Contagion and the Necessary Accident

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In the middle 1990s, during the second decade of the AIDS epidemic, media turned increasing attention to what critic Priscilla Wald has recently termed the "outbreak narrative": the "paradigmatic narrative" of the eruption of disease that "follows a formulaic plot that begins with the identification of emerging infection, includes a discussion of the global networks throughout which it travels, and chronicles the epidemiological work that ends with its containment."1 These outbreak narratives trace a process that begins with a disease's appearance—its emergence—and ends with its enclosure. Public health and popular narratives follow this pattern, often deeply invested in the process of making visible, and thus avoidable or containable, the invisible threat of contagion.2

Outbreak narratives, however, are also chock full of fascinating narrative holes—spaces that signal leftover anxieties incapable of being allayed by the outbreak narrative's teleology of containment. Most notably, a great many popular outbreak narratives are structured around illnesses—real or imaginary—that are contained neither by the narrative nor by the visualizing or prophylactic technologies that it imagines. When containment does occur in such texts, it rarely suffices to close off the formidable anxieties unleashed by contagion. Thus, one of the primary, if underexamined, genre conventions of the outbreak narrative is the common failure of the containment with which it, at the surface, appears most concerned.
I would propose to read the outbreak narrative against its ostensible drive toward containment. That drive is real enough, but the most powerful affective work done by outbreak narratives exists in the tension between the desire for containment and an opposing and powerful desire for accidental exposure and infection. The accident gives rise to that which is “narratable,” in D. A. Miller’s famous term. The epidemiological effort is an urge toward what Miller calls “closure,” but the spectacular accident resists closure, instead lingering in its own rupture within the narratable. Such spectacles of accident produce both terror and delight; unexpected terror erupts into the narrative—demanding an effort to quell it—while being simultaneously deeply desired by the narrative. Accidents become sites for plumbing cultural problems; they enable the exploration of a world perceived as intricately complex, shot through with forces that promise a form of control (through the enactment of effective borders) that simultaneously seems impossible to realize. Whereas the national fantasy of the outbreak narrative (in the U.S. context) rests upon national power’s ability to contain the epidemic and the anxiety generated by it, attention to the outbreak narrative’s investment in accident points to deep fissures in the national fantasy—that is, to a tendency to replace a belief in the imagined community of the United States with a belief in the failure of coherent, contained identity.

Against Containment

Depictions of Ebola outbreaks, the threat of avian influenza, and concerns over SARS (severe acute respiratory syndrome) all are examples of recent outbreak narratives that are as much about globalization as they are about disease, and which are played out in myriad variations in most forms of popular media. I focus here on a range of AIDS-era contagion narratives—journalism, fiction, film, popular science writing, and television—all produced since the early 1990s. Such outbreak narratives must be understood as sensation texts in the sense that they direct attention to the effects of contagion on bodies and in turn elicit bodily sensations from viewers. I investigate the power of the spectacle of accident not primarily through close reading, but rather by identifying how spectacular accidents motivate outbreak narratives and alter how we understand them. However, I do pay particular attention to a few key texts, especially Richard Preston’s 1994 nonfiction narrative The Hot Zone and Wolfgang Petersen’s 1995 film Outbreak. These well-known works
function as both critical and popular touchstones for the contemporary AIDS-era outbreak narrative, and need particular attention for a number of reasons: they offer especially apt examples of the spectacle of accident, their concerns are revisited by later outbreak narratives, and these two works are regularly addressed in the proliferating scholarship on culture and contagion.⁶

Although the basic outbreak narrative begins with disease emergence and moves toward containment, that formula needs to be placed in conversation with narrative energies that resist or complicate containment. The most clear instances are those narratives whose plots (whether fiction or nonfiction) never reach containment, but in which illness either continues or threatens to continue. The history of the HIV/AIDS epidemic perhaps lends itself to such a plot: it remains the central uncontained outbreak in the cultural imaginary,⁷ and HIV/AIDS thus serves to point to the limits of narrative containment and to stand in as the paradigmatic uncontained disease. Perhaps in response, narratives in which the mystery of the emerging epidemic is never solved, or in which the solution does not yield a simple cure, have become more common.⁸ Rather than one narrative form (open-ended) replacing the other (containment), both forms, along with their seemingly mutually exclusive ideologies, exist and circulate simultaneously.

Narrative openness (as opposed to the closure offered by containment) is perhaps most familiar as a trope of the horror genre—for example, the Living Dead and Resident Evil movies, as well as the film 28 Weeks Later (2007), do not imagine an end to the zombie menace—implicitly or explicitly a contagion transmitted through blood. That same openness occurs across a range of outbreak narratives.⁹ The 2006 ABC television movie Fatal Contact: Bird Flu in America uses both models: an inoculation is developed for the avian influenza that is killing millions, and the film appears to close on a note of a national family in the process of healing; however, in a denouement, Centers for Disease Control and Prevention (CDC) investigators travel to a village in Angola and discover that a more virulent strain of the flu has killed every person there: thus the plot moves from emergence to containment and back to emergence.¹⁰ The Hot Zone, while tracing the epidemiological labor that seeks to contain an outbreak of Ebola Reston at a monkey-quarantine facility, notes that the same facility later experienced a second outbreak of Ebola Reston and eventually closed its doors. The book ends with that illness still a mystery, having “subsided into the forest” but threatening to return, and thus never truly contained.¹¹ Richard Rhodes’s Deadly Feasts also raises the threat of prion-born illness
(specifically, mad cow disease and the human disease to which it has been connected, variant Creutzfeldt-Jakob disease [vCJD]) and, while diagnosing the cause, can only offer a possible path toward containment rather than the desired thing itself. Both fictional and nonfictional outbreak stories imagine the virus as a killer in hiding and, in doing so, stress the never-ending task of epidemiological monitoring. That narrative openness serves as a motor driving other reading and viewing pleasures—ambivalent pleasure produced not through the containment offered by intact borders but by way of the exploration of borderlessness.

**Basic Accidents: The Porous Body**

Critical interventions into outbreak narratives analyze two intertwined textual responses to (and uses of) contagion: in the first place, blaming outbreaks on racially other bodies, those deemed sexually irresponsible, or on “renegade social elements”—untrustworthy figures located outside bourgeois social codes; and, in the second place, containing the emerging outbreak within epidemiological interventions that track such problem bodies, map incidents of illness, and scientifically analyze cases and the genetic makeup of pathogens. Such epidemiological discourse creates populations through the exercise of what Michel Foucault terms “bio-power”: the processes by which power defines and analyzes human grouping. The rise of population science is a primary example of such bio-power for Foucault, and contemporary fields such as epidemiology function along similar lines. That is, the epidemiological gaze creates knowledge that in turn generates the sense of knowable populations made up of racial and sexual minorities who in turn necessitate public health surveillance. However, neither the epidemiological discourse of populations nor the related discourse of blame fully accounts for the peculiar energies of the outbreak narrative. To account more fully for such texts and the responses they generate, attention needs to be paid to the ways such narratives turn physical embodiment into a particularly daunting problem by punctuating the narrative with spectacles of—usually accidental— infection. Such accidents put into motion the bio-power of the epidemiological narrative, but such knowledge cannot contain the effects of the accident.

What might be called the basic accident of the outbreak narrative centers on the fragility of the body’s barriers—the porousness that leaves it susceptible to outside influence. The 2002 horror film
28 Days Later stresses this connection between the porous body and the accident, for example, when a drop of blood falls into the eye of a man who happens to be looking up at the wrong place and standing in exactly the wrong spot at the wrong time. Although animal-rights activists breaking into a laboratory originally unleash the central contagion, the film is far less interested in that breach than in the ever-present possibility of sudden and unexpected infection through any opening in the fragile barrier of human skin—a rupture followed immediately by monstrous illness. Similarly, Richard Rhodes’s nonfiction mad cow disease exposé ostensibly argues that CJD should be understood as the logical outcome of a food system suffused with unsafe practices; however, the narrative’s examples of unforeseen illness actually resist that argument and insist upon the accidental nature of any one given infection. Who would foresee, for example, the ironic incident of the vegetarian student who falls ill and dies of CJD, a disease thought to be spread through eating contaminated beef? In a related vein, journalistic accounts of 2001 anthrax spores sent through the U.S. mail focused obsessively on the seemingly random nature of each infection. In an essay concerning these accounts, critic Tina Young Choi argues that such narratives are deeply troubled by such accidents and struggle to make each infection appear to be the logical outcome of some knowable aspect of the victim’s life. However, a reading that seeks a hidden logic in events that seem random merely smoothes over the rough edges that cut deeply through most outbreak narratives. Rather than saying that such narratives are troubled by accident, we might more accurately say that such stories are in fact motivated by and desire the unpredicted accident.

Such tensions between explanations that make illness appear containable and accidents that resist containment are visible throughout the oft-discussed 1995 film Outbreak. The film’s initial moment of disease transmission, as well as the disease’s entrance into the United States, are made legible through a host of racist links between African (and other nonwhite) bodies and animals, especially that between the local tribal “witch doctor” and the monkeys identified in the film as the natural hosts of the film’s virus. That linking implicitly demands a more thorough and powerful form of national public health policing—in the film, the heroic scientists of the CDC and USAMRIID insist that the initial signs of an outbreak be investigated fully; their bureaucratic superiors overrule such epidemiological interventions and, in doing so, come to serve as the film’s villains.
Although the film resolves its outbreak narrative through contact-tracing and the production of serum that cures the disease, that narrative cannot fully contain the thrilling anxiety generated by spectacles of accident that locate danger in the material porosity of the human body; the main such spectacle occurs in the old-style single-screen downtown movie theater of Cedar Creek, a seemingly all-white northern California town. That scene is preceded by the accidental infection of a lab technician who carelessly puts his hand inside a moving centrifuge, suddenly spraying blood from test tubes on himself and across the room. He falls ill while on a date at the town’s movie theater, and it is his cough that becomes one of the film’s main bodily spectacles.

The spectacle is that of a virus-eye-view camera shot that follows droplets expelled by the man’s cough as they travel through the air of the crowded theater, and it provides an arresting example of the obsession with the porous body both transgressing its own boundaries and being unexpectedly penetrated. The camera, tied primarily to human subjects through the film to this point, is suddenly freed with respect to movement and scale, flying through the space of the theater; at the same time zooming from an extreme close-up of the mouth of the coughing technician to a microscopic close-up that follows the invisible pathogen as it floats through space and eventually enters the open mouth of a laughing woman. Spectacles such as this insist upon the impossibility of borders between outside and inside, other and self. The spectacle of the individual moment of infection—the moment depicted as unforeseeable by those involved—is thus mobilized in the service of the epidemiological narrative (it reveals who is ill and implies that medicine can track even invisible illness) even as the anxiety it generates potentially exceeds that narrative.

Such an accident reveals a powerful tension in the outbreak narrative: between, on the one hand, the epidemiological stance that turns individuals into populations categorized by risk factors, potentially measurable and knowable, and, on the other hand, individuals who experience the radical exception to daily life that catastrophic contagious illness signifies (at least in the world’s wealthier nations). At its surface, Outbreak’s movie-theater scene reveals the shift from individual to population: the scene begins with one individual infected by an accident in turn infecting others through the shared accident of their simultaneous presence at the theater. A few days later at the town’s small hospital, CDC and USAMRIID investigators confront not individuals but a population under quarantine, a population now defined by webs of connections
beginning with a night at the movies. By creating a sense of a population, epidemiological knowledge-making engages in an act of back-shadowing: it incorporates the accident into a coherent narrative by writing an event as having been foreseeable in retrospect (if we know the risk factors, and know how the disease travels, we can understand its eruption in a specific place) and as thus preventable in the future.**23** However, the spectacle of the accident—the sudden reminder of the body’s porosity—resists being incorporated fully into the narrative that would make it retroactively foreseen. Even as it is a necessary step in the narrative, the accident erupts into the narrative and leaves a residue of anxiety in its wake that cannot be reincorporated.

**Lifeboat Prophylaxis: The Laboratory and the Space Suit**

The outbreak narrative pulses with anxiety over the porous body in part because it locates the porous body within a complex system over which the epidemiological gaze struggles to establish control: the technologies (a “web” or “net” in *The Hot Zone’s* terms) that move bodies around the globe.**24** Outbreak narratives typically imagine such systems bringing dangerous bodies from the global South into contact with porous white Northern bodies, and thus obsess over the crossing of national borders. *Outbreak* and *The Hot Zone* narrate the emergence of Ebola (or Ebola-related diseases)—traditionally associated with sub-Saharan Africa—within the boundaries of the continental United States. Similarly, a *New York Times Magazine* special issue on global public health begins with a story picturing “a mosquito infested with the malaria parasite [that] can be buzzing in Ghana at dawn and dining on an airport employee in Boston by cocktail hour”—the mosquito serving both as a vampiric monster and an unpreventable accident.**25** These examples offer one of two related but contrasting visions of globalization that circulate within contemporary outbreak narratives. One envisions a public sphere in the North that might be invaded by outside infection: for example, the public sphere of the movie theater (and the idyllic small town) in *Outbreak* is one contaminated by an unforeseen and invisible invader from outside the community—specifically by way of an escaped monkey carrying a specifically African disease that is transmitted to humans and eventually to the town, where the bodily accident of the film’s movie-theater scene amplifies the epidemic.

On the other hand, the opening sequences of ABC television’s *Fatal Contact: Bird Flu in America* frame the porous body as neither
solitary nor stationary, nor does it envision illness as a simple invasion of the North from outside of it. The film’s opening sequences envision the public realm as less a sphere at risk of penetration and more an ever-shifting fluid exchange (and an exchange of fluids). Both ideologies—that of the closed space invaded from outside and that of the fluid exchange—can in fact circulate simultaneously, even in a single text or scene. Fatal Contact locates the source of its avian influenza in Guandong, China, a place imagined as a blend of the “preindustrial” and the “global village.”\(^\text{30}\) The origin of the flu in the film is implicitly blamed on close contact between the preindustrial labor of raising animals and modern factory work: an American businessman is infected when he is coughed on by an ill worker at a soda-bottling plant; the worker is ill because he refused to allow the chickens he keeps at home to be culled by the aggressive, militarized, and implicitly antidemocratic police force. The scene of the businessman’s infection is preceded by an opening credit sequence in which migratory birds are tracked by radar and nations in the global South are observed as if through military satellite imaging; it is followed by the camera conducting an only partially successful act of epidemiological contact-tracing, beginning with disease transmission by way of an airport bartender when he collects the now-infected businessman’s napkin.

These incidental points of contact beginning with one ill Chinese worker (immediately set aside by the film) and one ill Westerner—a situation that flirts with but does not generate the “Patient Zero” story familiar from the AIDS epidemic—begin the global epidemic with which the film is concerned. An ever-widening chain of intersecting lives follow—with fingers that touched the ill man’s napkin and that thus carry virus particles, the bartender places an olive in the drink of another patron; similarly, flight attendants handle food with the same hands that received a used hot towel from the ill businessman.\(^\text{37}\) Split-screen effects at first enable the viewer to follow the expanding web of contacts. While the split-screen’s depiction of each infection might imply that each can be known and tracked by medical expertise, that promise is quickly undermined by the sheer multiplicity of accidental infections: the screen splits and splits again, each image becoming smaller until each becomes too small to be seen. Epidemiological tracing depends on seeing and tracking illness in order to contain it; the multiplicity of contacts rapidly overwhelms any possibility of such containment.

By placing multiple bodies in multiple mobile trajectories, crossing paths and mingling porous bodies accidentally and in such numbers as to go beyond the capacity of the camera to envision them,
Fatal Contact's opening scenes imply that the movie-theater scene in Outbreak relies on nostalgic—if still politically powerful—fears about a single public sphere that might be invaded from some outside. The Outbreak scene worries about how to keep such a public sphere protected from outsiders; the Fatal Contact scene envisions accidental connections so dense as to offer little difference between any inside and outside.

In Decade of Disaster, Ann Larabee argues that anxieties over complex technological systems such as the space shuttle Challenger—and, for our purposes, the tension between national borders and the movement of bodies—give rise to a desire for a "lifeboat" that could guarantee that "smooth technological existence might be managed" given "a properly maintained, enclosed, and redundant system."28 In the outbreak narrative, anxiety is produced less by a specific device than by fears in the North about social changes and new forms of contact that globalization and speedy intercontinental travel might facilitate. The perceived complexity of global flows of bodies leads to what Larabee calls "lifeboat thinking"; her analysis of such thinking can illuminate the responses to epidemics imagined in outbreak narratives.

The "biocontainment laboratory," "a stock set in journalism, fiction, and film,"29 is generally treated as a site of mastery over illness. However, this space in which disease, complex technologies, and human bodies come into close proximity is as much a site for the generation of anxiety as it is for the generation of mastery. As with the metaphorical lifeboats that Larabee examines, the biocontainment laboratory not only functions as "a physical and psychological escape from technocultural terrors"—in this case, terrors of mobile and porous bodies in mobile and porous public spaces—but also as a system in need of its own protections: "a condensed version of that same technoculture."30 That is, the laboratory-as-lifeboat, in recreating the technoculture from which it promises an escape, threatens the same catastrophic failures of containment that prompted the desire for its existence in the first place.

The close relationship between the protection from the threat of accidental infection promised by the laboratory and the possibility of accident produced by the laboratory is revealed in the attention to the complex security systems, procedures, and technologies that seek to prevent contamination by carefully monitoring and policing bodies. The biocontainment laboratory, like the "plague-stricken town" discussed by Michel Foucault in Discipline and Punish, is "the utopia of the perfectly governed city": a place "traversed throughout with hierarchy, surveillance, observation, writing; a
[place] immobilized by the functioning of an extensive power that bears in a distinct way over all individual bodies.”

The laboratory controls space; it establishes a perimeter distinguishing inside from outside, clean from contaminated. If the regular rhetoric of technological globalization speaks of a borderless world, one made up not of nations but flows of capital, information, and laboring bodies, then the biocontainment laboratory offers exactly the distinctions that globalization promises to eliminate. Both The Hot Zone and Outbreak, for example, begin not incidentally by mapping the entrance into the laboratory through a series of increasingly controlled borders. In Outbreak, this comes after a preatory scene that pictures African jungle spaces suffused with disease; the film cuts to USAMRIID to contrast the disease-filled geography of the jungle with the clean and rationalized space of the military laboratory. In the film, this takes the form of an extended point-of-view tracking shot that moves through the various rooms of the larger laboratory system. Teletype-style text—familiar to moviegoers as a marker of factual information, often of a military nature—appears along the bottom of the screen, listing the names of infectious agents being investigated in each quarantine area, as well as the inoculations required for researchers. That text fills in for an imagined official discourse and, in that vein, educates the viewer in the vocabulary and protocols of research. When the camera that had tracked without a visible cut through long corridors and rooms of research—traversing a series of increasingly secure borders—stops, it does so only at the entrance to the “Biosafety 4” laboratory, which the teletype explains is the space for research involving the most dangerous and highly infectious diseases. The camera had moved freely and seemingly unnoticed by actors during its long track, in a manner echoed by the film’s later use of a freely moving camera to signify the travel of pathogenic viral particles; it stops at the outbreak narrative’s one ostensibly impenetrable border: that of the hot lab.

In The Hot Zone, Preston’s thick description is similarly invested in all of the barriers and procedures that ensure that the biocontainment lab symbolizes a carefully contained danger. Notably, although much popular and critical reception of his book focuses on his obsession with jungle imagery and depicting African spaces as diseased, Preston himself uses the title phrase “the hot zone” to refer to the biocontainment laboratory rather than the jungle. Preston gives the most detailed description of the barrier system—designed to give the reader a sense of an insider’s perspective—when his narration follows Nancy Jaax, one of the main players in his
story, into the laboratory in which she conducts research on Ebola: “She walked along a Biosafety Level 0 corridor, heading for a Level 4 biocontainment area . . . that had been set up as a research lab for Ebola virus.”53 Jaax’s path is tracked over numerous pages as she moves through multiple forms of security and purification, beginning with the guard at the entrance to Fort Detrick, where the USAMRIID laboratory is located, and continuing through borders within the building itself. Elaborate technologies of purification proliferate: “tall vent pipes on the roof . . . discharged filtered exhaust air,”54 while “waste water would be cooked in heated tanks” to disinfect it.55 Further, ultraviolet light “streamed through a window in the door”; readers are told, “Viruses fall apart under ultraviolet light, which smashes their genetic material and makes them unable to replicate.”56 The materiality of the structure becomes its own security apparatus: “The window was made of heavy glass, like that in an aquarium,”57 and “walls were painted with thick, gobby epoxy paint, and all the electrical outlets were plugged around the edges with a gooey material. This was to seal any cracks and holes, so that a hot agent could not escape by drifting through hollow electrical conduits.”58 Further, “negative air pressure, designed to keep hot agents from drifting outward” maintains even seemingly porous doorways.59

Containment systems are themselves contained—a move toward the idea of a “redundant system” of which Larabee writes60 in her description of the ideal lifeboat: “There was an alarm strobe light on the ceiling that would be triggered if the air system failed.”61 This reminder of redundancy implies a fail-safe level of security, but also raises the specter of catastrophic accident: the lifeboat might itself need, and not have, its own lifeboat. Further, the elaborate security of the laboratory directs attention to the two competing visions of the world that I have been addressing: the lab’s security works to contain deadly pathogens, thus implying that its borders keep the outside world comparatively cleansed; at the same time, the elaborate security of the lab—its functioning borders—serves to remind readers of the dangerous borderlessness of the outside world: security thus serves to assuage fears, but also to generate significant anxiety about accidents.

Such systems of containment, and the anxiety that comes with them, abound in outbreak narratives. The 1971 film The Andromeda Strain is almost entirely concerned with the possibilities and limits of such security. Similarly, Stephen King’s The Stand (1978; expanded edition, 1990) begins with the release of a genetically engineered
influenza virus from a military research laboratory, touching on a larger anxiety about what goes on behind the sealed doors of the laboratory and the possibility that such spaces might not serve their ostensible function of maintaining lines of demarcation between well and ill. In *Fatal Contact*, the governor of Virginia effectively encloses his entire staff and operations within a system that replicates the barriers of the hot lab, although in that film’s case his system of containment seeks to keep the outside world (here pictured as hopelessly ill) from invading a cleansed space reserved for the operations of rational government; such security is eventually abandoned after the containment unit’s inadequate supply of insulin leads to the death of the governor’s son.

The laboratory’s spatial containment of illness is mirrored by another stock image of the outbreak narrative: the pressurized biocontainment “space suit” that forms an entire-body prophylactic against infection. Both fictional and nonfictional outbreak narratives draw upon this image of a more elaborate skin that might, like the laboratory, distinguish clearly between infected and noninfected—infected-able. Again, urtexts such as *The Hot Zone* and *Outbreak* offer especially apt examples of the prophylactic body that appears in the outbreak narrative more generally. Preston’s book again follows Nancy Jaax as a means of detailing the procedures that control the body, removing the markers of identity and culture and encasing the body in uniform protective layers. She first strips to the skin, removing all of her personal clothes and jewelry—external markers of individual selfhood. Like the laboratories themselves, Jaax is bathed in ultraviolet light—a color that permeates *Outbreak’s* laboratory scenes, as well. Her body is recontained within a set of protective layers: “a sterile surgical scrub suit,” a surgical cap, clean socks, surgical gloves, and bands of tape to close off the gaps at the hems of each layer of clothing. Finally, she dons the “Chemituron biological space suit, . . . a pressurized, heavy-duty plastic space suit that meets government specifications for work with airborne hot agents.” Increasing layers of technological complexity prophylactically encase the vulnerable and dangerously porous body, with the authority of the technologically advanced nation-state (“government specifications”) underwriting the process.

**The Spectacle of Accident**

If the outbreak narrative often sees in global movement the infiltration of outside pathogens, then it is perhaps not surprising that the
most commonly sought “lifeboats”—the laboratory and the space suit—are devices that rein in the body’s movement. The physical enclosures of the lab and suit, and their accompanying protocols that dictate self-control, promise to shield vulnerable, porous flesh. As Preston describes the procedure of suiting up, he notes that “The hands were the weak point, the most vulnerable part of the suit, because of what they handled. They handled needles, knives and sharp pieces of bone.” The imagined response is that of more careful regulation: “Every movement of the body in a hot area has to be controlled and planned.” This pattern is not dissimilar to Larabee’s description of the attraction of lifeboats: “[S]afety is more conceivable in a limited environment, where near total surveillance and a minute accounting . . . are possible.” The laboratory and the space suit offer Western technology as the solution to the problem of invasive outsiders, not only for their ability to contain space and regulate those within it, but for the research that such procedures makes possible. The laboratory connects with epidemiological tracking of illness across the globe and with visualizing technologies such as the electron microscope to enact forms of vision that, in seeing, might control illness. But the fantasy of panoramic vision is always countered by the expectation of accident, since the lifeboat both shields and produces anxiety.

Outbreak narratives such as Fatal Contact, Outbreak, The Hot Zone, and Robin Cook’s novels Vector (1999) and Outbreak (unassociated with the Wolfgang Petersen film and later adapted as a television movie entitled Robin Cook’s “Virus” [1995]) draw upon the danger posed by laboratory conditions. That anxiety arises in large part from the contact between complex technological security and the “mundane clumsiness, inadvertent behaviors, everyday chance, and uncertainty” of human bodies. The lab and the space suit are “reproductions of disastrous conditions under apparently” but not actually “controllable circumstances,” and they remain uncontrollable because of the inherently unpredictable, messy nature of the human body. The potentially catastrophic effects of that “mundane clumsiness” and “uncertainty” are central to outbreak narratives and find expression in the spectacle of accident that repeatedly punctuates their narrative flow.

If outbreak narratives, in their movement from emergence to containment, imply connections that epidemiological expertise can reveal and thus track, and if the epidemic film borrows from public health conventions of desiring to see and thus contain the pathogen, we might say that the spectacular accident at once moves the narrative forward—it can establish chains of connections
and make the invisible pathogen visible—and, for a moment, stops such a narrative in its place. Additionally, we might note that the epidemiological narrative is implicitly after the fact—it discovers what occurred, in the manner of a detective story—whereas the accident is largely of the moment, unforeseen while simultaneously desired for the thrill of the spectacle it might unleash. This is not to say that a critical focus on the accident replaces attention to the process that blames disease on cultural others or the epidemiological work that masters the rupture of the outbreak, but that the investment in spectacular accident runs on a parallel track, raising other sets of anxieties that exist in tension with those of the epidemiological narrative.

Critical work has convincingly argued, for example, that in Outbreak the infection of the character Casey (played by Kevin Spacey) enables the film’s epidemiological gaze to fix illness in the body of a sexual other.\textsuperscript{56} That locating of illness is a key part of the process by which epidemiology and public health seek to make visible the invisible process of contagion. In making illness and infection visible, such gazes contain the outbreak within narratives that make illness appear to follow logically from blameworthy acts; such logic underwrites the ways in which outbreak narratives mark as dangerous those bodies othered in terms of race, sexuality, nationality, and/or gender. However, the national imaginary of contagion, as well as national fantasies regarding globalization, are also structured by anxiety about systems of control and the possibility of accident. The outbreak narrative is not organized by one of these two tendencies, but by the tension between them: on the one hand, blaming the dangerous outsider and a call for tracking and monitoring suspect populations; and, on the other, a lack of faith in the systems that promise, through the maintenance of distinction between clean spaces (imagined as the global North) and contaminated ones, to monitor and control the threat of epidemics. Reading for the accident involves keeping our reading within the moment of narration—reading for the sudden eruption of a spectacle—rather than within the backward-looking glance of the epidemiological narrative; however, we see outbreak narratives most fully when we place those two forms of reading in conversation.

It is worth noting that Casey’s accident serves as a spectacle both unforeseen within the narrative and equally foreshadowed by events of the film, which is to say that it is both unexpected by the characters and eagerly desired by the film’s logic. Casey first appears in the film in the background of the first long tracking shot: he is carefully examining his suit for holes. A few scenes later, Casey’s watchful eyes
spot a tear in his boss Sam’s suit as the two prepare to enter the laboratory, and he remonstrates with his boss for not checking the suit. As the scene unfolds, the unshakable Casey plays a joke on the team’s newcomer, Major Salt, tossing a test tube through the air that Salt mistakenly thinks contains the Motaba virus (the film’s fictional contagion) and quipping, “Don’t mess with this stuff. . . . Nothing in here [the lab] can’t kill you—including the air.” Later in the film, falling asleep on his feet after hours of overwork in pursuit of a solution to the epidemic, Casey experiences the accident: the hose that brings purified air to his pressurized suit snags on an open drawer, and a tear opens in the prophylactic shell around his body. The noise of the tear and of the suit depressurizing, along with the sudden swell of music signifying alarm, radically alter the affect surrounding what had been the routine, if important, labor of research. The film’s extended positioning of Casey as the most level-headed, most careful member of the team—he remains calm when confronted with sick patients who cause Salt to panic, he stands apart from the familial squabbling of Sam and his ex-wife Robby, and he maintains a methodical stance toward research and only briefly and quietly shows his frustrations, especially in comparison to Sam—ironically foreshadows his accident: the man most experienced with, and who displays the most comfortable adaptation to, the protocols of research experiences the accident that the protocols supposedly prevent. The spectacle of Casey’s accident depends in part upon its playing up the contradiction between his aptitude within the confines of laboratory and space suit and the seemingly inevitable power of accident itself.

It might be argued that such contradiction only serves to underscore the importance of properly trained and docile bodies and to insist that those who follow proper procedures will not be harmed. However, the repetition of these scenes of proper behavior and their sharp contrast with sudden, unexpected, yet ironically desired accident implies that the rhetoric of accident is all-pervasive. For example, the needle prick that infects Robby (while she’s caring for Casey) comes well after a scene in which Robby, able to steady her own nerves, takes over the autopsy of a dead Motaba victim from a too-frightened doctor; Robby insists that she “know[s] how to work with needles.” Accident is again made spectacular in part through its contrast to the correct following of rules that supposedly prevent accident. More to the point, such scenes of correct procedure seem to call forth, or desire, the failure of that procedure to adequately shield those involved. The fear of and expectation of accident might be said to be a contagious anxiety circulating within the outbreak
narrative, overrunning the logic of proper procedure that seeks to contain it.

In fact, the scenes that function as spectacles of infection in *Outbreak* all figure as accidents, beginning with the first accident in which the lab technician is sprayed with blood from the centrifuge (although this scene functions less clearly as a spectacle, since it occurs so quickly). That technician then falls ill in the movie theater—not a laboratory but rather a space the film suffuses with safety and nostalgia—an old-fashioned and innocent evening’s diversion into which infection intrudes abruptly and unexpectedly.36 Casey’s lab accident and Robby’s needle prick round out the series. Similarly, Preston’s *The Hot Zone* directs its attention repeatedly toward possible accidents. When Nancy Jaax notices a hole in her suit during the necropsy of an Ebola-infected monkey, she panics—as does the text—at the possibility of infection. The narrative of her accident is rife with blame: Jaax has an open cut on her hand because she was in a hurry and impatient while preparing a meal: “Her father had always warned her not to use a knife to open a can, but Nancy Jaax had never made a point of listening to her father’s advice.”37 Jaax is thus both too much associated with the domestic sphere of femininity—she is cooking for her family at the time—and too much the tomboy who tolerates kitchen drawers that are “a jam-packed nightmare.”38 Jaax is not infected in the accident, but the anxiety generated by this near miss is so great as to exceed the boundaries of actual narrated events, as well as the power of a narrative structure that would blame infection on violation of gender norms. The detailed attention dedicated to the near accident does not offer reassurance that systems of containment succeed. Instead, its multiplication of possible routes to catastrophic infection—the cut on the hand, the hole in the suit, the accusation of carelessness, the implication that Jaax does not follow procedures closely enough—implies that a tragic outcome, if it did not occur, in fact should have occurred, in turn revealing how much the text desires the accident.

Accidents both within and outside of laboratory conditions abound in outbreak narratives; they serve as spectacular moments that move the narrative forward—they create a link in the chain of infections that the epidemiological aspect of the outbreak narrative moves toward containing—even as they stop the narrative to revel in the anxiety produced by the accident. The television movie *Fatal Contact* signals that generalized anxiety in its (previously discussed) opening montage of successive accidental infections, one incidental point of contact leading to uncountable others. In the film *28 Days Later*, special effects create a moment of infection that both power-
fully surprises and is simultaneously expected by the narrative. A man looking up at a body on a ledge above him tries to scare away a bird picking at the corpse and, in doing so, causes a drop of blood to fall. The camera lingers within the falling blood, the viewer’s gaze falling with it, directly into the upturned, open eye of the man—two inches to the side and no accident would have occurred. Such an almost-avoided accident implies that human bodies are actively porous, seeking disease despite caution.

Although the original cause of the outbreak in *28 Days Later* implicitly rests at the hands of the socially renegade—in this case, animal-rights activists who unwittingly release infected chimps from a research facility—that cause occurs only in passing, and the spectacle of the falling drop of blood draws attention not to a causal chain linking bad acts and illness, but to the perversity of accident seemingly determined to occur. In the film’s sequel, *28 Weeks Later*, a kiss between a healthy carrier and her estranged husband leads to his infection and a potentially world-decimating outbreak. As with the Nancy Jaax story in *The Hot Zone*, layers of guilt seek to contain the surprise of the infection: the husband had earlier abandoned his wife when “the infected” (in the film’s terms) overran the farm where they were hiding. However, the moment itself still functions in the same two-pronged manner as other outbreak-narrative accidents: as an eruption of the unexpected and as the inevitable arrival of that which has been desired. For the outbreak narrative to exist, the infection must emerge. But the spectacle of infection exhibits a drive toward further spectacular pleasures rather than toward the narrative arc that ends with containment of disease.

*The Hot Zone* participates in this process of desiring the accident by generating such a long list of infections that those moments of contact that do *not* produce illness become the surprises. Nancy Jaax’s near accident is a prime example. A similar case early in the book is the story of a boy, given the pseudonym Peter Cardinal, who dies of a Marburg infection (a disease related to Ebola). Preston imagines that Cardinal fell ill during a visit to Kitum Cave in Kenya, where he might have touched sharp rocks and crystals suffused with virus—a site ripe for accident. What becomes difficult to imagine, in Preston’s account, is how Cardinal might have fallen ill while his sister, in the same space of ready accident, might not. The same question arises, in muted form, in *Fatal Contact*: why some fall ill and others do not is never explained, seemingly more the result of random chance than any logic of infection. Later in Preston’s book, two researchers smell a vial full of what is later revealed to be a variety of simian Ebola, one seemingly harmless to humans. However, the
act of near contact becomes a peg upon which that outbreak narrative can hang anxiety about the seemingly necessary spread of illness. Whereas in other accident spectacles the anxiety generated by the accident spreads beyond the epidemiological narrative’s effort to contain it within a logical chain of problem behaviors to be rectified, in the case of the near accident the anxiety generated by the close call cannot be contained even by the fact that no one falls ill. In both cases, the accident and its attendant anxiety have a logic that overruns narrative attempts to encircle it.

Desiring the Accident

I have argued that the accident becomes an overwhelming force within many outbreak narratives, and as such it reveals a counter-discourse within the outbreak narrative—a discourse existing alongside the epidemiological narrative that would detect, track, and contain the epidemic. Spectacles of accidents—even of seemingly minor incidents (albeit with major repercussions) such as the centrifuge accident that begins the infections in Cedar Creek in the film Outbreak—are perhaps the most notable example of this tendency, but a similar tendency is revealed in potentially open-ended plots (as in Fatal Contact, with its final-scene emergence of a more virulent strain of influenza) and in the often “self-consciously weak form[s] of narrative closure” with which outbreak narratives conclude (as in The Hot Zone, which ends with its primary epidemic subsided but unsolved). Outbreak narratives engage a similar set of anxieties and fantasies in their use of the bioccontainment laboratory and space suit; such technologies seek to contain and constrain both illness and the physical body of the researcher.
As in the case of lifeboat thinking, that “problematic organic materiality” is an excess that technological systems cannot fully master since systems of containment are prone to failure, prone to the body’s “mundane clumsiness” and its organic residues in the form of dust, skin, shit, or microbes. In a related manner, outbreak narratives contrast images of supposedly self-contained and uncontaminated spaces, such as the idyllic town of Cedar Creek in the movie Outbreak, to spaces imagined as thoroughly contaminated by illness, such as the same film’s use of sub-Saharan jungles. Such self-contained spaces are, like the body with its organic residues and inherent clumsiness, subject to sudden and surprising penetrations, crossings, and interconnections. While technological “cleanroom fantasies” of the biocentrism laboratory and national disease surveillance “attempts to govern” such anxieties, Harpold and Philip usefully note that the materiality of the body structures not just the “horror” but also the “pleasure” of technological thinking.

As I have already argued in my discussion of accidents as spectacles, accidents in the outbreak narrative similarly function not only to generate anxiety but to generate ambivalent pleasures—especially in their spectacular moments.

Writing of the archives created by official investigations following disasters, Ann Larabee notes that their purpose is to contain disasters by restoring faith in the idea of perfectible systems that will work in the future. The outbreak narrative’s tendency toward epidemiological containment of and solution to newly emerging diseases follows the same pattern—it insists that the nation-state’s systems of surveillance and intervention will protect a privileged citizenry—but the countervailing investment expressed through spectacles of infection points toward faith not in systems of containment, but faith in their failure.

Such spectacles and the drive toward exposure point to competing ideas about both the individual physical body and globalization. The accident punctures the notion that national public and private spheres can in fact exist; it insists that space is mobile and fluid, and that organic, material, uncontrollable bodies can and will move through space, making contact and exchanging an uncontrolled corporeal something. The accident thus demonstrates ongoing tensions between two contradictory models of space: one envisioning a public sphere separated from the private sphere, with both enclosed within national borders; and another much more suspicious of such distinctions, organized by a more generalized distrust and dis-ease about constantly mobile, ever-shifting space. In
the former, the public sphere is relatively safe and clean until penetrated by outside forces; in the latter, any space in which human bodies move is already infectious or at the very least perched on the edge of catastrophic accident.

What I have thus been pointing toward is what has been called a fundamental "inconsistency of desire"\textsuperscript{67}: that the outbreak narrative is centrally wrapped up in both the desire to contain and the desire to expose—to expose bodies to illness and, in doing so, to expose fantasies of containment as farcical wish fulfillment forever prone to the irreducible physicality of bodies. The fantasy of the biocontainment laboratory, as with that of the self-contained community, seems to hinge upon the paradoxical but common quest for a bodiless body—a quite old but still powerful fantasy of a mind roaming free, unencumbered by a physical shell.\textsuperscript{68} Accident within the outbreak narrative might best be thought of as the return of the repressed body. The scene of the laboratory accident—the accident in the most contained, most technologically advanced site—insists that the technological systems meant to govern the anxiety of the body's physical "remainders"\textsuperscript{69} are in some deep sense impossible. The accident in the outbreak narrative is a symptom both of the anxiety generated by a body that cannot be governed and of the insistence on that body's messy materiality.

However, the return of the repressed in this form—in which the image of a bordered world is overwhelmed by that of one with no borders—involves its own repressions and carries with it other desires. The image of the world without borders, while insisting upon a material body that cannot be willed away, in turn can suppress the economic and political facts that limit the movement of some bodies while enabling the movement of others, just as it tends to flatten all bodily movement into a single category—failing to distinguish, for example, between travel required for economic subsistence, that created by forced displacement, and that of the cosmopolitan elite. In the simple world with no borders, the Western executive whose company might generate capital from poorer workers of the global South is the same body in motion as is the refugee fleeing displacement and as is the disease-harboring African mosquito that surreptitiously boards a jetliner to Boston. In a similar manner, such an image of a borderless world can erase the link, clearly established by researchers such as Paul Farmer, not between disease and inherently dangerous locales or improperly civilized peoples, but between disease and impoverishment—impoverishment in which the North often has a historic and ongoing hand.\textsuperscript{70}
The repressions, returns, and desires that the accident reveals point to interrelated horrors and pleasures that are mutually constitutive of one another, and point to the ongoing and shifting complex logic through which epidemic disease is used in the global North—for my purposes, in the popular cultural productions in the United States. Such productions signal not just a desire to contain the epidemic, but a desire for the spectacular eruptions that signal containment's impossibility, and thus signal inherently contradictory ideas about globalization and human bodies. It might be tempting to point to one tendency—containment—as outdated, and another—exposure—as the new paradigm, but both can exist simultaneously and within a single work, as in the film *Outbreak* that ends with containment but is most spectacularly invested in continuing moments of exposure. The goal of critical investigations into such texts cannot be to finally separate the true from the false desire and horror in such narratives, but should be to think our way within their insoluble contradictions. In doing so, we come to better understand the tensions between fantasies of national identity and fantasies of globalization—that is, the desire for self-contained and highly monitored borders in constant contest with the attractions and terrors of dissolvable bodies and borders—that structure the contemporary moment.

Notes


4. For example, in her essay "Imagined Immunities" and in chapter 1 of her book *Contagious*, Wald reads the outbreak as a force that calls into being the very acts of imagination that make the imagined community possible; the epidemic points to the necessity of actively imagining and believing in the national community. Here, I turn attention to what I take to be an ongoing shift or tension in that act of national imagining around the epidemic; in a world in which the epidemiological project of containing HIV/AIDS, especially, has failed to succeed, the belief in the possibility of imagining a stable community becomes less possible. See Priscilla Wald, "Imagined Immunities," in *Cultural Studies and Political Theory*, ed. Jodi Dean (Ithaca, NY: Cornell University Press, 2000), 189–208. On national fantasy, see Lauren Berlant, *The Anatomy of National Fantasy: Hawthorne, Utopia, and Everyday Life* (Chicago: University of Chicago Press, 1991) and *The Queen of America Goes to Washington City: Essays on Sex and Citizenship* (Durham, NC: Duke University Press, 1997).
Linda Williams, “Film Bodies: Gender, Genre, and Excess,” *Film Quarterly* 44, no. 4 (1991): 2–13. Williams investigates “films that promise to be sensational, to give our bodies an actual physical jolt”—specifically horror, porn, and melodrama (see 2, 4–5).


Wald, *Contagious*, 27.

Thanks to my colleague Maisha Wester for a version of this insight. This idea is also suggested by Amanda Schaffer, “Jungle Fever,” review of *Contagious: Cultures, Carriers, and the Outbreak Narrative*, by Priscilla Wald, in *Bookforum*, Summer 2008, 57.

For an example of this tendency in some of the versions of *Invasion of the Body Snatchers*, see Wald, *Contagious*, 204, 211.


See Wald, *Contagious*, 58, as well as its chapter 5, “‘The Columbus of AIDS’: The Invention of ‘Patient Zero’.”

For an extended discussion of the difficulties that critical theory often has in dealing with the messy porosity of bodies, see Robyn Longhurst, *Bodies: Exploring Fluid Boundaries* (New York: Routledge, 2001). Fears about penetration, especially of the masculine body, are often coded as fears of homosexual penetration, as Kirsten Osterr shows with respect to the 1971 film *The Andromeda Strain* (*Cinematic Prophylaxis*, 162–63).

28 Days Later, dir. Danny Boyle (Twentieth Century Fox/Fox Searchlight, 2002).

Rhodes, *Deadly Feasts*, 212.

For more on these connections, see Osterr, *Cinematic Prophylaxis*, 182–83.

21 The United States Army Medical Research Institute for Infectious Diseases. The CDC and the USAMRIID tend to play primary roles in most outbreak narratives produced within or about the United States.

22 For other analyses of this scene, see Wald, *Contagious*, 60–61; and Osterr, *Cinematic Prophylaxis*, 185–88.

23 For more on backshadowing, foreshadowing, and sideshadowing, see Michael Andre Bernstein, *Farewell Conclusions: Against Apocalyptic History* (Berkeley: University of California Press, 1994).


26 As Geoffrey Cowley wrote in *Newsweek*, “The novel coronavirus that causes [SARS] emerged from Guandong, the same Chinese province that delivers new flu to the world most years” (Cowley, “How Progress Makes Us Sick,” *Newsweek*, 5 May 2003, 35, quoted in Wald, *Contagious*, 5).

27 The camera work and special effects that trace the pathogen from contact to contact are visually reminiscent of a history of public health films that sought to train a population in the conduct that would minimize just such a transmission of disease in the public sphere. For more on contact-tracing in public health films, see Kirsten Osterr, *Cinematic Prophylaxis*, 6–9. For more on the “Patient Zero” story, see Wald, *Contagious*, 213–63.


29 Wald, *Contagious*, 36.

30 Larabee, *Decade of Disaster*, 16.


32 Preston, *The Hot Zone*, 220. Richard Preston’s newest book, *Panic in Level 4: Cannibals, Killer Viruses, and Other Journeys to the Edge of Science* (New York: Random House, 2008), is a collection of essays, only one of which involves epidemic illness. However, its title’s reference to both “Level 4” and “killer viruses” attests to the centrality of the biocontainment laboratory within the outbreak narrative.


34 Ibid., 57.

35 Ibid., 90.

36 Ibid., 70.

37 Ibid., 60.

38 Ibid., 76.

39 Ibid., 70.

40 Larabee, *Decade of Disaster*, 16.

41 Preston, *The Hot Zone*, 76.

The laboratory in outbreak narratives is a complex site: it is clean in the sense of being ordered space, but is also contaminated insolar as it is assumed to harbor deadly pathogens. The space suit worn inside the lab is thus a containment for the body within a container for disease.

See Osthell, *Cinematic Prophylaxis*, chap. 2.

Preston, *The Hot Zone*, 70.

Ibid., 70–71.

Ibid., 71–72.

Preston, *The Hot Zone*, 72.

Ibid., 315.

Larabee, *Decade of Disaster*, 146.


Larabee, *Decade of Disaster*, 23.

Ibid., 39–40.

See Osthell, *Cinematic Prophylaxis*.

Ibid., 184.

It is notable that the movie-theater scene takes place in a decidedly old-fashioned, single-screen theater in the center of a seemingly all-white town whose citizens are described by the head of the local hospital (a building also located in the middle of town) as “a family.” The movie title on the theater’s marquee reads *What’s Up, Doc?* which in referencing the 1972 film and Bugs Bunny cartoons both heightens nostalgia and serves as a clever reminder that *Outbreak* is produced by Warner Brothers.

Preston, *The Hot Zone*, 54.

Ibid.

28 Weeks Later*, dir. Juan Carlos Fresnadillo (Twentieth Century Fox/Fox Atomic, 2007).


Ibid., 185.

Osthell, *Cinematic Prophylaxis*, 163.


Larabee, *Decade of Disaster*, 23.

Harpold and Philip, “Of Bugs and Rats,” par. 32.

Ibid., par. 36.
67 Ibid., par. 34.
68 Ibid., par. 28.
69 Ibid., par. 32.
71 For this insight, I am indebted to Harpold and Philip, “Of Bugs and Rats,” par. 36.