The War on Disease and the War on Terror: A Dangerous Metaphorical Nexus?

ANN MONGOVEN

The controlling metaphors in descriptions of cancer are . . . drawn . . . from the language of warfare.
To describe a phenomenon as a cancer is an incitement to violence.

Susan Sontag, *Illness as Metaphor*[1]

SARS outbreak is like Singapore's 9/11.
Headline from *Singapore Strait Times*, May 19, 2003

Singapore will spare no effort in nailing down the source of infection.

Dr. Balaji Sadasivan, Singaporean Minister of Health and Environment, May 8, 2003[2]

We are living in a time of war on multiple fronts. This is as true metaphorically as it is geographically. In particular, we live in an age in which war has been declared against disease, and war has been declared against terror. This essay considers in tandem the costs of those wars—more precisely, the costs of those metaphors of war.

Metaphors matter. By their nature, metaphors both highlight and obscure certain features of the complex reality that they seek to describe; they have intrinsic "sense" and "nonsense."[3] As verbal symbols that "point to while participating in something beyond themselves," metaphors thus become partially formative of human reality without being capable of wholly forming it.[4] The conceptual error of mistaking a mediating metaphor for complete literal reality can lead to moral excesses. Since that warning was first issued by monotheistic theologians concerned about mistaking "God" for one's language for "God," I call the associated structural error "metaphorical idolatry."

In a secular setting, metaphorical idolatry can become a dangerous self-fulfilling prophecy. Several commentators have discussed how the increasing prevalence of metaphors from war to describe politics in America has rendered social discourse more combative. George Lakoff and Mark Johnson illustrate how the expressions used to describe arguments often presume war as a model for argument: "shooting down a point," "a pre-emptive strike," "pulling out the big guns."[5] Linguist Deborah Tannen argues that such language supports a stultifying structure of political debate in which issues are assumed to have two

The author gratefully acknowledges contributions to this paper from conversations at a colloquium of the "town-gown" medical ethics discussion group at Indiana University's Poynter Center for the Study of Ethics and American Institutions, with special thanks to Richard Miller (Poynter Center director), Jennifer Girod, Caitlin Kelly, Gates Agnew, and Byron Bangert, and from conversations at Tokyo University's 21st Century COE Project for Death and Life Studies, with special thanks to Susumu Shimazono and Miyako Takahashi.

Cambridge Quarterly of Healthcare Ethics (2006), **15**, 403–416. Printed in the USA.

polar sides, and the aim of argument is presumed to be winning at the expense of the other side—rather than citizen education on complex social issues.[6]

In the context of a general social proliferation of war metaphors, tendencies to view medicine and antiterrorism efforts as war deserve particularly reflective attention. Of course, there is some obvious sense to the use of war metaphors in both medicine and antiterrorism. Many people who are seriously ill feel themselves to be literally fighting for their lives. The World Trade Center's collapse in a fiery inferno was explicitly intended as an act of war by its perpetrators and legitimately interpreted as such by its victims. However, my focus in this essay, like the focus of the critics upon whom I draw, is on the "downside" of war metaphors in both contexts—or more accurately, the downside of their discursive dominance.

The Idolatry of War Metaphors for Medicine and Antiterror

Perhaps nowhere in social discourse have war metaphors proliferated more influentially than in modern medicine. Historically, this metaphorical nexus coalesced as a result of two factors. One was 19th century developments in bacteriology that coopted "invasion" as a root metaphor.[7] The other was the thick institutional linkage between medical research/training and the war effort during the world wars.[8] In the medical world, we now bombard tumors that invade healthy tissue; we declare war against cancer; we battle death. We even describe the body's own immune system militaristically. For instance, we speak of immune defenses breaking down and of T-cells tracking invaders. The medical establishment is described as a military command, with cutting-edge researchers in the vanguard against disease and public health workers in the trenches.

The increasing prevalence of war metaphors for medicine has provoked an array of criticisms from bioethicists who fear its idolatry. In the age of the "war on terror," their criticisms bear renewed attention. Concerns about the nonsense of war metaphors for medicine suggest related warnings about the nonsense of war metaphors for antiterrorism. The reverse, of course, may also be true: that concerns voiced about calling antiterrorism "war" may be relevant to reconsidering how we conceptually frame medicine.

Susan Sontag, William May, and George Annas warn of several dangers entailed by understanding medicine primarily as a war against disease:[9]

- It implicitly defines patients as enemies and their bodies as battlefields, traumatizing patients and generating high rates of iatrogenic illness that are accepted as normal.
- It presents medicine as facing perpetual crisis (because illness is never totally defeated). This promotes an overmobilization that organizes health care hierarchically, allocates resources questionably, and discourages attention to preventive care.
- All of the above can discourage both democratic participation in defining health priorities and widespread civic cooperation in advancing health goals.

Each of these points has a clear structural parallel in current debate about the wisdom or folly of calling antiterrorism "war."

Who Is the Enemy? Where Is the Battlefield?

The rhetorical nexus that can render the patient the enemy begins with language that describes disease processes in military terms. Sontag notes that cancer cells, for example,

> do not simply multiple; they invade. (Malignant tumors invade even when they grow very slowly, as one medical textbook puts it.) Cancer cells "colonize" from the original tumor to far sites in the body, first setting up tiny outposts. . . . Rarely are the body's "defenses" vigorous enough to obliterate a tumor that has established its own blood supply.[10]

But if medicine is a war against either microbial or malignant invaders, then the body of the diseased patient becomes the battlefield. Pursuing the example of cancer, Sontag underscores that the military understanding of cancer

> supports . . . avowedly brutal methods of treatment. . . . [T]here can be no question of pampering the patient. With the patient's body considered to be under attack ("invasion"), the only treatment is counterattack.[11]

Battlefields are dangerous places, for patients as well as hapless civilians in war. As May emphasizes, not only diseases but patients can be hurt by modern medicine's big guns.[12] He worries about increasing rates of iatrogenic injury, which he likens to "collateral damage" in war. (In the United States, the Institute of Medicine estimates that as many as 100,000 Americans die from outright medical errors, a conservative estimate of wider iatrogenic illness.[13]) Offering a suggestion worth an essay of its own, May suggests that constraints aimed at minimizing civilian casualties articulated in the just war tradition of moral reasoning might analogically inform medicine in important ways.

> A just war, no matter how just its cause, had to offer some prospect of victory. Further, a just war required a careful limitation on the means used to fight it. The means must be discriminate (the means must respect the distinction between combatants and noncombatants) and fit proportionally to ends (the evils of battle must not exceeded the good of the outcome.[14]

However, warns May, the model of warfare that influences modern medicine is not warfare according to traditional notions of just war doctrine, but rather the totalizing kind of war that has characterized conflicts of the last century:

> But in the twentieth century, the democracies, as well as totalitarian states, waged total, unconditional war with the commitment of all means, extraordinary as well as ordinary, to the victory. Just so, hospitals and the physician-fighter wage unconditional battle against death. At their worst, before the advent of federal regulations, a few professionals used unconsenting patients in research protocols in the name of the general war against disease, even though no visible benefits would come to the patients in question. And at their most zealous they sometimes subjected patients to the ordeal of battle without any hope of victory.[15]

As many historians of war have noted, the conduct of total war psychologically demands a demonization of the enemy. For May, metaphors of medicine as unconditional war presume an ascription of "the demonic" to disease and to death. Sontag underscores how disease can become the projection of what she calls ultimate Otherness: ultimate threat, ultimate challenge to natural and social order. Thus, for example, now not only are cancers discussed as invaders, but social movements or groups that are perceived as undesirable are described as cancers.

Sontag presciently discerns that the extended family of war metaphors for medicine paradoxically both individualizes disease (the patient is the battlefield) and globalizes it (even noncontagious diseases like cancer become perceived as catastrophic threats to social order). Both metaphorical implications easily become overlain with moral judgment. The individual patient is judged, because—unlike during the medieval plagues, when minority communities were massacred as scapegoats—"with modern diseases, the scapegoat is not so easily separated from the patient."[16] The diseased person becomes the medical, and moral, problem. At the same time, the threat of the disease itself is also morally judged, as it is turned into a symbolic projection of ultimate chaos.

Medicine's experience as war has exposed a dangerous paradox whereby the enemy is both personified and rendered a transcendental force, a paradox that raises questions about the location of the battlefield. Critics of the "war on terror" voice similar concerns about the potential for antiterrorism experienced as war. Writing in the immediate wake of the 9/11 attacks, noted just war theorist Michael Walzer entitled his trenchant editorial "First, Define the Battlefield."[17] To read it now, long after the metaphor "war on terror" has become enmeshed in American discourse, is to remind oneself that in the wake of the attacks, dazed Americans were as unsure of what to call their new challenge as they were of any other aspect of response. It is to remind oneself that the metaphor of war was a deliberately chosen one that, over time, has eclipsed other alternatives—such as Walzer's preferred model of antiterrorism as international criminal justice. War may now seem the natural way to frame antiterrorism only because it has become a dominant way of framing it—just as with medicine's war against disease.

Walzer distinguishes the use of limited military strikes against identified terrorists from "war." Nonetheless he acknowledges that the metaphor of war may "serve well . . . to signify struggle, commitment, and endurance." He finds it "unobjectionable so long as those who use it understand what a metaphor is." However, he fears an idolatrous literal interpretation that would gloss over important disanalogies: "There is, right now, no enemy state, no obvious battlefield." Walzer is concerned to honor the just war tradition's constraints on legitimate targeting, even when the legitimate targets are hard to find. Tongue in cheek, Walzer concludes that "we should pursue the metaphorical war, but hold back on the real thing."[18]

William May's warning to consider not only the metaphor of war but also the model of war presumed seems crucially important when considering the formative power of the rhetoric "war on terror." May lamented losing the constraints of the just war tradition in a medical war modeled after total and unconditional warfare. The war on terror has been cast not only as a war, but as nothing short of a Holy War. It is a battle of Good against Evil. (It was even initially characterized by President Bush as a "crusade," necessitating a quick

retraction and apology to Arabs and Muslims for the offensiveness of the analogy. For those audiences, the crusades were historical as well as metaphorical.) While, as May notes, totalizing war seems characteristic of world conflicts during the last century, the resurgence of the distinctive rhetoric of holy war is a more recent development, in the United States as well as in many other parts of the world.[19]

The rhetoric of holy war may give terrorists more than they are due, not only by ironically borrowing their own apocalyptic rhetorical framework, but also by misjudging their real threat and thus deploying clumsy strategies against them. Just as metaphors of total warfare in medicine make high levels of iatrogenic illness seem normal and necessary, so too "overkill" in the war on terror can ignore nonmilitary options for redress and generate undue civilian casualties. In Afghanistan and Iraq, not only high civilian casualties but also postwar chaos has been widely accepted by the American public as a normal and necessary part of the "healing process."

The logic of the just war tradition explains that if you do not limit the means by which you fight, you come to look like the tyrant you purport to oppose. So both doctors who maim and kill in the attempt to defeat disease and armies who destroy innocents in the attempt to stop the random violence of terrorism violate their own integrity and vitiate their own reason for action. But the just war tradition alone cannot explain why rates of iatrogenic illness or collateral damage that are high on the face of it are not deemed high enough to raise questions among the perpetrators about whether they are beginning to look like the enemy. This phenomenon only makes sense if one excavates the surrounding metaphorical framework of total, holy war against a demonic enemy. It is that framework that makes high losses seem like necessary sacrifices.

Holy war framings may ask less of doctors, or of soldiers, than should be asked, precisely because they are symbolically assigned to the side of good. Just as many continue to assume the problem of "medical mistakes" is one of "a few bad-apple doctors," even in the face of statistics suggesting a systemic problem of catastrophic proportions, so too the prisoner abuses at Abu Ghraib are dismissed as a few bad-apple soldiers, even as evidence of systemic torture mounts. Neither medicine nor antiterrorism can afford to lose the constraints of the just war tradition, constraints that by their very nature challenge the construal of *any* wars as total wars—even the wars against disease, death, and terrorism.

Overmobilization

In both medicine and antiterror, the portrayal of the quest as total war against a demonic enemy invites a no-holds-barred approach to combat. That framing has institutional ramifications behind as well as on "the front lines." George Annas tags the response of medical institutions "overmobilization."

> The military metaphor leads us to overmobilize and to think of medicine in terms that have become dysfunctional. For example, this perspective encourages us to ignore costs and prompts hospitals and physicians to engage in medical arms races in the belief that all problems can be solved with more technology. The military metaphor

> also leads us to accept as inevitable organizations that are hierarchical and dominated by men. It suggests that viewing the patient's body as a battlefield is appropriate, as are short-term, single-minded, tactical goals. Military thinking concentrates on the physical, sees control as central, and encourages the expenditure of massive resources to achieve dominance.[20]

Because the threat is inflated, so is the response. Overmobilization not only affects how one fights, making high rates of iatrogenic illness seem like noble sacrifices, but also affects resource allocation and ultimately the structure of medical institutions.

Overmobilization dramatically skews resource allocation, obscuring worthy candidates for resources. With disease itself the unconditional enemy, combating the disease itself—its biochemical pathways, for example—gets the funds and the "soldiers." Examining the environmental, social, and psychological influences on health seems like unaffordable indulgence in the face of such a dangerous enemy. Indeed, health becomes relegated to a minor role in the "healthcare system," a disease-focused, not a health-focused system.[21]

Critics who question declarations of war on terror express related concerns about the potential for overmobilization. Walzer, for example, worries that characterizing antiterrorism as war will deflect attention from some of the most important work necessary to eradicate terrorism: "intensive police work across international borders, an ideological campaign to engage all the arguments and excuses for terrorism and reject them, and a sustained diplomatic effort." If medicine framed as war can ironically ignore health promotion, antiterrorism framed as war can ironically ignore peace promotion. If medicine framed as war ignores environmental and social causes of disease, antiterrorism framed as war ignores environmental and social conditions that stoke terrorism.

What is *not* described as part of the war effort also warrants attention. Regrettably, their legitimate concern about overmobilization has discouraged bioethicists from questioning the noticeable *absence* of war rhetoric for some kinds of medical quests. However, the selectivity of an appeal to a certain symbolic construction itself deserves critical ethical analysis.[22] After all, the U.S. government has not yet declared war on asthma, despite its mounting toll, especially on poor urban children. There may be good reasons not to frame complex chronic diseases as "enemies" to be "fought against"—but some of those same reasons could apply to cancer or other illnesses that have been personified as demonic enemies. The implicit criteria by which efforts to reduce some diseases are proclaimed a heroic war effort while efforts to reduce others are consigned to a symbolically lesser sphere ("the home front?") deserve explicit articulation—an articulation they may not survive.

Questioning what is *not* framed as war, amid otherwise overarching wartime rhetoric, deserves as much attention in the war against terror as in the war against disease. Significantly, for example, the United States framed its military action in Afghanistan as a war against terror rather than as a conventional war against a nation–state. Yet it argued that the multinational men it captured there were not "combatants," and thus not subject to the protections of the Geneva Convention on the treatment of prisoners of war. If they are *not* prisoners of war, one may legitimately wonder why the confrontation in which they were captured *was* a war. Once again, glaringly inconsistent appeals to a symbolic framework can call the very framework into question.

Overmobilization in medicine not only deflects resources from efforts to promote health proactively, it also opens the financial floodgates to spending on acute diseases selectively identified as militant enemies. For a generation, medical costs in the United States have risen continuously at rates higher than general inflation. Public attention to the unsustainability of this trend is deflected by the wartime rhetoric. Susan Sontag questions the proclaimed "war on cancer" because it is a war that cannot be won.[23] (President Nixon declared "war on cancer" in conjunction with the landmark National Cancer Act of 1971.) The perceived enemy is not something that can be defeated. There will always be some cancer in the world, even if treatment and prevention admirably improve. But the interminable rhetoric of war allows for ever-greater funding allowances and contributes to a highly centralized bureaucracy for dispersing cancer-fighting resources, even as "battle fatigue" draws attention away from real—but less than total—victories.

The war on terror generates its own version of the paradox by which battle fatigue coexists with expansive license to centralized authority. Like the war against cancer, the rhetoric of war on terror generates a certain weariness (Osama bin Laden remains elusive and international terror cells continue to operate) without recognizing real accomplishments that have been made, for instance, that Al Queda was severely crippled by military strikes in Afghanistan and that there is greater coordination among American intelligence agencies. Unlimited war seems incapable of acknowledging limited, but highly significant, accomplishments. The political effect of this incapability is public acquiescence to the enormous budget and relative secrecy of the Department of Homeland Security.

Antidemocratic Tendencies of the Wars against Disease and Terror

Thus overmobilization affects not only how much money is spent on medical care or on antiterrorism, but also how decisions about its use will be made and by whom. Critics of war metaphors in both contexts are driven by commitments to democracy, as well as by commitments to quality medical care or to effective antiterrorism. It can be hard to be a dissenter in the midst of a war conceived of as unconditional. It can also be hard to gain public hearing for nonwartime concerns, even if they greatly affect large numbers of people.

The overmobilization of medicine shapes the nature of medical establishments, modeling them after military command and control centers:

> The hospital becomes a military compound. It acquires something of a hallowed-grisly status of a battleground. A kind of military discipline prevails there. Assistants are orderlies. Nurses tend to become extensions of the physician's hand. The emergency room of a big city hospital on Saturday night smacks of the wartime field hospital.[24]

The emphasis on efficiency and discipline leaves little room for discussion, education, and diplomacy. Yet diagnoses may be uncertain; much disease is preventable or manageable; patients together with their loved ones may be the most important resources for their own care. In public health contexts, the military model gives the public no place at the table with the experts in the "war room" of policymaking. In clinical contexts, patients who balk at a

recommended treatment are quickly labeled "noncompliant." Similarly, in post-9/11 America, high-level officials labeled all public dissenters of the government response to terrorism unpatriotic, a dismissal that whitewashed the range, variability, and selectivity of their complaints. The "dissing" of dissent coincided with the Patriot Act's explicit restriction of civil liberties.

Perhaps the only public intellectual to address explicitly both war metaphors for medicine and for terrorism, Susan Sontag simultaneously piggybacks and distinguishes her democratic critique of the war on terror from her earlier critique of the war on cancer. In an op-ed piece for the first anniversary of the 9/11 attacks, Sontag explains that the two are connected by the metaphorical ploy of naming as "war" something with no foreseeable end. But Sontag finds the war on terror much more dangerous because it is less likely to be recognized as a metaphor:

> When a president . . . declares war on cancer or poverty or drugs, we know that war is a metaphor. Does anyone think that this war—the war America has declared on terrorism—is metaphor? But it is, and one with powerful consequences.[25]

For her, the declaration of this war without end is really the declaration of "the extension of power by a state that believes it cannot be challenged." Sontag warns that the idolatry of the war on terror—interpreted literally to render wartime exigencies permanent—wrongly inhibits democratic discourse. Thus she contends "there are better ways to check America's enemies . . . than continuing to invoke the dangerous, lobotomizing notion of endless war." Sontag deplores terrorism and supports use of military force to thwart it. But she insists such engagements, which have definable and foreseeable ends, are not "war"—just as she, a cancer patient, engaged in specific therapies without going to war against cancer.

In short, both the war against disease and the war on terror have proven ethically problematic in legitimating high rates of collateral damage, promoting overmobilization, fostering distorted resource allocation, and undermining democratic processes. The structural parallelism between ethical excesses associated with the war against disease and the war on terror warns against unreflective new variations on old metaphorical themes. It begs questions about burgeoning tendencies to view disease as terrorism, and to view terrorism as a disease.

Terrorism as a New Metaphor for Disease

Metaphors of terrorism can easily be grafted onto the already militaristic symbolic framework by which modern medicine is understood. Medical adoption of antiterrorist rhetoric may be particularly dramatic in, while not limited to, epidemic control. New threats of global pandemics have arisen contemporaneously with the age of terrorism. The new microbes are viewed as terrorist in their stealth, their resistance to conventional drug treatment (to "conventional war"), their ability to infiltrate borders, and their power to wreak havoc far from the point of their origination. If the effort to contain political terrorists is a total war, so too must be the effort to contain the new contagious diseases.

Contemporary political rhetoric on terrorism provides an explicit metaphorical bridge for the implicit jump feared by Sontag and May: the conceptual leap

from conceiving of medicine as war to conceiving of diseased persons as the enemy. In the wake of 9/11, President Bush proclaimed that any nation or person harboring terrorists would themselves be considered terrorists. What is notable about the statement is its lack of intent. The president did not say "anyone who knowingly or willingly harbors terrorists will themselves be considered terrorists." Thus at the time alarmed just war theorists worried that the whole civilian population of Afghanistan might be treated as terrorists.

If even unwitting or coerced harborers are the enemy, then the diseased are enemies in the war against disease. In such a rhetorical context, it may become difficult to disassociate unintentional harboring of terrorist viruses from moral judgment. Several Hong Kong family members of SARS victims have sued in court for damages because they were fired due to their loved one's illness or death.[26] They were not just asked to stay home for a quarantine period to insure public safety. They lost their jobs permanently and are having great difficulty gaining alternate employment even years later. By loving someone with SARS, they had harbored an enemy, and thus became viewed as a public threat.

Terrorist imagery can also exacerbate the psychological inflation that moves from appreciating the real threat of disease to projecting ultimate cosmic disorder on a feared disease that is viewed as demonic. Whether the perceived demonic, enemy is terrorism or disease, the threat may be conceived as so big that extreme measures are presumed necessary, without any rigorous cost–benefit accounting.

In the political realm, many commentators have expressed concern that the rhetoric of America's war on terror legitimates violation of civil liberties that have traditionally been viewed as basic to American democracy. The threat is described as so big, the times as so extraordinary, that one cannot unduly quibble on idealistic principle. Thus although American casualties caused by terrorism are small in comparison to the losses of World War II or the losses caused by cigarette smoking, prisoners have been detained without charge and the Patriot Act licenses unprecedented government surveillance of private citizens.

As international epidemic control becomes metaphorically modeled on terrorism, the parallel danger of eroding civil liberties in response becomes pronounced. A telling example is the univocal praise Singapore won from the international community for its handling of the SARS epidemic. To be sure, the Singaporean government and health system did much to be admired in containing the epidemic. Indeed, some of its greatest successes resulted from an implicit rejection of literally-interpreted metaphors of a war against SARS. Whereas war mentalities can generate reflexive secrecy, the Singaporean government—in stark contrast to China—immediately and honestly reported all information on SARS in the territory. It publicized an ongoing count of cases along with sophisticated epidemiological discussions of disease pathways, generating public trust. And whereas war mentalities have antidemocratic tendencies, Singapore gave a place for ordinary citizens as stakeholders in decisionmaking. For example, the schools were temporarily closed in explicit response to parental fears, which were deemed as significant a factor as concrete epidemiological evidence.[27]

Yet Singapore also instituted measures that could well be described as draconian, and wartime framings might be the only explanation for why they

were unquestioned not only in Singapore, but also in countries that have criticized Singaporean authoritarianism on lesser issues (such as its notorious ban on selling chewing gum).[28] If Singapore implicitly resisted some implications of war metaphors, explicitly war metaphors loomed large. The *Strait Times*, Singapore's leading English-language newspaper, designated possible SARS cases as "suspects," discussed "red alerts" and "all clears," reported that the battle against SARS was being waged "on all fronts," and exhorted Singaporeans not to "let their guard down" as the epidemic waned.[29] The highest-level government response team was called the "SARS Combat Unit"; in cooperation with the United States it established a "nerve center" to combat SARS in Southeast Asia.[30] (The nerve center literally as well as metaphorically linked SARS and terrorism, as the same institute engages in antibioterrorism research.) In an internationally aimed press conference, the Minister of Health reassured the world that Singapore would "nail the source" if any international visitor to Singapore contracted SARS.[31]

In this war zone, Singapore instituted jail terms and $10,000 fines for anyone who broke quarantine. Names of certain SARS victims, particularly of one so-called superinfector, became widely known. Given the high levels of voluntary cooperation with infection control measures on the part of the populace and the popularity of less warlike measures (such as the government encouragement of employers to pay employee salaries throughout quarantine), one might question whether these coercive or privacy-invading strategies were actually necessary. But no such questioning seems to have occurred. The only relevant story was that the battle was won.

Singapore recognized wartime sacrifices in a ritual that implicitly reinforced their valor: in a ceremony on the territory's National Day awarding medals to war heroes—health workers and researchers on the "front lines" of SARS care and prevention.[32] However, another kind of sacrifice merits ethical attention. Amid the epidemic's militaristic framing, SARS-related stigmatization and fear of being hurt by such stigmatization, not just by the disease, became widespread. Stigmatization was reported by those quarantined as a precaution but who never developed the disease as well as by actual SARS victims.[33]

Significantly, the fear that one could be stigmatized by unwittingly "harboring a terrorist" poses the potential to obstruct legitimate public health efforts. For example, a survey conducted months after the epidemic had been contained indicated that many Singaporeans would not want family, neighbors, or colleagues to know that they were infected and would prefer the development of a SARS case in their office to be maintained as a corporate secret (all of which is against explicit Singaporean policy).[34] A significant number would not even want to be told themselves if a colleague were infected, apparently deeming the risk of quarantine and associated stigmatization to be greater than the risk of infection.

Treating epidemic control as a war in general may backfire when it should be viewed as war specifically. The spring 2005 outbreak of Marburg virus in Angola was an emergency of such catastrophic import that severe restrictions on civil liberties were warranted. The easily spread virus kills most of those who contract it and has a dangerously deceptive latency period. In a region lacking access to mass media, identifying all ill, doing precise contact tracing, enforcing quarantine, and minimizing contact with infected corpses were crucial steps for containing what threatened to be a disastrous and fast-moving epidemic.

Yet tremendous local distrust of international healthcare workers hampered efforts to stop the epidemic. In some areas, visiting healthcare workers were physically attacked.[35] The cultural, historical, and educational factors that underlay that phenomenon are complex and specific to the locale. At the same time, they may have been exacerbated by general framings of epidemic control as war—with those harboring the virus implicitly viewed as enemies aiding the terrorist illness itself. In this case, the "enemies" started fighting back. But that is a fight no one can win.

Disease as a Metaphor for Terrorism

The full ironical circle by which the demonic becomes a metaphor for illness, and then illness becomes a metaphor for people or social movements perceived as threats, has been reinscribed in an age of terrorism. Not only are diseases now characterized as terrorists, but terrorists are described as diseases.[36] Here again, metaphors embody both sense and nonsense. Terrorists, like disease, can indeed maim and kill randomly. But unlike disease, terrorism is intentional. Therefore eliminating "pathogens" may not be as effective a strategy against terrorism as it is against illness.

Associating terrorism with disease undoubtedly has contributed to the acceptance of high civilian casualties in the war on terror. Terrorists coalesce in "cells," implicitly malignant ones with dangerous potentials for metastasis. Indeed, terrorism itself has been described as a malignancy or a cancer.[37] A standard treatment for tumors, of course, is excision. Just as cutting-edge medicine prides itself on the precision of tumor-excision techniques whereas standard medical practice continues to accept significant damage to surrounding tissue as a necessary price to pay, the U.S. military trumpets the precision of its "smart" bombs whereas standard military practice continues to accept high collateral damage as a necessary price to pay.

Of course, there may be legitimate debate about how necessary those prices are, in both medicine and war, but the psychological grip of "cancer" tends to repress such debate from open discussion. Just as significant numbers of both cancer patients and oncologists continue to choose the most radical forms of surgical treatment even if the cancer is diagnosed at early stages in which alternative treatments have demonstrated equivalent clinical efficacy, so too people may simply assume it is "better safe than sorry" when the cancer is terrorism.[38] Losses of whole wedding parties in Afghanistan, or of whole towns, such as battle-devastated Fallujah in Iraq, are defended because the target of the attacks was a terrorist cell—and we all know that cancer hides in seemingly healthy tissue. Civilian losses become viewed as necessary amputations to protect the body from the malignancy of terrorists

Metaphorically analogizing terrorists to disease may have helped to spawn the false dichotomy between fighting terrorism and understanding terrorism that has become a mainstay of American political debate. Pathogens themselves, of course, cause disease, so eliminating them is often the most direct strategy to eliminate disease—even if the disease's ultimate origin or biological mechanisms remain incompletely understood. In public health, identifying the existence of a pathogen is often enough to strategize its control.

But pathological people, although necessary, are not sufficient to cause systemic terrorism—which depends on social support and intentionality in

ways that disease does not. Diseases do not give reasons for their existence. Terrorists do. Understanding the psychology of one's enemy has been advocated as an intrinsic necessity of military strategy since the ancient Chinese philosopher Sun Tzu wrote *The Art of War*.[39] But today efforts to understand terrorist enemies are cast as a cowardly evasion of fighting. Paradoxically, describing terrorists as disease may subtly undermine some of the most powerful reasons to call antiterrorism "war."

Indeed, both diseases and terrorists derive from particular historically and socially formed environments. Wartime rhetoric blurs the difference in intentionality between disease and terrorism, making diseases seem intentional and terrorists seem like mindless tumors. Both directions of this metaphorical inversion make environmental, social, or long-term analysis seem like unaffordable luxuries, for medicine and antiterrorism.

Conclusion: Metaphorical Dissent and Diversification

The metaphorical nexus by which struggles against disease and terrorism are called wars, diseases are called terrorists, and terrorists are called diseases has led to continuous deflections of important health and social agendas while we fight war without end on multiple fronts. Fighting a war is a top-down endeavor. But democracy is a bottom-up affair. In both the war on disease and the war on terror, ordinary citizens are left with little say as to public priorities or public response. They also have little opportunity to articulate what they think their own contributions could be to health or to peace, as well as to fighting disease or terrorism. Yet, ultimately no strategy for responding to disease or terrorism is likely to be effective without the support and education of the general public and without tapping the talents of the general public.

One organization that has made a practical connection between the antidemocratic tendencies of a war on disease and a war on terror is the New York Academy of Medicine's Center for the Advancement of Collaborative Strategies in Health, which has sponsored two related projects.[40] The linkage between the two projects was a desire to include the public more in setting healthcare priorities. One project considered how different kinds of local public/private partnerships might allow citizens a greater role in articulating and pursuing visions of public health. The other project designed a national survey to consider public health responses to terrorism, probing how multiple levels of civic community might become fruitfully involved in planning coherent responses to potential terrorist attacks.

These projects were not conceived as metaphorical critiques. However, in my terms they de facto challenge the dominance of war metaphors, both the war on disease and the war on terrorism. Like civic projects encouraging creative participatory responses to crime or pollution, these efforts assumed that peacetime democratic activities can address real threats. Perhaps the idolatry of war metaphors for medicine and antiterrorism can be redressed by a dual strategy: a strategy that combines such practical activities presuming a different symbolic framing with reflective metaphorical diversification.

Military metaphors are not wholly without sense, but their increasing discursive dominance should be recognized as ethically problematic. Particularly worrisome is the presumption of total war as the underlying model of war. In both medicine and antiterrorism, highlighting what military metaphors over-

emphasize or obscure, as well as challenging them with alternative metaphors, is necessary to promote a number of ethical goals: to protect vulnerable innocents, to reduce illness and terrorism as much as possible, conversely to promote health and peace as much as possible, to use resources wisely, and to maintain robust democracy in the face of serious natural and political threats. A retreat from war metaphors may be a significant ethical advance.

Notes

1. Sontag S. Illness as metaphor and AIDS and its metaphors. New York: Doubleday; 1990:64,84.
2. Tan W. Singapore will nail source if visitors are infected. *Strait Times* 2003 May 9.
3. Lakoff G, Johnson M. Metaphors we live by. Chicago: University of Chicago Press; 1980.
4. Tillich P. Dynamics of faith. New York: Harper; 1957:41–9.
5. See note 3, Lakoff, Johnson 1980.
6. Tannen D. The argument culture. New York: Ballantine; 1999.
7. See note 1, Sontag 1990:66.
8. See, e.g., Rothman D. Ethics and human experimentation: Henry Beecher revisited. *The New England Journal of Medicine* 317:1195–9.
9. May W. The physician's covenant: Images of the healer in medical ethics. Philadelphia: Westminster; 1983; Annas G. Reframing the debate on health care reform by replacing our metaphors. *New England Journal of Medicine* 1995;332:745–8.
10. See note 1, Sontag 1990:64.
11. See note 1, Sontag 1990:64.
12. May repeatedly worries that the quest to "eliminate suffering" can devolve into the "elimination of the sufferer." The metaphorical framework of battling disease links his concerns about euthanasia (which he opposes) and iatrogenic illness (which he thinks inadequately opposed). See note 9, May 1983.
13. Kohn L, Corrigan J, Donaldson M, eds. To err is human: Building a safer health care system. Washington, D.C.: National Academy Press; 2000.
14. See note 9, May 1983:66.
15. See note 9, May 1983:66.
16. See note 1, Sontag 1990:71.
17. Walzer M. First, define the battlefield. *New York Times* 2001 Sep 21.
18. See note 17, Walzer 2001.
19. In the United States, the contrast between the rhetoric of the first Gulf War and the war in Afghanistan is revealing. In the first Gulf War, President George H. Bush consistently decried the Iraqi invasion of Kuwait as "an injustice," connected efforts to push back the Iraqi invasion to demands for justice, and invoked the just war tradition specifically. A decade later, George W. Bush framed the fight against terrorism in Afghanistan as a fight against evil.
20. See note 9, Annas 1995:746.
21. Therefore Annas, who criticizes market metaphors for medicine as well as military metaphors, urges the use of a new family of "ecological" metaphors emphasizing balance and sustainability. See note 9, Annas 1995:757–8.
22. I propose that consideration of selectivity be added to criteria elucidated by other authors who evaluate the coherence of moral appeals to symbolic frameworks. For a particularly explicit and systematic example, see Sytsma S. The moral authority of symbolic appeals in medical ethics. *Cambridge Quarterly of Healthcare Ethics* 2004;13:292–301. To Sytsma's list of criteria I would add: "Is the symbolic appeal invoked selectively among cases that seem significantly similar in terms of the internal logic of the appeal? Does the selectivity of the appeal undermine its moral authority, or is it explainable by legitimate differences?"
23. See note 1, Sontag 1990:66–7.
24. See note 9, May 1983:65.
25. Sontag S. Real battles and empty metaphors. *New York Times* 2002 Sep 10.
26. Wu E. First SARS prejudice case hits court. *South China Morning Post* 2004 Sep 25.
27. SARS: How Singapore outmanaged the others. *Asia Times* 2003 Apr 9.
28. Lee A. Singapore's SARS moves world's toughest: BBC. *Strait Times* Europe Bureau press release. 2003 Apr 27. Bush praises Singapore's response to SARS fight in talks with Prime

Minister Goh. *Channnel NewsAsia* 2003 May 6. Singapore's SARS measures welcomed. *New York Times* 2003 Apr 22. Hensen B. WHO praises Singapore's moves to fight SARS. *Strait Times* 2003 May 1. Szep J. In Singapore, tough laws help contain SARS alarm. *Reuters* press release 2003 Apr 30.
29. SARS alert sounded. *Strait Times* 2003 Sep 4. Fighting SARS on all fronts. *Strait Times* 2003 Aug 9. Khalik S. Move to face truth serves Singapore well. *Strait Times* 2003 Sep 11.
30. SARS combat unit says there is no new infection in all hospitals in two weeks. *Channel NewsAsia* 2003 May 3. Chang A. Joint research into disease and bioterrorism. *Strait Times* 2003 Oct 22.
31. See note 2, Tan 2003.
32. Cheong S. Hearts who battled SARS honored in National Day awards. *Strait Times* 2003 Oct 9; see B. National Day awards for overcoming SARS presented at special ceremony. *Channel NewsAsia* 2003 Oct 10.
33. Moves to humanize home quarantine process. *Strait Times* 2003 May 4.
34. Khalik S. SARS stigma fears remain. *Strait Times* 2003 Oct 10.
35. Lafraniere S, Grady D. Fear and violence accompany a deadly virus across Angola. *New York Times* 2005 Apr 9:A1.
36. Of course, though not the focus of this essay, decisions about who to label as terrorists in the first place are highly politicized and have enormous consequences. See, e.g., Kapitan T. The terrorism of terrorism. In: Sterba J, ed. *Terrorism and International Justice*. New York: Oxford University Press; 2003.
37. See, e.g., The cancer of suicide bombing. *New York Times* 2002 Apr 3:A18; Friedman T. Marking down Bin Laden. *New York Times* 2005 Feb 6.
38. See, e.g., Yan Y, Carvalhal G, Catalona C, Young J. Primary treatment choices for men with clinically localized prostate carcinoma detected by screening. *Cancer* 2000;88:1122–30; Shou I, Ekeberg O, Ruland C, Karesen R. Do women with newly diagnosed breast cancer and consulting surgeon assess decision-making equally? *Breast* 2002;11:434–41; Stafford D, Szczys R, Becker R, Anderson J, Bushfield S. How breast cancer treatment decisions are made by women in North Dakota. *American Journal of Surgery* 1998;176:515–9.
39. Sun Tzu. *The Art of War*. Translated by Thomas Cleary. New York: Random House; 1988.
40. See http://www.nyam.org/initiatives/ph.shtml. See also Lasker R, Weiss E. Broadening participation in community problem solving: A multi-disciplinary model to support collaboration and research. *Journal of Urban Health* 2003;80:14–47; Lasker D. *Redefining Readiness: Terrorism Planning through the Eyes of the Public*. New York: New York Academy of Medicine; 2004.