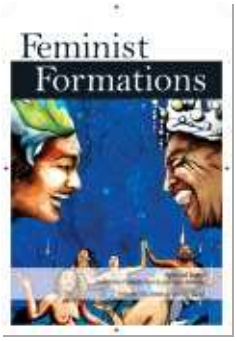
Metaphors of Contagion and the Autoimmune Body

Beth A. Ferri



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The response to an uncontrolled spread of disease often incites a commingling of medical, moral, and political panic. Whether in the context of threats *presented by early plagues, to contemporary super viruses, to lead toys, contagion, via transmission, makes interconnections visible, among and across peoples, cultures, objects, forms of commerce, and more. In this article, I use an intersectional disability studies framework to first discuss how, faced with the bio-insecurity of contagion, responses typically invoke discourses of war, empire, and what Priscilla Wald calls "medical nativism" (2008, 9). I then discuss how metaphors of autoimmunity often simply shift this discourse from concerns about external terror to that of internal terror (Sengupta 2014). Viewing autoimmunity from this vantage point, the body/nation is still viewed as vulnerable to attack, but the victim and the villain are the self/same. In the final section, I posit that a reimagined ethic of autoimmunity could offer new and fruitful ways to think about self/other relations that rely on mutual recognition and reject the binary, oppositional stance that undergirds annihilation.*

Keywords: autoimmunity / contagion / intersectional disability studies / metaphors of disease and illness / war metaphors

> Contamination then is no longer a risk
> but a fate that must be assumed.
>
> —Jacques Derrida 2007, 162

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> Autoimmunity is a biopolitical force that confounds immunological paradigms predicated on binary dichotomies of self and nonself, revolutionary and counterrevolutionary, ability and disability, and so forth.
>
> —Chien-hsin Tsai 2011, 98

Responding to threats of disease imbued with the capacity to infiltrate porous state borders and bodies, various nation-states have provoked racialized and nationalist panics over pandemics like Ebola, Avian flu (Bird Flu), SARS (Severe Acute Respiratory Syndrome), HIV/AIDS, and, most recently, the Zika virus. In order to *combat* such threats of contagion, the United States (and other nations) have responded by tightening immigration and travel restrictions and enacting various prophylactic measures of state surveillance, "supervision, control, [and] containment" (Mayer and Weingart 2012, 144). Concerns over viral and bacterial risk often rely upon military metaphors, where the microbe is positioned "as a guerrilla fighter, a pirate, sometimes a spy . . . a terrorist" (142).

Typical panic responses to contagion feature a commingling of medical, moral, and political discourses and a concomitant call to arms. Importantly, the threat of infection from without also influences how we think of diseases that are seen as attacking from within. In this article, I first illustrate how, faced with instances of the bio-insecurity of contagion, responses typically draw on discourses of war, empire, and what Priscilla Wald calls "medical nativism" (2008, 9). Next, I discuss how metaphors of autoimmunity often simply shift this discourse from a concern about external terror to that of internal terror (Sengupta 2014). Viewing autoimmunity from this vantage point, the body/nation is still viewed as vulnerable to attack, but the victim and the villain are the self/same. In the final section, I suggest that a reimagined ethic of autoimmunity offers new ways to think about self/other relations that are nonoppositional and that rely on mutual recognition and connectedness, rather than annihilation.

Contagion and War

Legacies of empire, particularly ideologies of strength and conquest, are continuously reanimated through securitization, militarization, and various efforts by the state to manage disease, interspecies relations, and related animacies (Chen 2012a). Cementing foreignness with disease (Cady 2005; Sontag 2006) and positioning ourselves as sovereign nations and bodies, we are compelled to declare war, to engage in battle, and ultimately to defeat disease as the alien enemy (Quackenbush 2008). From tuberculosis to cancer to AIDS (Sontag 2006) to autism (McGuire 2016), military metaphors are so firmly ingrained in contemporary thinking about both medical and social (dis)ease that we have declared *war* on drugs, teen pregnancy, cancer, poverty, and more (Reisfield and Wilson 2004). Whether endangered by social or medical (dis)ease, the notion

of *cure* regularly involves a call to arms aimed at vanquishing external threats to the health of the body or body politic. Similarly, when particular disabilities (such as autism) are perceived to be occurring in increasing numbers, they are often described in the popular press as outbreaks or epidemics in order to heighten concern and marshal medical attention toward pinpointing the cause and eradicating the disease (McGuire 2016).

If the natural state of the body is assumed to be normative, healthy, and whole, and disability or disease is something the body succumbs to or "has" (McGuire 2016), its immune system serves as the border wall or fortification between the self and nonself. The body, however, is not a closed system, and the border—like all borders/boundaries—is permeable, demarcating the very point at which outside and inside, self and other, touch or come into contact.[1] Thus, the body's Achilles' heel lies in the (natural, yet pathologized) vulnerability and permeability of its border between self and other and the supposed threats posed by queer, racialized, tainted, disabled, and diseased others.

In the name of cure, then, threats must be located, their causes traced and identified, so that counterdefenses may be marshalled accordingly. Infectious disease in particular requires an *other* that can be identified, targeted, and quarantined. Fueled by fears of contagion, "individuals, groups, populations, locales (regional and global), behaviors, and lifestyles" have all been stigmatized and scapegoated as themselves diseased (Wald 2008, 3). Thus, war metaphors of disease are particularly pernicious because they influence the way we "perceive, name, and respond to disease" (34), how we think about those whose live *with* disease, as well as how we treat those groups who are perceived *as* diseased (Chen 2007). At issue is not simply metaphors or even what we *do* with metaphors, but also how the underlying logics of metaphors act upon us and others (McGuire 2016). More than a tool for sense making, metaphors constitute an interpretive move, but also a "form of social action" (Titchkosky 2015, 10).

Yet, perhaps we should not be surprised at the conflation of war and disability. As Gary Reisfield and George Wilson write, there is a "seemingly perfect metaphoric correspondence" between disease and military metaphors (2004, 4025). Like stock characters in a formulaic plot, first, an *enemy* is cast (played by the disease), which is then confronted by a military commander (the physician/scientist), who wields "formidable weaponry (including chemical, biological, and nuclear weapons)," directed at saving the combatant (the patient) (4025). The familiarity of scene, plot, and archetypal characters are part and parcel of both the appeal and the persistence of what Wald identifies as the outbreak narrative. In the typical outbreak narrative, microbes, borders, and bodies intermingle to tell a "contradictory but compelling story of the perils of human interdependence and the triumph of human connection and cooperation" (Wald 2008, 2).

Further cementing bio-cultural anxieties of contagion, metaphors for *combatting* dis/ease evoke a highly militarized discourse. Guided by this framing of

disease, we respond (or are called to respond) by identifying the disease as the enemy, declaring war, and hopefully winning at all costs (Quackenbush 2008). Winning the war of disease requires either a cure (once infected), an immunization, or a healthy defense (immune) system to serve as a barrier or safeguard to the risk of infection. From within these logics, managing the threat posed by viral and bacterial infection—fending off the capacity of viruses and bacteria to invade and infiltrate the body—is quickly understood as requiring various systems of fortification and defense (Mayer and Weingart 2012) to cordon off the body/state from the perceived risk. Yet, the very nature of contagion renders the body and its borders penetrable—vulnerable to trespass—or, to put it differently, inherently permeable. The border therefore is always already a site of exchange and contact. As Jacques Derrida notes, contamination is a "kind of touching [that] foils every strategy of protection" (quoted in P. Mitchell 2017, 82).

Thus, like the outbreak narrative, "virus talk" often draws upon the lexicon of "border crossing, cultural contact, social conflict, and . . . terrorism" (Mayer and Weingart 2012, 139). Wald (2008), for instance, traces the highly predictable vocabulary of words, images, storylines, and characters featured in scientific, journalistic, and even fictional accounts of contagion. In these contexts, the microbe is characterized as the "archetypical stranger" (Wald 2008, 10)—the enemy-other who is perceived as threatening, infiltrating, or attacking the body of the state. Particularly troubling, the microbe has the potential to infect, but also to hide—tucking itself away, unseen and unidentified, lurking within unsuspecting human carriers who, even if they remain well, nonetheless might leave destruction in their wake. The existence of this figure of the first-known healthy carrier for any such threat, including "Typhoid Mary," or, much later on, "patient zero" of the AIDS epidemic[2] (Wald 2008), required a collective reckoning with the knowledge of the ways that we bear a social responsibility to one another, but also sparked an increased fear of the other, or the otherness that can unknowingly hitch a ride within; the Trojan Horse gets reimagined as the unwitting and unintentional carrier. Conjoining scientific discourses of microbes with social anxieties about the transmission of ideas and commerce, contagion brings to the fore both the "necessity and danger of human contact" (Wald 2008, 4).

Toxic People, Places, and Things

Our predilection for war metaphors may explain why we like to think of terror/threats/disease as external—coming from elsewhere—there, not *here*. Mel Chen's (2007) work, for example, examines how the United States all but turned its back on concerns about peeling lead paint, or lead-infused water supply lines (like those in Flint, MI), in order to stoke an all-out panic over lead toys from China as a form of biological terror. This move marked a shift in focus, from threats inside (the home and homeland) to an external and foreign threat (in

this case brought here from China). The victim, too, shifted from urban youth of color and their exposure to lead paint (or contaminated water) to a panic about middle-class white suburban children being poisoned by their toys. Because exposure to lead was seen as threatening intellectual superiority associated with whiteness and class status, this *new* panic produced an intensified public outcry compared to the more muted concerns about urban youth of color. Moreover, although lead poisoning is an example of how social inequality gets *inside* the body (Roberts 2011), discussions of educational achievement gaps between white and black students point the finger at so-called failing schools rather than addressing environmental causes of health and educational disparities. This shift away from environmental justice concerns over toxins in public housing within the United States also marked a new development in "immunity discourse [and] . . . vocabularies of contagion," focusing on the "toxicity of inanimate objects" (Chen 2007, 370, 372). Further, by locating the problem within the toys themselves, the transnational workers and their children, who were likewise exposed to lead in the making of toys, were all but ignored.

The idea of a diseased other has often focused not simply on geographic foreignness, but also on associations with transgressive or primitive (premodern or non-Western) cultural practices and appetites. The long-held (and since debunked) origin story for HIV/AIDS, for instance, focused on sensationalist ideas about human-animal transmission—featuring stories about "Africans either slaying (for food) or having sex with, monkeys" (Chen 2007, 371). Media coverage of deadly outbreaks like Avian Influenza, first identified in the late 1990s, and later SARS in 2002, both of which originated in China, focused public attention on possible routes of transmission involving animal carriers. Theories of how animal viruses make the leap to infecting humans have looked to cultural practices such as cock fighting, live bird (or animal) street markets, poor sanitation, or consuming or preparing decidedly non-Western animal proteins. By animating longstanding pathologizing logics informed by an imperialist gaze, cultural practices, once they become associated with disease outbreaks, are further enveloped in a discourse of *backwardness* or animalistic tendencies and associations. Conversely, Swine flu, which first broke out in the United States in 2011, called into question industrialized agricultural or factory farming practices, where animals are warehoused in crowded and unsanitary living conditions. However, large-scale *modern* farming, butchering, and food distribution practices were not castigated as threats in the same manner. Increasing concerns about animal-related pathogens—such as Ebola—call for an examination of a range of practices associated with modernity, including travel, urbanization, trade, industrial farming, changes in land use, lapses in environmental regulation, climate change (*Economist* 2005), and the overuse of antibiotics in animal feed. However, a powerful deception of modernity is its ability to hide or deflect attention away from itself and its own contradictions. Thus, paradoxically, while the *premodern* or the *exotic* other is framed

as presenting the greatest threat to modernity's values and progress, many of modernity's imperatives, be they medical, labor oriented, or tied to food production and land use, often pose a far greater risk to the overall well-being of the earth and all beings. Of course, acknowledging these practices would require locating the source of *trouble* inwardly (rather than outwardly) and challenging existing progress narratives.

Communicable Dis/Ease

Now omnipresent, the ubiquity of war metaphors for disease emerged most forcefully with the identification of bacterial infection (Quackenbush 2008). Prior to bacteriology, disease was more likely to be ascribed to transgression, prohibition, and divine retribution rather than to combat or war (Wald 2008). Yet, even with scientific explanations and vocabularies for disease, contagion continued to register "symbolically powerful" social meanings rooted in the past (13). Similar to early Christian teachings—in which the spread of pestilence among sinners was seen as the work of an angry god, modern-day discourses of disease frame particular places, behaviors, and people as "risky." Exploiting epidemiology's ability "to tell a good story" (20), public-health officials drew on medical and social discourses in disease prevention efforts. For instance, many such campaigns cast the early twentieth-century city-space as a "promiscuous" social space where masses of people, because of their close quarters and proximity to others, were human incubators for microbes and communicable diseases to flourish (20).

The urban context, because of its queer commingling of bodies beyond the confines of the nuclear and heteronormative family, represented a new, transgressive, crowded sociality, where bodies literally bumped up against masses of others, who themselves carried traces of unknown otherness. The tenement and, later, the residential high-rise, allowed and often necessitated new forms of cohabitation, kinship, and racial encounter. New forms of public transportation carried great numbers of undifferentiated others in crowded buses, trains, subways, and ferries. Bodies, suddenly less easily demarcated or delineated by class, racial, ethnic, and gendered divisions, shared crowded and communal space as they traversed the city. Furthermore, the urban context, as a site of migration and exchange, also precluded any easy notions of an originary or pure presence. Many residing in large cities are oft understood (by themselves and others) as relative newcomers—arriving from somewhere and bringing somewhere with them—continually engaging in a cycle of movement and migration, of displacing and replacing. To be at home in the city is to be reminded that the notion of a bounded, independent self is a myth—the body, like the city, is marked by and experienced as fluid, as complexity, adaptation, and exchange.

Viruses, too, are mutating shapeshifters; they can transform from a dormant state to a pathogenic state and back again—often in unpredictable ways.

Once considered a kind of poison[3] (Villarreal 2004), increasingly viruses are characterized instead as tricksters because they exhibit characteristics such as intelligence, problem-solving, or sophistication (Mayer and Weingart 2012), which also imbues them with the capacity to avoid detection and adapt (Villarreal 2004). Yet, microbiologists have long debated whether viruses are living or nonliving. Not *exactly* micro-organisms, viruses occupy a liminal space between living and nonliving—more than mere strings of chemical notations, but not quite life—perhaps a kind of borrowed life or (bad) seed (Villarreal 2004).[4] While viruses may not reproduce, they have the ability to replicate and mutate, even across species—from bird to pig to human in the case of Avian flu, for instance. The offspring produced by the mixing and matching of genes imbue viruses with a sort of heterosis (or increased vigor). Becoming more virulent with each mutation, viruses can thus be understood as exhibiting a kind of dangerous adaptability and/or even a menacing queer desire (Villarreal 2004).

Disease outbreaks have thus long resulted in various forms of meaning-making. Absent a clear or compelling cause or origin story, we often fill in the blanks in ways that reveal deeply held insecurities and fears (Feuer 2014). From early diseases like the Black Plague to more contemporary examples (such as the Ebola virus or HIV/AIDS), viruses have evoked all manner of conspiracy theories, frequently ones that draw on (and animate) racist, ableist, sexist, heteronormative, settler-colonial logics and legacies. Whether as part of an ostensible government plot or as, supposedly, purposely introduced by the pharmaceutical industry, in confronting the unpredictable spread of disease, it seems that we are compelled to name a villain. Yet, confronting the "necessity and danger of human contact," acknowledging the limits of immunity requires that we reckon with the knowledge that the "circulation of microbes" and the transmission of cultures, are not only unavoidable material interactions, but ones that, positively, "constitute us as a community" (Wald 2008, 2). In other words, violating oppositional thinking about absolute divisions between inside(r) and outside(r), experiencing *threatened* immunity requires grappling with the knowledge that the body/nation is permeable and vulnerable—but does this constitute a militarized threat, a site where modernity's conquest narrative necessarily plays out?

Furthermore, viruses are not just *out there* as an existential threat—viruses cross borders and saturate the body. In turn, bodies are not closed systems—as bodies, we take in *the other* in all manner of ways—exchanges of breath, blood, saliva, and more (including nonliving materials that enter the bloodstream, infiltrate tissues or organs, and/or become incorporated into the body). As Jasbir Puar (2007) notes, the terror of contagion weaves together bio-political fears of infiltration and border penetration with cultural anxieties about queer, sick, and disabled bodies. However, what Puar and others have often failed to consider is that for people (like me) with an *actual* compromised immune system, anxiety over contagion is not simply an existential worry, theoretical

conundrum, or a discursive debate about metaphor and meaning, but a palpable phenomenological experience and state of being. Engaging with the limits and contradictions of (auto)immunity as lived experience has much to offer in complicating discussions of contagion and immunity.

Autoimmunity as Metaphor

If we commonly posit disease as a threat from without—brought here by alien combatants (human or nonhuman) from outside the borders of nation/state/body—what, then, of autoimmune illnesses, wherein the "alien" other *is* the self and the body is the "site of conflict" (Devaney 2008, 122)? Although autoimmune illnesses are often chronic, they can be episodic, such that one waxes and wanes between periods of illness and wellness (Rinaldi 2013). How does one either talk about or live with a body that is unwell and will likely remain unwell for one's foreseeable lifetime? Confounding both biomedical and social model definitions of illness and of disability (Devaney 2008), and frustrating efforts aimed toward cure, people who live with autoimmune illnesses are also underserved by the medical community, denied social security and disability benefits and workplace accommodations (Quackenbush 2008). For instance, the Center for Disease Control (CDC) has turned its back on autoimmune diseases—prioritizing illnesses that fit more comfortably with the paradigm of cure (Quackenbush 2008). And, paradoxically, autoimmune issues and experiences are also rendered invisible within much of the disability community. However, autoimmunity, as a construct, has served as a rich source of metaphor.

Traditional definitions of autoimmunity and indeed much of the popular and medical discourse surrounding autoimmunity rely on many of the same logics behind the war metaphors widely used to frame the outbreak narrative. Here, the body is similarly positioned as a battleground in which the immune system functions as a "soldier" at war with foreign invaders (Quackenbush 2008). The locus of terror simply shifts from external to internal in a "quasi-suicidal attack" (W. Mitchell 2007, 281). Thus, in the autoimmune body, the immune system declares war on a part (or parts) of the body it no longer recognizes and attacks itself as if confronting a foreign, antagonistic, threatening other (or enemy).

Feminist medical anthropologist Emily Martin (1994), who interviewed scientists after the AIDS crisis, found that most described the immune system in relation to these same kinds of war metaphors. One scientist is quoted as describing the immune system as occupying a harsh and violent world—similar to a war movie or novel. He stated, "I mean these lymphocytes see something they don't like, and they arrive at the scene, and they inject nasty chemicals onto it. They attack it, leave it obliterated, have their mop up crew come by and chew it all up. It's pretty harsh" (quoted in Martin 1994, 96). Scientists describe the body in similar, violent imagery as the "scene of total war between ruthless

invaders and determined" defenders (Martin 1994, 53) and relentless defenders. In this war, the immune system serves as the body's own "armed forces" or "internal body guards" against itself (53). T-cells in particular are most often positioned as the soldiers or "warriors," or killer cells—always at the ready in the police state of the body (54). In the typical scenario, each cell in the body carries with it a kind of identity card or citizenship papers—the body's police force or immigration enforcement is trained to patrol and enforce, to "distinguish between bona fide residents and illegal aliens—an ability fundamental to the body's powers of self-defense" (Nilsson quoted in Martin 1994, 54). Alien cells are targeted, engulfed, and then showered with deadly poisons before being "eaten up" by scavenger cells (54).

Between the 1970s and 1980s, there was a burst of public and media interest in the immune system. Working out various metaphors to explain and characterize the immune system, scientists began thinking about the immune system, not as a war machine or fortress, but a more complex network in which the immune system is more brain-like—adapting and self-regulating (Kirschner and Martin 1999). Living through these years was David Phillip Vetter, born in Houston, TX in 1971 and diagnosed with Severe Combined Immunodeficiency (SCID). Vetter, who was portrayed in the media as the "bubble boy," lived his entire life until his death at age 12 in a sterile plastic "bubble."[5] Born with virtually no immune system, his life captivated the public imagination, later raising a number of ethical concerns that he was being kept alive as a research subject more than as a patient. Indeed, he is credited as contributing to medical breakthroughs in immunology and cancer research (Haberman 2015). Mythologized on big and small screens, Vetter's life also served to feed a public fascination with the immune system and the possibility of protecting the body from external threats.[6] If a "bubble" could protect a child with no immune system, might a personal biome shelter, like earlier bomb shelters, protect us against new threats to our health and well-being, particularly killer bacteria and viruses? In other words, as the world was coming to terms with becoming ever more complex and interconnected, the story of a "bubble boy" fueled desires that science or medicine would be able to find ways to blockade the self from the terror of contamination and contagion.

As E. Cohen (2004) argues, conventional understandings of the immune system often rely upon the body's ability to distinguish self and nonself and friend from foe. This type of dichotomizing premise seems to work quite well for infectious diseases, where "alien" pathogens, whether bacteria, virus, or parasite, can easily be figured as "invaders" against whose incursions the "defense forces" of the immune system wage their valiant wars (Cohen 2004, 7). Of course, besides painting a grossly superficial understanding of the immune system, this characterization relies upon a "non-contradictory or self-identical" philosophical understanding of the body-self. Problematically, it assumes that what we perceive as "the self" should naturally align with what we perceive as "the body"

(Cohen 2004, 8)—an assumption that has been thoroughly critiqued within queer and trans studies, for instance (Beauchamp and D'Harlingue 2012). It also relies upon thinking about disease or disability as a *thing*, distinct from the body (McGuire 2016). Yet, what if one's own immune system is the enemy or invader? What, then, "is to be erased, fought against, done battle with? Who, in the case of autoimmunity, is the enemy?" (Quackenbush 2008, 33). Is the state of autoimmunity a suicide mission, a cannibalization of the self, an allergy to the self (Cohen 2004)?

When thinking about the immune system and autoimmunity, in particular, things begin to fall apart—perhaps in productive and constructive ways. Autoimmunity, as metaphor, for instance, has the potential to deconstruct dichotomies of "us versus them . . . , between inside and outside, friend and foe, native and alien," thereby highlighting the limits of efforts to distinguish clear divisions between self and other (Tsai 2011, 80). Both Derrida (2003) and Donna Haraway (1991) have drawn on autoimmunity as a theoretical construct to explore the contradiction between the internalized self-destructive responses nations make in reaction to external threats. Derrida drew on the construct of autoimmunity to underscore the ways that the United States enacted anti-democratic forms of censorship and surveillance under the guise of Homeland Security after 9/11 (Tsai 2011). In particular, he showed how security measures aimed at protecting (or immunizing) the country from future terrorist attacks threatened the very civil liberties they were aiming to protect. In its war against "rogue" states, in other words, the United States revealed itself to be the (actual) "rogue" (Sengupta 2014). In the post-9/11 world, the price of freedom, we were asked to believe, was the suspension of freedom. The maintenance of peace, freedom, and liberty becomes or calls for its own kind of war, wherein the nation, "in order to protect the security of its subject . . . unleashes violence within itself—it kills in order to protect" (Sengupta 2014, 80).

Thus, the precarious, inconsistent, and contradictory nature of democracy is underscored by the ways the United States subverted its own democratic principles under the pretense of democracy (Mayer and Weingart 2012)—unwittingly exposing its settler-colonial origins. The terror of autoimmunity, then, turns out to be exchangeability—or the dynamic in which good and evil constantly switch roles—where "counter-terror is, in other words, perceived as terror and thus provokes (counter) counter-terror and so on" (Mayer and Weingart 2012, 150). John Protevi characterized this exchangeability in this way:

> The immunological system's task is one of reading, of espionage and counter-espionage. The endgame of auto-immune disease—especially when it targets the immune system itself—is that of the impossible task of undoing mistakes committed by the internal police who confuse internal police for foreign agents masquerading as internal police dedicated to tracking down foreign agents masquerading as internal police. (2001, 101–2)

Terror, according to prevailing logics of autoimmunity, is more like a cancer than a virus—and, rather than an attack from the outside, biomedical terror functions in ways parallel to agents at work in the contemporary war on terror—i.e., as "invisible sleeper cells hidden inside the body waiting to strike" (W. Mitchell 2007, 283). War, however, is not the appropriate "medicine" or curative strategy for countering autoimmune terrorism: it is akin to "pouring gasoline on fire," according to W. J. Thomas Mitchell, because overreactive responses "fail to discriminate the body from its attacker" and run the risk of stimulating the "proliferation of pathogens" (2007, 283). Instead, autoimmunity requires a nonoppositional interchange: a deconstruction of self/nonself (Johnson 2010). One must recognize the enemy is not other, but the self—and rather than the self as enemy combatant, the issue should be reframed as a problem of recognition.

Thus, like actual autoimmune disorders—the "conceptual weaknesses" of war metaphors emerges when you consider and confront autoimmunity as a lived reality—there are "no actual enemy invaders; the enemy is self" (Reisfield and Wilson 2004, 4025). In other words, if the body is a battleground, the enemy is the selfsame (Quackenbush 2008)—or, as this circular logic reveals, autoimmunity shows that we need a more adequate framework than one that pivots on opposition, enemies, and combatants. How do metaphors of war, invasion, alien enemies, and so forth, used to describe diseases perceived as coming from outside the body (politic), explain a body facing its own nonrecognition? How can viewing the immune system as a kind of map that guides "recognition and misrecognition of [both] self and other" (Haraway 1991, 204) expose what Chen has called the "requisite underside of frenzied war-making" (2012b, 78) and prompt unexpected, alternative, and generative responses (Tsai 2011) to social conflict?

An ethical engagement with autoimmunity as a discursive construct requires a reckoning with the phenomenological, lived body, refusing "neat divisions between antibodies and foreign antigens," and attending to the more complex ways that the immune system actually works, which is largely elusive, in flux, and indeterminate (Tsai 2011, 80). Thus, although I am generally skeptical of disability metaphors, which reduce disability to anything but what it is (May and Ferri 2005; Schalk 2013), I am compelled by the prospect of theorizing from the experiences of inhabiting/living in an autoimmune body—as an interpretive horizon, not an essential state (Alcoff 2005). As an interpretive move with material consequences, metaphor is how we make sense of the world; as such, it can be a tool of thinking and acting otherwise (McGuire 2016; Titchkosky 2015). Thus, a more ethical and embodied engagement with autoimmunity as an interpretive horizon has the potential to contest metaphors of conquest and cure and offer a more nuanced understanding of social conflict as well as disease and disability.

Living with chronic illness and autoimmune disorders requires engaging states of internal conflict that one must learn to live with, and within. Autoimmune processes do not lend themselves to simple or easy demonization or *bad guy* status. Neither do viruses, actually, which have the capacity to mutate, remain dormant, and turn against themselves. In other words, if the immune system is more like a virus—which is increasingly characterized as a little *biomachine*—a not-quite-human form of body-intelligence that confounds categories of us/them, insider/outsider, human/machine, how then does the metaphor (and experience) of autoimmunity point to the necessity of finding alternative ways to live with the precarious, contradictory, and constitutive presence of the other within (Mayer and Weingart 2012)?

The Ethic of Autoimmunity

According to recent estimates, there are more than eighty distinct autoimmune diseases, with more being identified daily. Currently, 50 million people in the United States alone have been diagnosed with autoimmune diseases. Of those affected, 75 percent are women. There are no known causes nor cures for autoimmune illnesses. I am both one of the many, the 50 million people, as well as one of the few; I have been diagnosed with a rare autoimmune blood disorder called chronic autoimmune neutropenia (AIN). The question, "How are you doing?" is for me often reduced to a series of absolute numbers and percentages of white blood cells and, specifically, neutrophil counts—I've gone from the initial panic of hitting *rock bottom* (and basically being without an immune system), to the realization that I hit that point a few times each month. Even though my *good days* would raise red flags on any lab report, I celebrate when my counts reach a whole number—even if this achievement is (truly) short-lived and not completely predictable. This is just the most recent autoimmune disease that I have been diagnosed with, but easily the most dramatic. Perhaps, I sometimes joke, autoimmunity is a lifestyle or a form of body art or expression—like your first tattoo, once you have one, you often pick up others along the way.

If you go to WebMD to read up on AIN, you learn that neutrophils are part of your white blood cells. Created in the bone marrow, neutrophils are designed to "*attack* bacteria and other organisms when they *invade* your body" (WebMD 2018; emphasis added). The website further states that in the AIN patient, the bone marrow produces neutrophils, but the immune system mistakenly identifies those neutrophils as "*enemies*" and targets them for "*destruction*" (WebMD 2018). I am, as WebMD (as well as much of the popular press on autoimmunity) would have me believe, at war with myself. If blood is typically the basis of kinship, then the term "blood feud" connotes a conflict in which family members turn against one another (Tsai 2011). It is also the typical analogy for an autoimmune blood disorder. In these terms, AIN is an all-out *blood feud* waged within one's own body.

Thankfully, I have a new doctor who eschews war metaphors and tells me that my immune system is perhaps best described as *confused*. Rather than aim for combat or cure, then, this confusion calls for finding different ways to live. Certainly, individuals with autoimmune diseases describe their conditions in a variety of ways—and some continue to identify with war metaphors, while others do not. One blogger explains her own immune system as running "seek and destroy missions for foreign and abnormal cells" (Oleinik 2009). Yet, despite the ubiquity of war metaphors, she and others also describe autoimmune processes in more complicated, even confounding ways:

> I know that the immune system's responsibilities include recognizing and responding to potentially harmful agents such as bacteria, viruses, and foreign molecules . . . , but the methods by which our immune system accomplishes this seem so complex that when I attempt to make sense of it all, I end up thinking that my name is Alice and that I have fallen down a rabbit hole . . . curiouser and curiouser! (Oleinik 2009)

> When most people think of immunity, they're actually thinking of acquired immunity: the sort of immunity you develop (you hope, anyway), say, after having had chicken pox, or the sort that you develop from a vaccine. . . . But what happens when that autoimmune system malfunctions, and begins recognizing *everything*—***including your own body***—as an invader? You get my condition. (Aji 2010)

> My immune system is a tool. Have you ever been a part of a team? Almost always there's the guy who no one likes. You know, the tool who has an answer for everything. That's my immune system. One day he was checking over things and when he got to my digestive tract he was all like, "Whoa, whoa, whoa. What the hell is going on here? You guys are infected!" And my digestive tract was like, "What the hell are you talking about. Are you drunk again?" And, so my tool of an immune system sets about "CURING" my NOT sick digestive tract. (Stevens 2013)

Alternative metaphors like *mystery* or the experience of Alice from the novel *Alice in Wonderland*, who finds herself in a curious new world after falling down a rabbit hole, highlight a common experience of living with an autoimmune disease—one that is very much outside of discursive certainty and medicine's preferred biomedical frameworks of cure. Like all mysteries, autoimmunity can be "frightening, intriguing, and baffling" (Quackenbush 2008, 72). Nancy Mairs, for instance, likened Multiple Sclerosis (MS) to feeling like she was being "haunted by a capricious and mean-spirited ghost, unseen except for its footprints, which trips you even when you're watching where you're going, knocks glassware out of your hand, squeezes the urine out of your bladder before you reach the bathroom, and weights your whole body with a weariness no amount of rest can relieve" (1996a, 83–84).

I, too, have tried to bring meaning to the fact that although my bone biopsy shows normal production of white blood cells, they seem to disappear as fast as (or faster than) I can produce them. After shedding thirty pounds or more over the past year because of an unrelated (?) digestive problem (caused by bacterial overgrowth or *invasion*), I begin to think of my confused immune system (and my gut bacteria, ironically) as being hungry. In other words, maybe my immune system has developed an appetite for neutrophils—an insatiable hunger perhaps? This thinking may not be so far-fetched as it sounds. Recent thinking suggests that microbes in the gut can "modulate, tune, and tame the host immune response" (Sathyabama, Khan, and Agrewala 2014, 273).

Thus, the body's own microbiota can either bring equilibrium or cause imbalance (or both—numerous *good* bacteria can be called upon or ingested, via probiotics or prebiotics, to help support a diverse biome—diversity, not singularity or one group of bacteria dominating others, is the goal). In any case, because of a destruction of neutrophils, I am at risk of serious infection (or an infection becoming serious)—so, I worry a lot about what I eat, whom and what I touch, even what I breathe. The truth is, I may be perfectly happy to see you or meet you, but I generally would rather not shake your hand or give you/receive a kiss. Yet, because the immune and nervous systems are the only systems in the body that are capable of learning (W. Mitchell 2007), vaccinations are, in a way, pedagogical: they can help train the immune system to recognize and respond to a particular viral or bacterial pathogen. Because my immune system requires remediation, I have been given every vaccination my doctors can think of—I think of these as my superpower. In making meaning of experience—whether based on science or fiction or science fiction—we imbue the body and embodied experience as a way of both knowing and being in the world.

If, like Simone de Beauvoir (1972), we think of the body as an occasion for meaning— simultaneously material reality and situation to be taken up and interpreted—then metaphors matter. Thinking about autoimmunity as more of a problem of recognition of the ways self, other, and things are mutually dependent and often indistinguishable from one another, provides us with a way to think about autoimmunity as an alternative ethic of self/other relations. Autoimmunity also tells us that, in the end, war is only good at war. Thinking about the immune system as a war machine highlights the self-destructive underside of war-making. But, it may have other lessons, too.

For instance, metaphors that link autoimmunity to terrorism, though problematic in terms of their racialized state logics and violent imaginaries, at least begin with or acknowledge to some degree the "idea of exchangeability," in which the immune system is in continual negotiation between self and nonself in a nonoppositional interchange (Johnson 2010) that is open to revision and is therefore neither static nor stable (Mayer and Weingart 2012). In other words, autoimmunity is more about a dynamic and unpredictable negotiation between what is recognized and lived with or alongside as well as what is not

recognized and not tolerated. This is not a negation of conflict, but rather a more nuanced and multifaceted set of relations (Mayer and Weingart 2012, 152). Offering a more complex, nonbinary understanding of social conflict, autoimmunity offers a "profound reconceptualization of the very idea of self and other in the political sphere" (153). In addition, as an embodied experience, autoimmunity can also be engaged in order to pursue a more ethical stance toward the self and other and to rethink both politics and praxis (Johnson 2010) "to open up new horizons for thought and action, for solidarity and coalition" (McRuer 2010, 176).

Even if we support the use of war metaphors to describe or understand autoimmunity, because they seem logical and illuminating, we must consider the futility of declaring war on a body that has declared war on itself, in an endless cycle of combat and violence. Perhaps we must come to terms with the fact that war is not the right response—perhaps the lesson of autoimmunity is that we need a better response to our perceived enemies and terrors or we risk continuous damage to, and violation of, both self and other.

What might be the value in defining autoimmunity in ways that do not conjure war or provoke a militarized state (of being)? What is autoimmunity if it is *not* the self at war with itself? Might it be, instead, "[a] paradox. A self-contradiction. A contradictory self" (Cohen 2004, 9)? If autoimmunity is a kind of paradox in which one is both diseased and not diseased, how might a recognition of this hybridity invite and even call forth a more creative response to self and other, and a reconceptualization of multiplicity or heterogeneity within the self that is not equivalent to a fragmented, broken self? Many new treatments for autoimmune diseases, for instance, focus on suppression, not cure: rather than eradication, the goal is to allow cohabitation of self and other, alongside and within each other.

Moreover, what does the embodied experience of autoimmunity (as opposed to simply abstract engagement with autoimmunity as an interesting theoretical concept or metaphor) teach us about living with mutual vulnerability? In many ways, living with(in) autoimmunity disabuses us of any (remaining) neoliberal illusions we might have about self-sufficiency, independence, or control, leading to what Ryan Parrey calls "a different sense of being in the world" or the realization of already being "in the world differently" (2016).

For me, this has meant a heightened awareness of the interrelatedness of bodies, things, and contagion. A sudden sneeze, a cough, a handshake, a hug, a kiss, your pet's friendly greeting, a door knob, a latch, an elevator button, a pen offered by a cashier—all likely everyday encounters that were once taken for granted as unremarkable. I now experience these as embodied social experiences—and, rather than unexceptional, I am hyperaware of these ordinary, everyday events. While you may check out restaurant reviews before selecting a restaurant, I consult county health inspection reports before making a reservation. Blood that routinely courses through your veins is endlessly drawn,

measured, quantified, and considered from mine. My disordered blood "carries broad ranging yet largely unspoken corporeal and conceptual meaning" (Parrey 2016).

Caught in the contradictions of signification, my bodily/lived difference also does not register in ways that other, more obvious differences do. I do not wear my difference on my sleeve, although a sleeve might cover a bandage or bruise from a recent blood draw. I sometimes must wear a mask, which amounts to breaking a social contract, at least within a Western context, in which a medical mask covering the face might signal vulnerability, whereas others kinds of facial coverings associated with Arab or Muslim woman are characterized as a "hostile act" (Chen 2012b, 89). A medical mask, like David Phillip Vetter's bubble, marks me as vulnerable, even as it offers protection. A medical mask creates distance from others, who often shy away from my masked self—a distance I relish, at times, both because I know the permeable bodily boundaries between us present risk and because sometimes I like to have a bit of solitude, like when I am on a plane. The intimacies of friendship and the social niceties of everyday interactions could mark my undoing, even as such interactions suggest connection, relationship, and bonding. This negotiation with risk is ongoing and continual—sometimes leaving the *bubble* is a risk worth taking; other times it is not.[7]

Yet, there is much to be learned by having a heightened relation to animate and inanimate worlds. In hyperfocusing on combating (or even violently destroying) risks that are foreign and out there (or that have *invaded* our interiors), how do we not only re-animate violent imperial imaginaries and legacies, but also ignore what can be differently learned, and engaged, from within permeability, exchange, and non-binary crossings? The logics of war and empire not only distort and draw us away from rethinking self-other relations; they also invite us to ignore the risks that we present to others (via colonialism, war, exploitation of human and natural resources, environmental degradation, and more). To encounter autoimmunity is to grapple with how the self (as a body) always contains the seeds of its undoing. It cannot be placed in opposition to "the other"— because rather than a bounded, selfsame, unified subject, the self-body is many and one, heterogeneous, but not fragmented. Furthermore, grappling with (and bumping up against) autoimmunity brings to the fore a lived awareness that our encounters with the world are rarely simple, and never one-sided.[8]

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Notes

1. Of course, any easy or self-evident relationship between the body and identity has been called into question in queer and trans theory (Antosa 2012), as well as in feminist disability studies (Wendell 2001). For the purposes of this article, I am concerned with the set of relations both between and within bodies, as bodies, but also how those relations are shaped by ways of thinking about bodies, particularly disabled bodies. Anne McGuire's (2016) discussion of person first disability terminology (person with autism) and Nancy Mairs's writing are both useful in thinking about the dangers of thinking about disability as a thing, as nonlife, that can/should be lived without. As Mairs writes, her disability (MS) "can't be stripped away without mutilating the being who bears it" (1996b, 10).

2. Gaetan Dugas, a Canadian flight attendant, was originally suspected of triggering the AIDS epidemic in North America. Dugas, first as identified by epidemiologists as "Patient O," became known in the media as "Patient Zero," mischaracterizing him as the scapegoat for the epidemic.

3. The origin of the term "virus" is actually a Latin term for poison.

4. At issue is the very definition of life—often defined in biology as the ability to reproduce (reflecting a heteronormative worldview). Yet, as high-profile debates involving individuals who have been deemed *brain-dead* and ongoing abortion debates illustrate, an agreed-upon definition of life remains elusive.

5. Vetter did venture outside a few times wearing a specially designed NASA space suit. These rare moments, like much of his life, were captured on film.

6. The first of these was a made-for-TV movie, *The Boy in the Plastic Bubble* (1976), featuring John Travolta playing the role of the "bubble boy." This was followed by comedic spoofs in episodes of *Friends*, *The Simpsons*, as well as a 2001 coming of age feature film, *Bubble Boy*, featuring a comedic portrayal by Jake Gyllenhaal. The soundtrack included the 1986 hit song, *The Boy in the Bubble*, by Paul Simon, which was later covered by Patti Smith (2007) and Peter Gabriel (2010). Vetter's life was also featured in PBS documentary on *American Experience* in 2006.

7. Vetter died at age 12, two weeks after he left his bubble following an otherwise successful bone marrow transplant from his sister, who turned out to be carrier for the Epstein-Barr virus. His doctor described the procedure as a "calculated risk," but one that David and his parents readily agreed to (King 1984).

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