

## Bioparanoia and the Culture of Control

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The subject under capital lives in constant fear that at any moment her body may betray her integrated subjecthood with organic disintegration that will in turn threaten her agency, identity, role, and appearance in the world. Knowing this betrayal is probable, and eventually inevitable, produces an uncomfortable disquietude that fluctuates wildly in its intensity, depending on the degree to which immediate circumstances are working in conjunction with a stimulated, paranoid imaginary. For the subject under capital, the body imaginary is a technology that can be adjusted, fine-tuned, and amplified by external social, political, and economic pressures in order to advance interests that too often are at odds with those of the individual. Capital's general ability to make such adjustments by constructing easily consumed and rapidly internalized apocalyptic fantasies has been honed to a very refined process. The consumer must accept these scenarios as probable, react with relative predictability, and yet avoid complete meltdown (productivity cannot be destabilized). If internalization of the fantasy can occur within a large enough aggregate of individuals, the social, political, and/or economic landscape can be altered by their collective reactions.

Individuals under the influence of artificially created bioparanoia will typically attempt to find ways to reduce the amplitude of a given internalized scenario in order to maintain a functional persona. The means by which psychological equilibrium is approached and approximated varies by scenario. Sometimes a deferment to authority is the solution, such as in the Bush administration's use of the imaginary of terrorists killing scores of American people in an effort to create a citizen-approved shredding of the Bill of Rights. Other times, the purchasing of a product will calm the storm, such as the run on plastic sheets

and duct tape when the U.S. public was encouraged by various government agencies to fear imminent biological attack. And at yet other times, individuals attempt to restore equilibrium by acquiring information readily supplied by the crisis-generating news media as was seen with viewer approval of the excessive reporting of bird flu outbreaks as a major public health hazard.

Hyperstimulating the imaginary of individuals with fears of a loss of bodily integrity is one of capital's most common energizing spectacles. It may not be the only tactic, but it is certainly a favorite. How much power has been consolidated under the sign of fear? We can never know precisely, but we can probably agree it is too much. We cannot hope to count all of the wars, markets, and legislative acts that have been generated in the wake of a fear campaign, but we can examine the typologies and related mythologies that have become grist for the exploitation mill that churns out the spectacle of fear. There are many phantasmagorical bodies to exploit, but three seem to stand out in regard to public bio-paranoia derived from the spectacle of fear: the disinfected body, the aestheticized screenal body, and the abused body. The narratives associated with these constantly mutating icons can carry us into the territories of the abject, the destabilized, and the tortured bodies that have been acted upon by external and internal (i.e., genetic error) forces that can reinscribe the flesh as the site of catastrophe. While some of these narratives may have a fragile connection to history and materiality, others continue simply as collective hallucinations. All types, however, are still perfectly suited for profitable symbolic exchange in the service of extracting individual agency and expanding realms of domination.

### **The Disinfected Body**

The disinfected body, though a relatively new imaginary entity, is the eldest among this collection of phantoms. It emerged directly out of the material conditions of early capitalism in regard to human and public health. Its backstory reveals one of capitalism's greatest gifts to society and one of its greatest curses. To understand the conditions that brought this mythic specter into being, a look back at the emergence of capitalism (particularly ground zero—the United Kingdom) is necessary.

At the beginning of the nineteenth century, the British landscape was rapidly changing. The intensification of urbanization moved in parallel with the intensification of industrialization. Cities exploded in population, and towns turned into cities in a matter of years. In 1750 there were two cities with a population of over fifty thousand people in the United Kingdom, London and Edinburgh. By 1801 there were eight, and by 1851 there were twenty-nine. The factories' immense demand for labor precipitated a massive population shift from the countryside to the cities. For the first time in history, the center of profit and power was situated in the control of manufactured goods. As long as England had a monopoly on modern technology and the knowledge to use it effectively, the British Empire was unassailable.

As labor poured into the cities, opportunities bloomed for all types of small businesses that supported the factory laborers and the growing industrialist class. However, along with opportunity and wealth, a very serious problem emerged: no institution(s) existed that had the function of managing growth. Urbanization at this rate and density had never been seen before. From this lack of management sprang the now familiar modern social problems: pollution, crime, exceptional poverty, and health crises. In the case of public health, the conditions could not have been worse. The poor were packed together. Multi-generational families crowded into tiny apartments. To make matters worse, in the early part of the century there existed only the crudest waterworks and sewage systems. This problem was particularly bad in London, where the flow of the Thames, in conjunction with regular rainfall, was no longer robust enough to carry all the sewage out to sea. The river, which supplied the city's drinking water, became a festering wound running through the city, yet remained the only source for drinking water. Under these conditions, contagions spread like wildfire. Cholera and dysentery were common. Because of the population density, airborne diseases such as smallpox (in the early century) and tuberculosis (consumption) were rampant. All disease spread faster and had higher mortality because laborers were overworked and undernourished, and consequently had weakened immune systems. For babies and children (especially those who were working) the mortality rate was staggering.

Despite this chaos, capitalism—a political economy populated with managers, number crunchers, bureaucrats, and optimizers—sought ways to express rationalization and efficiency in this urban landscape. It did, albeit probably for the wrong reasons. Labor was an abundant resource that was at best a mere force of production, as opposed to being viewed as a dignified human ability. Thomas Malthus suggested as an early management technique letting the poor die (and, if necessary, helping the process along), since there was an inexhaustible supply. After all, from his perspective, their squalor was a matter of moral ineptitude and not economic oppression. Fortunately for the laboring and underclasses, disease does not care about the qualities of its host. The merchant and ownership classes were also caught in the crisis. Not as many died on a per capita basis, but die they did. The problem caused enough public outrage that something had to be done.

In 1837, the National Vaccination Board was created to distribute smallpox vaccinations around the city of London. In 1843, London created its Board of Health. Other cities copied the model. Because of agitation and unrest, labor began getting some very modest relief as well. The Factory Act of 1833 forbade children under the age of nine from working in textile mills. This was followed by the 10 Hour Act in 1847, which banned women and children from working more than ten hours a day. These initiatives and acts were better than nothing at all, but a quick glance at Friedrich Engels's chronicle *The Condition of the Working Class in England* (1844) shows that they did little or nothing to improve the actual situation.

Spurred by a serious cholera epidemic between 1848 and 1854, a real consideration of public health began in 1854. The summer of 1849 was especially bad, and was surpassed only by the summer of 1854. Cholera was one of London's more gruesome diseases—at that time it had a 50 percent mortality rate due to the disturbing speed with which an infected body would dehydrate. Even more gruesome, infected bodies often continued to convulse after death. A physician named John Snow had been seeking the cause of cholera since its appearance at Newcastle in 1832. Snow had no scientific model with which to track cholera, and instead used a quantitative social scientific model. He chronicled and mapped the outbreak, and managed to build a correlation between case distribution and water quality. This lent some credence to his hypothesis that cholera was waterborne (most of his contemporaries believed it to be airborne). In 1854 he discovered that it was better to get drinking water from the north side of the city. South London, a more impoverished district, had a much higher incidence of cholera. The increased rate was due to the Southwark and Vauxhall water companies drawing their water downstream from the many sewer outlets that flowed untreated into the Thames. Unfortunately, this was the only water available, so people were forced to drink the brown, frothy brew.

In September 1854, cholera raged in Soho, with more than six hundred people dying in the first ten days of the outbreak. Snow tracked the outbreak to a pump on Broad Street where most of the victims were getting their water. His solution was to remove the pump handle. The Board of Guardians of the parish concurred, and carried out his advice. The cholera did stop, but whether it was because the pump was disabled is uncertain. Snow himself admitted the cholera epidemic was in decline at the time of the action, so the closing of the pump could well have been too little too late. Still, this moment was of great importance for three reasons. First, Snow had convinced those in power that water and sewer management were key to public health management. Second, the government began to understand what public health really was, and why it was important to pay attention to it. Third, any doubts the city fathers may have had regarding Snow's conclusions were quashed by the uproar over the number and type of people who had died. The six hundred were not the impoverished laborers of South London, but the reasonably well-to-do shopkeepers of Soho. Members of Parliament, led by Benjamin Disraeli, quickly moved to rework the entire sewer and water system, sparing no expense and using the best engineering techniques known at the time. Cholera never returned to London after the system was completed.

The late nineteenth century brought another series of events that would add to the public's mounting interest in the disinfected body. Most significant was the isolation of a number of disease-causing bacteria, which in turn led to uncontested proof that specific bacteria were the source for specific diseases and infections. Louis Pasteur and Robert Koch proved the germ theory of disease in the 1880s, a decade that truly launched the field of microbiology. The idea that germs caused disease had been around in a crude form since

1546. During that year, Girolamo Fracastoro proposed that disease was caused by agents too small to be seen by the naked eye. He called these agents “seminaria.” A century later, with the invention of microscopy, these creatures were finally seen. Even so, the germ theory of disease enjoyed very modest success through the eighteenth and nineteenth centuries. Most physicians and other specialists were sympathetic to the theory of spontaneous generation that stated bacteria were a by-product of disease rather than a causal agent. After the work of Koch and Pasteur, however, germ theory was uncontested. Pasteur also proved that bacteria were the cause of souring and rotting. As the evidence mounted, the medical establishment grudgingly accommodated this new knowledge and the medical techniques born from it. These new understandings were among the cornerstones of modern medicine.

The appropriation and exploitation of the new knowledge by capitalist opportunists was rapid. Disinfectants and sanitizers poured into the marketplace. A new appreciation for alcohol (both ethanol and isopropanol) boomed in the 1890s. In 1897 Sears and Roebuck listed five types of bleach in its catalog. By 1903, phenol was the standard antimicrobial against which all others could be judged, using the phenol coefficient method of testing. Hospital infection rates plummeted. Eventually, the antiseptic era of medicine gave way to the aseptic era, in which bacterial contamination was intentionally and actively avoided, and antiseptics were used as a second line of defense. This was the upside. The downside was the reactionary but profitable attack on public consciousness regarding germs.

The public in developed countries was worried enough by experiences of epidemics, and very frightened of infection from the newly discovered invisible germs. We must remember that there were no antibiotics yet, and once they came into being, the public could not access them with any ease until after World War II. This meant that any breach of the borders of the body, no matter how small, was an invitation to infection. Once infection began, it could rarely be stopped. In this context, when the news arrived about the link between filth and germs, it was as if a war between humans and bacteria had been declared. Both body and environment were held to a new standard of purity. Cleanliness was no longer a metaphor for spiritual purity, nor was it just a status symbol that few could afford—it was a standard that toed the line between life and death!

In the 1880s and 1890s scientists and doctors showed that germs could be carried in dust. This notion was immediately exploited. In 1899, an ad for Bissell house cleaning supplies read, “Dust, a carrier of disease.” Vacuum cleaners emerged as an answer to the scourge of dust. Ideal claimed that its vacuums would “[eat] up germs as well as dust.” If that was not scary enough, it also offered to send free to its customers “the truth about TB.” In 1912, Lysol claimed that it would “[kill] the germs that cling to rugs.” Hygiene was no longer just a social problem in need of government intervention and management; it was a domestic and personal charge with dramatic consequences for those who failed to respond. Manufacturers were quick to understand that selling bioparanoia moves

products. The greater the fear, the better for the household sanitation and disinfectant industries.

The middle-class household was being transformed. The Victorian era created a new kind of domestic—the wife became the servant. She was responsible for the maintenance of the household, but she no longer had to make the supplies for the house, as in the past; she had to buy them. For example, candles were bought rather than made. The wife was quickly transformed into a service worker and a consumer. As capital pushed its models of efficiency in the factory, Taylorism made its way into domestic space as well. Women's magazines such as *Good Housekeeping* showed women how to do their housework with the greatest efficiency, and offered tips concerning everything domestic from time-saving bodily movement to the best designs for an efficient kitchen. Women were also taught how to be good consumers by buying the best products for the best price, just as any factory purchaser would do for his business. This disciplinary logic of the household made for an immediate association between protection of the home from an invasion of anything inferior or impure, and fear of the consequences of failure. Not only would an inability to stem the invasive tide of germs have a physical consequence for the health of the family, it would also cause a collapse of identity and social position. To this end, any support product became desirable—not just as a functional item, but as a means to neutralize the anxiety of a hyperreal biopolitics.

CAE does not mean to argue that the germ frenzy arising in the West was a pure form of bioparanoia; we are only saying that fear and danger were pushed to an inordinate extreme by profits (both real and symbolic), and then institutionalized. The truth of the matter is that the disinfected body (i.e., a germ free organic body or domestic body) is not possible. Humans have a symbiotic relationship with gut *E. coli*; we would die without them. Some bacteria just like to live on us, and plenty live all around us. Humans are bacterial hosts no matter how hard we may try not to be, and the environment is always filled with one of the oldest, most differentiated species on the planet (except under the strictest of “clean room” conditions, which cannot be achieved in domestic space with household products). And this is fine, since the grand majority of bacteria are not a danger to bodily health and are the foundation of every ecosystem. No ecosystem could sustain itself without decay, and bacteria provide this essential function.

Unfortunately, advertisers have kept the public focused on the dangerous bacteria. The germ hysteria that began in the Victorian era has never really subsided. Even after the invention of antibiotics, the fear of bacteria persists. The matter is further complicated by the discovery of viruses in 1911, and their association with the Spanish flu of 1918. Such events and the personal experience of pain, nausea, and the uncontrolled overproduction of a variety of bodily liquids during illness continue to make advertisers' jobs easier.

The market research on household cleaners is a clear indicator that advertisers and the corporations producing the products have done very well at normalizing a hysterical

relationship to bacteria—one in which the illusion of environmental sterility and personal microbe-free purity is an anticipated daily goal. Consequently, the household cleaning market consistently expands. According to the Freedonia market research reports, demand for household cleaning products tops four billion dollars a year.

While some of this success can be explained by product differentiation (packaging what is basically the same product in slightly altered forms) and the ability of companies to develop more convenient means to use the products, Freedonia is quick to note that “concerns over the spread of diseases continue to boost demand for biocides, not only in disinfectants but in a broad variety of cleaning products.”

As the market grows, the standards for cleanliness expand with it. A point of diminishing returns emerges when a body or a space can be only so well sanitized, yet the scrubbing continues. In order for the market for disinfectants and sanitizers to grow continually, consumers must engage in wasted activity—cleaning that which no longer needs cleaning. (Ironically, if this obsession with sanitizing continues to intensify, human immune systems may become weaker.) Through this process, the consumers no longer approximate, but believe they have achieved, the disinfected body, and are once again secure from the microbial boundary disrupters and organic trespassers. They can feel confident in their artificially constructed sense of security. To the contrary, however, strong public health programs are the best protectors against disease. Cholera did not disappear due to housecleaning, but rather a public health policy that provided for robust investment in water treatment. As for viruses (the flu in particular), cleaning may help to a degree, but until one is ready to become Howard Hughes and renounce contact with other humans, occasional sickness is simply a fact of life.

### **The Aestheticized Screenal Body**

CAE has no intention of belaboring its analysis of the aestheticized screenal body, as the critical literature that already exists on the subject is copious, broad, and articulate. Almost every social aggregate (whether based on class, ethnicity, gender, sexuality, and so on) limited to the margins of the socioeconomic sphere of global capital has presented critiques of either the images used to represent them in all forms of spectacle and/or the absence of images with which these groups could actually identify. CAE's focus for this article when examining the screenal body in this vast spectrum of spectacle are those body images that can exist only on the picture plane, and yet are believed to be more than just visual fiction; they are seen as a copy of organic perfection to which one should aspire, and that some have attained. Much like the disinfected body's inseparable association with purity transformed into guarantees of health and a site of safe communion, the aestheticized screenal body (ASB) and its association with beauty transforms into a guarantee of strength and attraction. Both forms are caught in the black and white of extremity, and are represented in absolute positive or absolute negative forms. The disinfected body is

either a beacon of health or a failed body that is a reckless endangerment to everyone around it. The ASB exists either as the perfect beauty or as repulsively hideous, as brimming with confidence or as suffering humiliation.

Both of these extremes contained in the ASB are of tremendous use to capital. The positive ASB is of such resplendent artifice it would make Des Esseintes envious. This imaginary succubus could be produced only in the perfectly coded environment of the virtual, in order that she be more real than real. Her ethereal liquidity allows her to constantly develop and transform. For all the unfortunate analogue bodies caught in the cycles of order and entropy, their Sisyphean fate is to endlessly attempt to copy the digital model that the ASB sets for all who gaze upon it. One more product might make it possible to capture this illusive image, or at least a respectable approximation. Even a respectable approximation cannot last long, since that which one tries to imitate is in constant flux. To engage the specter thus requires endless amounts of time and money. This costly imperative is the genius of capital: creating the moment when life must imitate art.

For those who dare to doubt the reality of the fashionable icons of the virtual, capital has created the perfect alibi—the aestheticized celebrity. The floating signifier of the ASB grounds itself in the flash appearance of the celebrity. Acting as a living referent for a dead illusion, this glorified abstraction of the code of beauty walks among the mortals. Not only can it be seen, it can be touched. The flesh becomes a point of obsession, yet the relationship to the flesh is unstable, as this body could betray its image. The hope that the boundaries of the subject will rupture in some way is always waiting behind the public adulation. The witnessing of such occurrences is an industry in itself. Here again is the genius of capitalism; it makes a profit even from its failures and shortcomings.

As with most morality narratives, the villains are more interesting. We prefer the horror to the perfection, the *Inferno* to the *Paradiso*. The opposite end of the spectrum is what truly helps to reinforce the disinfected body, and vice versa. The body in crisis is aestheticization at its most effective. This liquid body, unlike its counterpart, leaks, squirts, oozes, drips, excretes, and even gushes. The association between the body in crisis and evil, horror, humiliation, and abjectivity is replayed with unwavering dedication by the brokers of affectivity. The tale generally ends in punishment or death for the offending monster. The fear that the body will autonomously participate in the performativity of the grotesque becomes its own obsession. Fantasies of organic meltdown and its consequences, fueled by vague social anxieties, run rampant in the imagination. Narratives from the image barrage of horror films and teen “gross out” cinema, and the subtext of humiliation and embarrassment from a tide of advertisements, seem to predict an inevitable future that can be changed only by purchasing the right product—one that could stop the revolutionary conspiracy brewing within the flesh. The technology of the body imaginary is at full amplification, pushing the markets to new heights. Products ranging from makeup to diet products to over-the-counter pharmaceuticals benefit from the fear of a public display of broken boundaries.



The driving of markets through the use of collective hallucinations is a socioeconomic disaster. An immeasurable amount of productive energy is wasted appeasing the anxiety inserted by capital through insidious and invasive manipulations of huge sections of the public imaginary, not to mention the misdirection of resources that could function for the public good. Also immeasurable is the extreme psychological damage done to individuals who find themselves unable to approximate the image to the extent they believe is expected of them by an indefinite, unidentifiable, internalized authority; or conversely, the damage to those who have been left only the option of identifying with the monster. These failures and identifications spill into the social sphere, and become the alibi for more authority and new types of markets to transform the deviance back into market desire. However, capital can do worse. The ASB and the disinfected body are the linkages for a third imaginary body that is meaningful to markets, but even more meaningful to the military. It, too, has colonized the blend of these two imaginaries for its own purpose—as a means to expand its domain by advancing on civilian institutions in the hope of making them its own, and as a way to extract more funds for its own useless purposes.

### **The Abused Body and Its Consequences**

The term “the abused body” is a very volatile one, so it behooves us to define precisely what we are and are not speaking about. We are *not* speaking about the billions of people worldwide who are broken and battered by all or some combination of poverty, violence, starvation, and preventable disease; rather, we are speaking about another fantasy body that, like the other two treated in this chapter, is thought to be material even though it resides only in fantasy. This body signifies the fate of the flesh should the crises that ever loom before us reach fruition. This fate is a nightmare worthy of the most extreme gore films—mounds of corpses, burning bodies, adult and infant deformities, radiation sickness, pox and plague, a Dantesque inferno of agony of global proportions.

For this scenario of complete body meltdown to be transformed into a powerful sign of exchange that can reform material and relations to material, those minting this semiotic coin engage a specific set of principles. The scenario must be all-inclusive and totalizing. No point of escape can appear in the crisis narrative—everyone must be at risk. Every physical body within the sphere of deployment must be included in such a manner that “the body” in meltdown is accepted as one’s own body in meltdown. The narrative should be framed as global. The threat of becoming an abused body must be everywhere and imminent. The mythology of the “global village” emerging from the collapse of space and time inside the technosphere helps to transform a belief in a possibility of retreat from the crisis into a statement of naïveté.

The only suitable response to the abused body is fear, and once that is established, all contradictions, no matter how intense, can exist simultaneously and without conflict. For

example, in the current U.S. political climate of fear, the Bush administration can say that the crisis of the global war on terror can be resolved by fighting the terrorists elsewhere in the world so Americans do not have to fight them on home soil, and simultaneously claim that “home” is a major battle front peppered with those ready to do citizens harm, so that extreme security measures must be taken within the country even if they severely erode civil liberties. In addition, the executive branch should be granted whatever power is needed to secure the besieged state. The administration can command both of these opposing points without worry that the contradiction will be visible to a public blinded with fear.

While the general model for manufacturing societies of fear has remained consistent since the 1950s, the specifics of scenario generation have varied, blowing with the winds of political fashion. Nuclear war is the traditional fear producer. Certainly, the fear in the 1950s is understandable. Weapons of mass destruction were new on the scene. The power to completely destroy civilization as a real material scenario had never before been contemplated. And the Soviets had “stolen” nuclear secrets through the use of espionage and had created a bomb of their own. Under these conditions the abused body emerging out of global nuclear war appeared as a certainty. With the fall of the Soviet Union, this type of narrative was saved for “rogue” states that capital believed needed to be subdued. The events of 9/11 were ideal for establishing a “global war on terrorism” that in turn would put the United States into permanent and immediate crisis mode, but the technique was too tactical. The weaponry (box cutters and planes) was not of a pangeographic variety. In October 2001, the latest fashion in fear debuted with an anthrax incident that killed five people. This weapon, although hardly as effective as boxcutters and planes, had all the right elements to fire the public imaginary.

First, the public was prepped for this narrative of body invasion. The ASB and the disinfected body had already laid the foundation on which a consumer anxiety could be transformed into outright manufactured fear of biological attack. Once germs had become an official weapon of terrorism, all that was required was to create a campaign that would inform the public about how germs could be used as a weapon of mass destruction. Using the 1918 Spanish flu epidemic as a model, the association with a global epidemic was established and reinforced on a daily basis. The hype in the early 2000s over avian flu further reinforced this situation.

The apparatus that manufactured this phantom of threat is a complex network of institutional authority with each node looking to expand or consolidate its power. Each piece in the network does not necessarily need to be in collusion with any other piece. Each needs only to see possibility, and act accordingly, knowing that fear is one of the most exchangeable and profitable signs in political economy. (Even the slowest of bureaucracies acts quickly in its presence.) Since all parties involved have a stake in taking their fantasy for reality and turning the most improbable into the most probable, the manufacturing process is nearly frictionless, and the rewards are tremendous.

The rewards to the Bush administration for convincing the public that bioterrorism is a real and present threat are threefold. First, it reinforces the administration's argument that executive power should be unchecked, and that the president is above the law in all matters since the country is under a multilayered invasion. Second, a population that is afraid of becoming an abused body is most likely to surrender its civil rights in exchange for the promise of security. Under these conditions any resistance against the administration's repeal of the First and Fourth Amendments would be minimal. Finally, the security issue was Bush's ticket to a second term as president.

The rewards for other agencies are not as profound, but still quite significant. The news media increase their viewer/reader base during times of crisis, which in turn pleases the advertisers. The producers of knowledge increase their funding. The government handed out billions of dollars for biological research with military applications, and even rewarded those who were most cooperative with Regional Centers of Excellence (RCE) for Biodefense and Emerging Infectious Disease Research. The Centers for Disease Control got its share of these research funds as well, and a new research building (Building 33 in Atlanta), at a cost of 186 million dollars. The real winner, however, is the military. Not only did it see its germ warfare program returned to the status and financing that it had in its glory days of the 1950s and 1960s, but it is able to colonize more civilian resources for its own use.

Here is where the fantasy spirals out of control—these biowarfare initiatives are a huge waste of taxpayer dollars. The waste is everywhere. At a cost of nearly one billion dollars, the Bush administration's plan to have 25 million doses of anthrax vaccine, and eventually a dose for every citizen, is a prime example. Vaccines have a very short shelf life (usually around six months) and must continuously be replaced, meaning the overwhelming probability is that they will never be used, but continuously thrown away. The likelihood of a national anthrax attack is actually zero. Air security is such that no terrorists could possibly fly over the United States in a cargo plane full of anthrax and do systematic large area coverage release. Moreover, where would they get enough anthrax and the cargo plane? At best, anthrax could be used only as a tactical weapon, as in 2001. We should also note that anthrax is not contagious, and cannot start an epidemic. This is public health policy from an administration against national health care in a country with an infant mortality rate that is second among developed nations only to Latvia.

While the loss of money to biowarfare programs is infuriating, the loss of life is unconscionable. Resources for combating and researching emerging infectious disease are finite, whether these resources are funds, labs, or the personnel necessary to do the research. The more that is pulled away to research military interests, the less research is being done in the public interest. While HIV, hepatitis C, multidrug resistant TB (and TB itself), malaria, and other diseases are killing millions of people each year, the military prefers to focus on anthrax, Ebola, and smallpox (which should be extinct; it's on Earth only because the U.S. and Russian military keep specimens). Smallpox hasn't killed anyone

since 1977. Since the 1970s, Ebola has killed only 683 people worldwide (that is not even a good minute of death for most of the diseases listed above). There were only 236 cases of anthrax in the United States between 1955 and 1999. None of these are real public health issues. They are all about military fantasy, and come at the expense of real, ongoing, material health crises.

### Three Phantoms

The belief in the abused body as a real body (in relation to germ warfare) stands upon the shoulders of three other phantoms that are haunting the public imaginary. The first is the fantasy that a germ warfare attack is highly probable. It's not probable; rather, it is the most remote form of possible attack except nuclear attack. If we examine the history of terrorism, it becomes abundantly clear that terrorists prefer explosives and small arms for reasons of stealth and practicality. Even the U.S. Office of Technological Assessment (OTA) has said that it is extremely improbable that terrorists would use such weaponry (even if they could get it, sustain it, transport it, and deploy it to begin with). The reasons the OTA gives are lack of familiarity, fear of alienating supporters by causing large numbers of casualties, fear of an extreme response by another country, fear of working with biological weapons, prohibition by terrorist groups' financial sponsors, and the need to await someone else's successful use. Terrorists are not deranged humans looking to spread chaos as if they were the Legion of Doom or some other comic book fabrication. They have a political agenda; they are strategically as well as tactically goal-oriented; and thereby they have limits placed upon them by what they desire to achieve.

The second phantom is one that involves the misunderstanding of kill rates. We can say with great assurance that the death toll expected from biological weapons has been overexaggerated by those who will benefit most from the development and maintenance of this specific fear. For example, in 1997, U.S. Secretary of Defense William Cohen made a dramatic appeal by appearing on television holding up a five-pound bag of sugar and declaring that this amount of anthrax sprayed from an airplane would result in the death of 50 percent of the population of Washington, D.C. Not only is such fear mongering irresponsible, since it greatly exaggerates a highly unlikely scenario, but the information itself is incorrect. Even the World Health Organization (WHO) estimated that it would take fifty kilograms to cause a 20 percent casualty rate in a population of five hundred thousand.

But why trust the WHO? Money could be going its way as well. Instead, CAE suggests looking at the historical record. Two cases of anthrax exposure are available to us. The first occurred in April 1979. The Soviet biowarfare unit Compound 19 at Sverdlovsk (home to a large-scale military weapons manufacturing site and a city of 1.2 million people, now known as Yekaterinaburg) noticed that a neighboring population was experiencing a serious outbreak of anthrax. Soviet émigrés to Germany told local newspapers

that the factory had released a cloud of anthrax spores. This explanation seems likely. Seemingly, sixty-six deaths occurred in a four-kilometer swath downwind from the incident. The U.S. military and various intelligence agencies believed that an anthrax aerosol was accidentally released. Further evidence of the release came from satellite images of roadblocks and what appeared to be decontamination trucks in the area. Later, Soviet doctors who were involved in the event came forward, saying it was an accident, and published details of victim autopsies. Based on the horrific numbers we are given, wouldn't more than sixty-six deaths occur in a populated area? Though the exposure rate was enormously high, the infection and mortality rates were incredibly low.

Perhaps it was just luck that more were not killed. However, if we look at the other incident of anthrax exposure, the results are repeated. The October 2001 anthrax incident in the United States also tells us that the classification of biological weapons as weapons of mass destruction may be a tad overstated. Thousands of people were exposed to this military grade anthrax. Only twenty-two people were infected, and only five or six (depending on whom you want to believe) died. Once again, there was a high exposure rate followed by a low infection rate and an incredibly low mortality rate. The incident did not generate panic, nor were hospitals overwhelmed. None of the nightmare scenario that the public was sold actually occurred, but unlike Cohen's sugar bag simulator, the attack brushed against the real just enough to structure it as plausible in the public's imagination. This was enough for capital's fantasy engine to produce a phantom that could diabolically haunt the public sphere.

Now the third phantom makes its appearance. Once fear is established and is associated with war, government and military alike can argue that the only solution to the problem is a military one. Health policy can and must be dominated by military concerns and values. Such a policy is the only way citizens can remain secure. Unfortunately, when it comes to health crises due to disease, nothing could be further from the truth. The military has little interest in the diseases that are actually killing millions, thus constituting a real ongoing crisis; rather, its interests are in diseases such as smallpox, Ebola virus, tularemia, Marburgh virus, and anthrax. These diseases are killing practically no one (with the historical exception of smallpox; however, it hasn't killed anyone at all since 1977). Yet this is where resources for fighting true dangers are being redirected.

If anyone needs an example of what happens to public health when civilian institutions become militarized, one need look no further than the sad history of the Federal Emergency Management Agency (FEMA). Launched in 1979 by the Carter administration, FEMA was an attempt to unify a number of federal agencies charged with managing a variety of public emergencies. These included natural disasters, nuclear war, enemy attack on U.S. territory, and incidents involving civil unrest. The Reagan administration decided that FEMA would be most useful if it focused on civil unrest. To this end, the administration appointed a former National Guard general and counterinsurgency expert, Louis O. Giuffrida, to the post of "Emergency Czar". He, in turn, appointed more military men

who shared his McCarthyist tendencies. The militarization of FEMA reached its peak in 1982 with the publication of “The Civil/Military Alliance in Emergency Management.” This document contained the plans to cement the association between FEMA and the military, and went on to argue for the countermanding of the U.S. Constitution by saying that military force can and should be used in cases of domestic disturbances. The Reagan administration supported this notion with several National Security Decision Directives that bonded FEMA not only to the military, but to the National Security Council as well. During this time, the Civil Security Division of FEMA pursued all kinds of nastiness, including organizing military training for police and opening files on U.S. activists. They collected twelve thousand files in all.

At this point, FEMA was beginning to crowd into other agencies’ territories—most notably the FBI’s. In retaliation, the FBI launched a full-scale investigation of FEMA, exposing the de facto nepotism and misappropriation of funds. Giuffrida was forced to resign. After this, FEMA fell into relative neglect, and the ties to the military eroded. During this period, an “all hazards disaster preparedness” plan emerged, designed so a single plan could be used to accommodate many types of emergencies. FEMA was reborn after its performance in Hurricane Andrew in 1992. The storm was the worst ever to have hit the United States, and leveled parts of South Florida. Andrew put a scare into both the government and the public, making it abundantly clear that the focus of FEMA should be on natural disasters that were occurring with steady or increasing (depending on whom one wants to believe) regularity. In this climate, the Clinton administration appointed James Lee Witt to be the director of the agency. For the first and only time in its history, FEMA had a director who was a professional emergency manager! Witt committed FEMA to natural disaster preparedness and disaster mitigation—quite a shift from the Reagan/Bush era.

However, this Dr. Jekyll and Mr. Hyde story does not end here. With the 2000 election of George W. Bush, FEMA went retrograde. The Bush administration followed through with very little of Witt’s work and appointed cronies with no emergency experience (much like nominating Paul Wolfowitz to head the World Bank even though he has no banking experience, or appointing John Bolton as the ambassador to the United Nations even though he has no diplomatic experience). The Bush administration’s choice for director was Joseph Allbaugh, the chief of staff for Bush when he was governor of Texas and the former national manager for the Bush-Cheney campaign. Allbaugh resigned in 2003. His buddy and GOP activist Mike Brown, who had been appointed deputy director when Allbaugh joined FEMA in 2001, succeeded him. Like Allbaugh, Brown had no experience in emergency management.

After 9/11, the administration decided that FEMA was an anachronism, the duties of which should fall under the new Department of Homeland Security. Public protection from natural disasters once again shifted back toward the military, and the only disaster that garnered government attention in the post 9/11 climate was terrorism. Once again,

military paranoia rather than public health became the order of the day. Under Brown, FEMA developed a new “all hazards” plan suitable only for the many types of terrorist attacks that the agency could dream up. Public health emergency equipment was replaced with military first-response equipment for WMDs. Given the catastrophe in New Orleans and the Gulf Coast in 2005, the consequences of this shift are clear. An underfunded and unprepared FEMA attempted to manage the greatest natural disaster in U.S. history. The military was almost completely useless, giving little support until nearly a week after the storm hit. The many casualties were not from the storm, but from the sheer incompetence of the Bush administration to ensure funding for the necessary precautions against such a disaster, in combination with the inhuman negligence of authorities and the lack of preparedness of FEMA. The clear lesson here, once again, is that a militarized relationship to public health serves only to intensify disaster and not to lessen it.

To the contrary, strong civilian preparedness has served citizens very well. The most significant medical victories have come from civilian initiatives. The elimination of smallpox and polio (although now it is back due to criminal neglect), antibiotics, the arrest of SARS, and all other beacons of health policy are fruits of strengthening programs and research initiatives that are in the global public interest. The people who are dying with every passing minute of every day cannot wait in hope that the military will stumble upon a helpful “spin-off” technology that may benefit them. Only an integrated global public health policy can secure anyone from the threats and crises brought about by emerging infectious disease or hostile attack with biological agents. However, until the collective illusions and hallucinations that haunt the public imaginary are revealed and understood as constructions designed only to mislead the public and obscure contemporary and historical relationships to production and power, a pathological bioparanoia will continue to rule public consciousness, much to the delight of authoritarian forces, and the type of health policies needed for a secure and vital world will remain a dream.