of those mundane biological processes that ordinarily result in sickness or health. Individual and community sins could invite or prolong an epidemic—but only through the body's physiological mechanisms, not through miracles or God's direct interposition. This eclectic mixture of moral assumption and mechanistic pathology provided a style of explanation that has been fundamental to the social management of epidemics in the West for the past three centuries.

When threatened with an epidemic, most men and women seek rational understanding of the phenomenon in terms that promise control, often by minimizing their own sense of vulnerability. Not surprisingly, such consolatory schemes have always centered on explaining the differential susceptibility of particular individuals—on what was ordinarily termed predisposition in the eighteenth and nineteenth centuries, or what might be discussed today under the rubric of risk factors. How else explain why one person or class of persons succumbed while others did not? If susceptibility was not to be seen as a random accident or as the result of constitutional idiosyncracy alone, it had to be understood in terms of physiological mechanisms suggesting the physical—and risk-enhancing—effects of behavior, style of life, and environment. Such hypothetical schemes constituted a framework within which moral and social assumptions could be at once expressed and legitimated.

Particularly important was belief in the connection of volition. responsibility, and susceptibility. During nineteenth-century cholera epidemics, for example, alcoholism, gluttony, sexual promiscuity, and filthy personal habits were widely accepted as predispositions to the disease. Such behaviors were seen as increasing susceptibility (and the likelihood of a poor outcome) even in smallpox, where contagion had been accepted for centuries.8 It was hardly conceivable that such behaviors could be anything other than debilitating physically as well as morally; that an inveterate whiskey drinker might escape cholera by avoiding water could hardly have been accepted or understood. Bad was bad, culpable culpable, in every dimension of life. Even if one conceded that an epidemic might originate in some general environmental influence such as the atmosphere, selective susceptibility still demanded explanation. Everyone in a community breathed the same contaminated air; not everyone succumbed to the epidemic. Believers in contagion could entertain parallel views; infected individuals might encounter a good many men and women, only some of whom became ill.

Although such etiological views may in retrospect seem occasions for the expression of a crude and class-oriented moral hegemony, the eighteenth- and nineteenth-century debates about the cause of epidemics were in actuality rather more nuanced. Epidemics did tend, for example, to be associated with place of residence and occupation as well as behavior. And the environmentalist-and thus determinist and morally exculpating-implications were there to be drawn; people who worked overlong hours and lived in tenement apartments without adequate ventilation or access to water would necessarily be less able to fight off a disease.<sup>9</sup> The managing of response to epidemics could serve as a vehicle for social criticism as well as a rationale for social control. The same author might casually incorporate both elements; victims were predisposed by their environment to indulgence in such habits as drinking and sexual promiscuity yet could still be held responsible for the physical consequences of such indulgence. But this assumption hardly constituted a logical inconsistency for most individuals who thought about public health. Views in this field have always been murky and conflicting, and it is hardly surprising that such ambiguity should have been expressed during the course of past epidemics.

For the poor and inarticulate, other mechanisms might be invoked to impose a certain order on an epidemic. Whether it was Jews poisoning wells, doctors seeking anatomical subjects, or the landlords and employers who forced them to live in unventilated hovels, poor people often found their own structure of blame—and meaning—in which to place an epidemic. The layman's almost universal association of epidemic with contagious disease played a parallel role. At least a presumed knowledge of the epidemic's mode of transmission could provide a measure of understanding and thus promise control.

### Act III. Negotiating Public Response

Recognition implies collective action. One of the defining characteristics of an epidemic is in fact the pressure it generates for decisive and visible community response. The contrast with a disease such as tuberculosis is instructive; although far more significant demographically in the nineteenth century, tuberculosis did not elicit the sense of crisis that accompanied epidemics of yellow fever and cholera. Nor did it elicit moral and political pressure for immediate and decisive measures. In the stress of an epidemic, on the other hand, failure to take action constitutes action.<sup>10</sup> An epidemic might in this sense be likened to a trial, with policy choices constituting the possible verdicts.

This similarity suggests another dramaturgic aspect of an epidemic: measures to interdict an epidemic constitute rituals, collective rites integrating cognitive and emotional elements. In this sense the imposition of a quarantine, let us say, or the burning of tar to clear an infected atmosphere, the gathering of men and women in churches for days of fasting and prayer, all play a similar role—the visible acting out of community solidarity. At the same time, these collective rituals affirm belief—whether in religion, in rationalistic pathology, or in some combination of the two—while those beliefs promise a measure of control over an intractable reality. It is hardly surprising that communities should in moments of fear and incipient social disorganization seek the reassurance of familiar frames of explanation and logically consequent policies that provide both meaning and the promise of efficacy.

Since the eighteenth century, our rituals have been of a diverse sort. We have appealed in an eclectic way to a variety of sources of authority; days of prayer and fasting might be proclaimed along with

the simultaneous enactment of procedures to cleanse and disinfect. For the historian and the social scientist, of course, the content of public rituals provides insight into social values at particular times, while conflicts over priorities among them provide insight into structures of authority and belief. Thus in the 1832 cholera epidemic, inconsistencies between lay and medical views of contagion shaped policy throughout Europe and North America; laypersons almost unanimously assumed the new disease to be contagious, while medical opinion was divided. In America, to cite another attitudinal variable, hostility toward immigrants and Roman Catholics played a significant role in shaping responses to the epidemic, while in England class hostility and endemic suspicion of medical men and their motives played a larger role in defining policy options.<sup>11</sup> Nevertheless, as I have argued elsewhere, the picture of a consistent if occasionally awkward coexistence between religious and rationalistic or mechanistic styles of thought was characteristic of mid-nineteenthcentury Anglo-American society and sharply delineated in response to the cholera epidemic.

The adoption and administration of public-health measures inevitably reflect cultural attitudes. The poor and socially marginal, for example, have historically been labeled as the disproportionately likely victims of epidemic illness, and they have been traditionally the objects of public-health policy. Often, indeed, good empirical evidence has supported such assumptions; experience as well as ideology has enforced the association. Such views have manifested themselves in a variety of ways. Nineteenth-century quarantines and disinfection were, for example, imposed on the poor and their possessions, not on the wealthy-on the steerage, not the cabin-class, passenger-even after the germ theory was well established. Polio provides another pertinent example. In New York's 1916 epidemic, prophylactic measures were enforced in the dirty and densely populated immigrant slums, which in the past had bred typhoid and typhus-and not in the more prosperous, less crowded, and seemingly salubrious suburbs and middle-class areas that in fact produced so many of the cases.<sup>12</sup>

Epidemics ordinarily end with a whimper, not a bang. Susceptible individuals flee, die, or recover, and incidence of the disease gradually declines. It is a flat and ambiguous yet inevitable sequence for a last act.

But it also provides an implicit moral structure that can be imposed as an epilogue. How had the community and its members dealt with the epidemic's challenge? Not only during its reign but—most importantly—afterwards? Historians and policymakers concerned with epidemics tend to look backward and ask what "lasting impact" particular incidents have had and what "lessons" have been learned. Have the dead died in vain? Has a heedless society reverted to its accustomed ways of doing things as soon as denial became once more a plausible option? This implicit moral agenda has often accompanied—and in some cases no doubt motivated—the more selfconscious and pragmatic concern of scholars with the evolution of public-health policy, let us say, or the demographic transition.<sup>13</sup> Epidemics have always provided occasion for retrospective moral judgment.

#### AIDS IN HISTORICAL PERSPECTIVE: REMEMBERING TO REMEMBER

Our experience with AIDS during the past decade has reminded us of some very traditional truths. Most strikingly, we seem not to have conquered infectious disease. Death is not associated exclusively with a particular—and advanced—age. AIDS has reminded us as well that managing death has been traditionally a central responsibility of the physician (though by no means of the physician alone). We have not, it seems, freed ourselves from the constraints and indeterminacy of living in a web of biological relationships—not all of which we can control or predict. Viruses, like bacteria, have for countless millennia shared our planet and our bodies. In some ways AIDS is a very traditional phenomenon indeed.

Nor have we revolutionized the framework within which we respond as a community to epidemic disease. In a good many ways the AIDS experience has reenacted the traditional dramaturgic structure of earlier epidemics. One, of course, is the gradual and grudging acceptance of the epidemic as reality—and the resentment expressed toward bringers of bad tidings, the physicians and activists who demand a response to this new threat.<sup>14</sup> Equally obvious is the way in which coping with randomness provides an occasion for reaf-

firming the social values of the majority, for blaming victims. Framing and blaming are inextricably mingled; the details vary, but the end is similar. The peculiar mixture of biological mechanism invested with moral meaning is equally traditional.

Most Americans prefer to deal with a threat that they do not see as "meant" for them. The search for a reassuring connection of volition, behavior, and pathological consequence is as much alive today as it was in Philadelphia in 1793 and New York in 1832. Transgression implies punishment; affliction implies prior transgression. The historic circumstances and epidemiological peculiarities of AIDS have made such connections unavoidable in the public mind—and in their seemingly empirical character have obscured the social and psychological functions implicit in the underlining of that connection.

AIDS has reminded us as well of the apparently inevitable juxtaposition of suffering and death with a search for meaning that has always characterized epidemics. Meanings vary, but the need to impose them does not. Most Americans find reassurance in their accustomed faith in the laboratory and its products; they see AIDS as a time-bound artifact of that unfortunate but essentially transitional period between the discovery of this new ill and the announcement of its cure. Others, of course, see its primary meaning in the realm of morality and traditional piety. Many of us, of course, impose multiple frames of meaning on these biological events. The majority of Americans retain their faith in the laboratory but at the same time believe that AIDS points variously to truths about government, the political process, and personal morality.<sup>15</sup> The linked sequence of biological event and its moral management seems unavoidable.

But there is another aspect of public-health history that AIDS also recalls. For the sake of convenience diseases can be divided into two categories: diseases whose prevention demands individual behavioral change—like syphilis, AIDS, and lung cancer—and diseases that can be prevented by collective policy commitments—like typhoid fever, where the aggregated knowledge and decisions of bacteriologists, civil engineers, administrators, and elected officials have protected individuals whose habits need not have changed at all.<sup>16</sup> AIDS reminds us of the difficulty of inducing changes in behavior and thus of the intrinsic complexity of the decisions facing local governments and public-health authorities.<sup>17</sup>

Contemporary sensitivity to individual rights only underlines the centrality of this dilemma, as does our novel public willingness to publicly discuss sexual behavior. Despite these characteristic aspects of today's social scene, parallels with earlier health campaigns are obvious. During the first decades of this century, for example, publichealth workers who urged the use of condoms and prophylactic kits to prevent syphilis met some of the same kind of opposition their successors in the 1980s faced when they advocated distributing sterile needles to intravenous drug users. In both cases ultimate values came into conflict. In both cases debate turned on distinctions between "deserving" and "innocent" victims—in the case of syphilis, the presumed innocents being the wives of erring husbands and their infants; in the case of AIDS, the recipients of contaminated blood or the offspring of infected mothers.<sup>18</sup>

These cases remind us as well of the need for ritual, even in a fragmented modern society. It is a need that is recognized in the AIDS memorial patchwork quilt that has recently circulated throughout the United States; it is recognized, I suggest, even in the whimsically self-conscious and public distribution of condoms on college campuses and in other public spaces; it is recognized in the calling of conferences graced by individuals representing various agencies of social authority—scientists, administrators, even the odd historian. Each ritual implies collective responsibility and communal identity. Each invokes a differentially nuanced frame of meaning—in the case of the quilt, a commitment to egalitarian compassion; in the distribution of condoms, a commitment to the potential of applied science. If science and technology allow us to control and predict, it is a realm of value worth invoking collectively.

#### AIDS, A MODERN EPIDEMIC

In a number of obvious ways, however, AIDS does not fit easily into the traditional pattern I have outlined. One, for example, is the rapidity of its geographic spread and the parallel rapidity of its identification as a unified clinical entity.<sup>19</sup> It might well be described as modern, and even postmodern, in its relationship to scientific medicine and institutional structures. AIDS is postmodern in the self-conscious, reflexive, and bureaucratically structured detachment with which we regard it. Countless social scientists and journalists

watch us watch ourselves; that reflexive process has become a characteristic aspect of America's experience with AIDS.

More generally the epidemic has existed at several levels simultaneously, mediated by the at first uninterested, then erratically attentive media. For most Americans—insofar as this epidemic can be construed as a national phenomenon—it is a media reality, both exaggerated and diminished as it is articulated in forms suitable for mass consumption. The great majority of Americans have been spectators, *in* but not *of* the epidemic.

Another significant difference between this and earlier epidemics grows out of the novel capacities of late twentieth-century medicine. Without its intellectual tools, the epidemic would not have been understood as an epidemic; we could not easily have determined that it is a clinical entity with protean manifestations. Providing substantive cognitive change during the course of an ongoing epidemic, the laboratory and its intellectual products have played a novel role in the narrative structure of our encounter with AIDS. Without the option of serological screening, for example, the intense and multifaceted debate over the imposition of such tests could hardly have been framed. Without knowledge of an infectious agent, the options for public policy would necessarily have been defined differently.

Another modern characteristic of America's experience with AIDS mirrors the institutional complexity of our society. That structured complexity has in scores of ways shaped responses to this crisis. (Response to epidemics has, of course, always been constrained by preexisting institutional forms and prevailing values, but twentieth-century institutional structures seem categorically different—if only in scale.)

Institutional complexity implies institutional interest—and thus conflict. Certainly we have seen this in the case of AIDS. Blood banks, hospitals, the National Institutes of Health and its several components, and state and municipal departments of public health have all played particular yet necessarily linked and interactive parts. Similarly, the not always consistent interests of local and national government, and of political parties, have also helped shape the nature and pace of our society's response to AIDS. Even patients and their advocates have become public activists in a generation newly conscious of individual and group rights. Perhaps least surprising is the way in which our courts have provided a mechanism for resolving the difficult policy choices posed by AIDS. As we are aware, American courts have become the residuary legatee of a variety of intractable social problems. Recently, a judge in Florida, for instance, decided that a child with AIDS should not be excluded from the classroom—but would have to remain within a glass-enclosed cubicle while in attendance.<sup>20</sup> As in many other instances in our society, conflicting attitudes and interests find their way into courts where judges and juries must of necessity make *ad hoc* decisions.

Finally, Americans have created a complex and not always consistent health-care system, and AIDS has been refracted through the needs, assumptions, and procedures of that system. The epidemic might be seen as a socio-assay of that system. Just as costs have been problematic in the system, so have they in the case of AIDS. AIDS has, in particular, forcefully reminded us of the difficulty of providing adequate care for the chronically ill in a system oriented disproportionately toward acute intervention—and of the complex linkages between disease categories, hospital policies, and reimbursment formulas. In this sense, AIDS might be seen as an exacerbation of a chronic pathology.<sup>21</sup>

The gap between isolating an infectious agent in a laboratory in Paris or Bethesda and the imposition of a preventive program altering the behavior of particular people in particular places is difficult and problematic. But this is no more than characteristic; clinical application does not follow inevitably from technical consensus. AIDS provides a powerful *de facto* argument for an integrated systemoriented approach to public health and health care; neither the laboratory's contributions nor the social contexts in which that knowledge is employed can be seen in isolation.<sup>22</sup>

## AIDS as a Postmodern Epidemic

The role of the media and social scientists in our contemplating ourselves is obvious enough, but AIDS can be seen as postmodern in several other ways as well. Perhaps most strikingly, it is a postrelativist phenomenon.<sup>23</sup> After a generation of epistemological—and political—questioning of the legitimacy of many disease categories, AIDS has underlined the inadequacy of any one-dimensional approach to disease, either the social constructionist or the more conventional mechanistically oriented perspective. AIDS is socially constructed (as society perceives and frames the phenomenon, blames

victims, and laboriously negotiates response) yet at the same time fits nicely into a one-dimensionally reductionist and biologically based model of disease. AIDS can hardly be dismissed as an exercise in victim blaming, even if it is an occasion for it. It is no mere text, words arranged to mirror and legitimate particular social relationships and perceptions. On the other hand, we can no longer remain unaware that biopathological phenomena are framed and filtered through such agreed-on texts.

Of course, a good many Americans never succumbed to the relativist mood of the late 1960s and 1970s, while others have always regarded the social claims of medicine with skepticism, even if they did not question the legitimacy of its disease categories. Others of us have tried to steer a more tentative course. We live in a fragmented society, and not even the most myopic cultural anthropologist would find it easy to impose a neatly coherent and unified cultural vision on the diverse group of individuals who inhabit the continental United States.

Yet AIDS has reminded us that we all share at least some common fears and ways of responding to social crisis. "They fancied themselves free," as Camus wrote of the citizens of the soon-to-be plague-stricken Oran, "and no one will ever be free so long as there are pestilences." At the end of his narrative, Camus's physiciannarrator reflects, even as he listens to the cries of joy that greet the opening of the city and the official conclusion of the epidemic, "... that perhaps the day would come when, for the bane and the enlightening of men, it would rouse up its rats again and send them forth to die in a happy city."<sup>24</sup> Plague reminds us that human beings will not so easily escape the immanence of evil and the anxiety of indeterminacy. Mortality is built into our bodies, into our modes of behavior, and into our place in the planet's ecology. Like other epidemics, AIDS has served well to remind us, finally, of these ultimate realities.

#### ENDNOTES

<sup>1</sup>These are endemic phenomena, and a fundamental aspect of the root meaning of *epidemic* lies precisely in its contrast with such "domesticated" phenomena. The *Oxford English Dictionary* tells us that when referring to a disease, the term *epidemic* denotes "prevalent among a people or a community at a special time,

and produced by some special causes and generally present in the affected locality." Epidemics have a unity of place as well as time—and even worldwide epidemics are experienced and responded to at the local level as a series of discrete incidents. In addition to fellow authors in this issue of *Dædalus*, I should like to thank Drew Gilpin Faust, Chris Feudtner, Renée Fox, Elizabeth Long, Harry Marks, and Rosemary Stevens for helpful comments on an earlier draft of this essay.

- <sup>2</sup>Albert Camus, *The Plague*, trans. Stuart Gilbert (New York: Alfred A. Knopf, 1952), 7.
- <sup>3</sup>There is an important parallel, moreover, between the biologically determined chronology of an epidemic and its social chronology. I refer, on the one hand, to the increasingly steep curve of case incidence, the exhaustion of susceptible individuals, and the gradual decline in mortality and morbidity and, on the other, to the social pattern of gradual recognition, negotiated response, and gradual decline.
- <sup>4</sup>One might contend that there is a prior first act, or prologue, at the biological level. In the case of plague, this would have been acted out in the linked relationship among rats, fleas, and bacteria. The existence of these events prior to man's awareness of them communicates the chastening moral message that humankind exists in an intricate web of biological relationships. In periods with welldeveloped channels of communication such as the nineteenth century, another sort of prologue takes place "offstage," as particular communities follow the gradual spread of a pandemic and anticipate its arrival.
- <sup>5</sup>On the vexing question of contagion in these ills, see E. H. Ackerknecht, "Anticontagionism between 1821 and 1867," Bulletin of the History of Medicine 22 (1948), 562–93; J. H. Powell, Bring Out Your Dead, The Great Plague of Yellow Fever in Philadelphia in 1793 (Philadelphia: University of Pennsylvania Press, 1949); Margaret Pelling, Cholera, Fever and English Medicine 1825–1865 (Oxford: Oxford University Press, 1978); Charles Rosenberg, "The Cause of Cholera: Aspects of Etiological Thought in Nineteenth-Century America," Bulletin of the History of Medicine 34 (1960): 331–354; William Coleman, Yellow Fever in the North, The Methods of Early Epidemiology (Madison: University of Wisconsin Press, 1987).
- <sup>6</sup>Ernest Caulfield, A True History of the Terrible Epidemic Vulgarly Called the Throat Distemper Which Occurred in His Majesty's New England Colonies between the Years 1735 and 1740 (New Haven: Yale Journal of Biology and Medicine, 1939).
- <sup>7</sup>See for example, the present author's *The Cholera Years, The United States in* 1832, 1849, and 1866 (Chicago: University of Chicago Press, 1962, new ed. 1987), which sought to trace that growing secularism.
- <sup>8</sup>After the adoption of inoculation for smallpox in the eighteenth-century West, few physicians or laymen doubted that this endemic and often fatal disease was transmitted from person to person. Contagion was also assumed in venereal disease. In this instance, the connection between willed behavior and the incidence of disease was obvious.

- <sup>9</sup>The environmentalist emphasis fundamental to anticontagionist views of yellow fever and cholera provided a natural rationale for critical attitudes toward inattentive local government and exploitative landlords and employers.
- <sup>10</sup>The action need not be efficacious by late twentieth-century standards but does imply a choice among intellectually and institutionally available options. In 1832, for example, American assumptions of inherently limited federal power meant that a truly national quarantine against the threatened importation of cholera was not a real option, while municipal and state quarantines were.
- <sup>11</sup>See, for example, R. J. Morris, Cholera 1832, The Social Response to an Epidemic (New York: Holmes & Meier, 1976) and Ruth Richardson, Death, Dissection and the Destitute (London and New York: Routledge & Kegan Paul, 1987), 223– 28.
- <sup>12</sup>New York City Department of Health, A Monograph on the Epidemic of Poliomyelitis (Infantile Paralysis) in New York City in 1916 (New York: New York City Department of Health, 1917); Naomi Rogers, "Screen the Baby, Swat the Fly: Polio in the Northeastern United States, 1916" (doctoral dissertation, University of Pennsylvania, 1986). In the 1920s and 1930s, on the other hand, a rather different social picture was created; polio-stricken children were romanticized.
- <sup>13</sup>For a recent attempt to evaluate studies of cholera's social and institutional impact, see Richard J. Evans, "Epidemics and Revolutions: Cholera in Nineteenth-Century Europe," *Past & Present*, no. 120 (1988), 123–46.
- <sup>14</sup>One might also note the desire to specify implausibly explicit beginnings—and clothe them with moral meaning. Compare the expository and narrative function of Camus's rat with the role played by Gaetan Dugas, the antisocial and hypersexual airline steward of Randy Shilts's recent best-seller And the Band Played On: Politics, People, and the AIDS Epidemic (New York: St. Martin's Press, 1987). A rodent vector obviously provides the occasion for a rather differently nuanced moral agenda. One can hardly blame a rat.
- <sup>15</sup>Even scientists can, and doubtless do, understand seemingly objective statements at several levels simultaneously. "When certain immunologists suggest that predisposition to AIDS may grow out of successive onslaughts on the immune system—it may or may not prove to be an accurate description of the natural world. But to many ordinary Americans (and perhaps a good many medical scientists as well) the meaning lies in another frame of reference... the emphasis on repeated infections explains how an individual had predisposed him or herself. The meaning lies in behavior uncontrolled." And suitably punished. See Charles E. Rosenberg, "Disease and Social Order in America: Perceptions and Expectations," *Milbank Quarterly* 64 (suppl. l) (1986):52.
- <sup>16</sup>The spread of AIDS through the blood-banking and processing system represents an instance of this category of intervention—one in which the transmission of a disease can be limited or halted without inducing behavioral change in prospective victims.
- <sup>17</sup>The layman's persistent belief in contagion through casual contact despite the reassuring words of medical authority reenacts another traditional element in the history of epidemic disease.

## What Is an Epidemic? 17

- <sup>18</sup>Compare Allan M. Brandt, No Magic Bullet, A Social History of Venereal Disease in the United States since 1880, with a New Chapter on AIDS (New York: Oxford University Press, 1987). On "syphilis of the innocent," see L. Duncan Bulkley, Syphilis in the Innocent... Clinically and Historically Considered, with a Plan for the Legal Control of the Disease (New York: Bailey & Fairchild, 1894). There are a good many other parallels between AIDS and syphilis, such as the proposed criminalization of the knowing transmission of the disease. Changed attitudes toward female sexuality have, however, altered presumptions of female "innocence" and responsibility.
- <sup>19</sup>The contrast with the very gradual elucidation of such protean clinical entities as syphilis, tuberculosis, and rheumatic fever is instructive. Although AIDS may seem to have appeared suddenly in the public consciousness, as a biological phenomenon it has been extremely slow in developing, certainly in comparison with other virus diseases such as measles and influenza.
- <sup>20</sup>New York Times, 23 August 1988, A14.
- <sup>21</sup>And, needless to say, it underlines as well the often less than adequate preparation of medical personnel for dealing with fatal illness. That AIDS is infectious as well as almost invariably fatal provides an exacerbating element that differentiates it from the great majority of chronic life-threatening ills.
- <sup>22</sup>The epidemic has illustrated the geographical integration of society as well; AIDS has made clear North America's relationship with other countries and continents. Our traditional habit of largely ignoring African health conditions may be a luxury we can no longer afford.

<sup>23</sup>Rosenberg, 35–6, 53.

<sup>24</sup>Camus, 35, 278.