

Ebola Exceptionalism: On the Intersecting Political and Health Geographies of the 2014-2015

Epidemic

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**Abstract**

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The outbreak of Ebola virus disease that began in Guinea in December 2013 has evolved into an epidemic that is unprecedented in many ways. The number of cases and deaths, geographical distribution, social and political impact, and duration of the epidemic have created a global public health crisis so severe that WHO Director-General Margaret Chan has called it “the greatest peacetime challenge that the United Nations and its agencies have ever faced.” This thesis examines the multiple, overlapping, and contested discourses that have emerged in response to the epidemic, in the context of Ebola’s historical significance and current role within the dominant paradigms of contemporary global health. Competing discourses of disgust and care; the reinforcement and collapsing of social and spatial distances; and narratives of blame and responsibility across many scales are symptomatic of underlying tensions among competing conceptualizations and practices of global health.

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## List of Abbreviations Used

AIDS	Acquired Immunodeficiency Syndrome
CDC	Centers for Disease Control
DAH	Development assistance for health
DALY	Disability-adjusted life-year
DRC	Democratic Republic of the Congo
EID	Emerging infectious disease
ETU	Ebola treatment unit
EVD	Ebola virus disease
FFF	Family planning, female literacy, food supplementation
GAVI	Global Alliance for Vaccines and Immunizations (Gavi, as of 2014)
GBD	Global burden of disease
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GIS	Geographic information system
GOBI	Growth monitoring, oral rehydration, breastfeeding, immunizations
HIV	Human Immunodeficiency Virus
HOT	Humanitarian OpenStreetMap Team
HSS	Health system strengthening
HTCs	High-transmission countries
IDRI	Infectious Disease Research Institute
IHME	Institute for Health Metrics and Evaluation
IHR	International Health Regulations
IMED	International Meeting on Emerging Diseases and Surveillance
IMF	International Monetary Fund
ISID	International Society for Infectious Diseases
ISIS	Islamic State of Iraq and al-Sham
MDG	Millennium Development Goals
MSF	Médecins Sans Frontières
MERS	Middle East Respiratory Syndrome
MOH	Ministry of Health
NGO	Nongovernmental organization
NIAID	National Institute of Allergy and Infectious Disease
NIH	National Institutes of Health
PCDR	Post-Catastrophe Debt Relief fund
PHC	Primary healthcare
PPE	Personal protective equipment
ProMED	Program for Monitoring Emerging Diseases
SARS	Sudden Acute Respiratory Syndrome
VHFC	Viral Hemorrhagic Fever Consortium
UNMEER	United Nations Mission for Ebola Emergency Response
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
USAID	United States Agency for International Development
WHO	World Health Organization

## **I – Introduction: “A public health emergency of international concern”**

Since the first cases of Ebola virus disease were reported in Guéckédou Province, Guinea in March of 2014, the Ebola epidemic concentrated in Guinea, Liberia, and Sierra Leone has continually proven to be increasingly exceptional. It was the first outbreak of Ebola in West Africa; the most geographically extensive outbreak within a single country; the first truly transnational outbreak of Ebola; the first with a human case diagnosed on American soil; and the longest in duration. Medical volunteers from Cuba, China, India, the United States, and many other places around the world travelled to West Africa to support efforts to control the spread of the disease and care for patients, the vast majority of whom had never seen a case of Ebola or encountered such a devastating disease. The social and economic effects of the epidemic soon proved to be at least as destructive as its impact on public health: local commerce was suspended in the high-transmission countries (HTCs), meetings of more than three people were banned in many places, thousands of people with suspected exposure to Ebola were confined to their homes for weeks, and governments imposed stringent lockdown and quarantine measures. Ebola was transformative in almost every aspect of life in the Guinea, Liberia, and Sierra Leone, and was profoundly disruptive, in different ways, in many other places as well.

As the epidemic progressed, its case number and fatality statistics—month by month, and sometimes week by week—multiplied far beyond the numbers documented in all previous outbreaks combined. In an address to the United Nations Security Council, Dr. Margaret Chan, the Director-General of the World Health Organization (WHO), called it “the greatest peacetime challenge the United Nations and its agencies have ever faced” (“WHO | WHO Director-General addresses UN Security Council on Ebola,” n.d.). On the ground in West Africa, healthcare workers characterized it as being more devastating than their experiences providing care for

AIDS patients in Sub-Saharan Africa at the height of the HIV/AIDS pandemic, and coping with Liberia and Sierra Leone's devastating civil wars. Across many scales, public health agencies conducted training, crafted contingency plans, and constructed emergency facilities in preparation for Ebola's spread to their territories. As of this writing, the WHO reports that there have been 27,145 laboratory-confirmed cases directly linked to the initial outbreak, including 11,147 deaths ("Ebola Situation Report - 3 June 2015 | Ebola," n.d.). Although weekly case numbers fell dramatically in early 2015, and Liberia was declared to be Ebola-free as of May 9, Sierra Leone and Guinea have both continued to report new cases every week for over a year, and it is unclear when the epidemic as a whole will be over.

In this context, it is perhaps unsurprising that Ebola has been pervasively, though not uniformly, framed as a humanitarian emergency of extraordinary severity. In August 2014, Chan declared the epidemic to be a "public health emergency of international concern," only the third time this classification had been invoked since the creation of the International Health Regulations in 2007. The United Nations created its first-ever emergency mission for a health-related crisis, the UN Mission for Emergency Ebola Response (UNMEER). Discussing the International Monetary Fund's perspective on the crisis with more than a touch of understatement, Christine Lagarde, the IMF's Managing Director, stated that, "It is good to increase the deficit when it's a matter of curing people, of taking precautions to actually try to contain the disease. The IMF doesn't say that very often" ("Transcript of Remarks at the Event: Impact of the Ebola Crisis: A Perspective from the Countries," n.d.). By the beginning of September, the medical humanitarian organization Médecins Sans Frontières (MSF) was so desperate for assistance in containing the outbreak that it explicitly called for external military intervention—which is certainly not something that it says very often, either.

At the beginning of the 2014 outbreak, Ebola was considered to be an under-researched disease in comparison with others that were more highly prioritized by pharmaceutical companies and public health apparatuses alike. Its exact etiology was unknown, and there was no vaccine or known cure. What was well known, however, was how to effectively contain outbreaks of Ebola. A 1978 report in the *Bulletin of the World Health Organization* summarizing the very first documented outbreak of the disease concluded that proper protective equipment, isolating patients, and safe disposal of contaminated material “will almost certainly prevent future major outbreaks” (“Ebola haemorrhagic fever in Zaire, 1976,” 1978). In the ensuing decades, there were several outbreaks on a similar scale as the original outbreak in Zaire, but none with more than a few hundred cases or that lasted for more than three months.

Conventional wisdom held that Ebola was a cruel and terrifying disease, but not one that posed a threat outside of the isolated communities it tended to afflict. Until 2014, every known outbreak of Ebola had been successfully contained not with cutting-edge technologies, expensive drugs, or vaccines, but with preventive techniques and basic protective equipment.

The world’s first Ebola epidemic occurred at a pivotal moment within the field of global health. Development agendas, including those related to health, were guided in large part by the United Nations’ Millennium Development Goals (MDGs) for the first fifteen years of the 21<sup>st</sup> century, but 2015 marks the formal end of the period that that framework was designed to address. The structure and target areas of the MDGs promoted development projects that had specific, time-limited ambitions and incorporated logics of market efficiency, decentralization, and partnerships between public agencies and private industry. While this model was in ascendance during the era of the MDGs, a growing attention to investment in health systems has begun to emerge within global health. Even the Bill & Melinda Gates Foundation, which has

historically strongly opposed approaches that focus on health systems (Storeng, 2014), created an “Integrated Delivery” initiative in 2012 out of recognition that health systems and primary health care in developing countries could not be ignored (“Integrated Delivery,” n.d.). Ebola has proven to be disruptive to many widely-held perceptions about the state of global health security, knowledge, and equity; the role that chronically weak and underfunded public health systems in Guinea, Liberia, and Sierra Leone had in creating the conditions that made epidemic Ebola possible showed the potential short- and long-term consequences of devaluing and dismantling public health in developing countries, both within the affected countries and worldwide. In the context of the impending shift in the global development agenda, the disruptions that Ebola has caused have the potential to contribute to a reframing of global health in terms of universal access and health systems rather than as a collection of related but independent problems.

The Ebola crisis has triggered anxieties about the interdependencies and vulnerabilities between the Global South and North that are produced by neoliberal globalization, and generated multiple, sometimes competing, discourses of explanation, responsibility, and blame for the epidemic. While many of these discourses reinforce existing preconceptions about the threat of emerging infections, critical counternarratives about the nature of the disease itself, patients and their caregivers, and the ultimate causes of the epidemic challenged the blame, fear, and disgust that were typical of many representations of the disease. The scale and scope of the epidemic’s origins, immediate impact, and future implications are presented in diverse and divergent ways within different framings of the disease and the region in which it emerged. Universalizing discourses, which emphasize global interconnection and shared risk, responsibility, and vulnerability, situate epidemic Ebola within political and economic systems across many scales. In contrast, discourses of isolation, exclusion, and distance frame Ebola as an isolated event,

specific to the time and place in which it emerged and the people it has afflicted with limited implications outside of West Africa—downplaying the multiscalar structures and processes that made this exceptional public health crisis possible.

Ebola is a disease of extremes, one of the rarest and most lethal in the world. Historically, many diseases have acquired distinct personalities, through their cultural interpretations, the political issues they become involved in, and the social anxieties that are projected onto them: Hans Zinsser, the scientist credited with creating the first vaccine for typhus, classified his book *Rats, Lice, and History* as a biography of the disease he had spent his own life studying (Zinsser, 1935); more recently, Siddhartha Mukherjee's *The Emperor of All Maladies* (Mukherjee, 2010) is framed as a biography of cancer. In both cases, these diseases are cast as entities that have not only histories, but true life stories of their own. Ebola, during the ongoing epidemic and throughout much of its history, has been so shrouded in both terror and enigma that a particularly nasty and threatening personality has been constructed for it, and it seems likely that some future biographer of Ebola would frame the 2014-2015 epidemic as its coming-of-age story. In what follows, I will explore the ways that Ebola's particular character has informed the ways in which it has been framed during the currently ongoing epidemic, and how those framings are also shaped by discourses of security, inequality, and moral obligation in global health more generally. For the purposes of this paper, I will use the more technically correct term "Ebola virus disease" (EVD) only in reference to the pathophysiology and clinical signs and symptoms of the disease. The more general "Ebola" signifies not only the disease itself, but its social, cultural, and political interpretation and enactment: Ebola as a discourse, not just a disease. While much of my analysis is text-based, the discourses that have governed and been produced

by Ebola are by no means limited to the written word, and take form through oral and visual manifestations of culture as well as textual ones.

This thesis will examine competing and sometimes contradictory Ebola discourses that have emerged over the course of the 2014 epidemic. Text, images, and other documents drawn from popular media sources, expert commentary, press releases, public presentations, and official reports from many levels of government provide insight into different ways that Ebola has been conceptualized and framed, both as a crisis of exceptional proportions, and as an emerging infectious disease that shares common causes and consequences with many other diseases of poverty. Chapter II situates the Ebola crisis within the landscape of contemporary global health, and outlines the particularities of the pivotal moment, at the close of the era of the UN-led Millennium Development Goals, at which Ebola briefly became the most visible and contested issue on the global health agenda. Chapters III, IV, and V analyze the discursive constructions of Ebola during the current epidemic, with attention to the unique historical associations that the disease carries. Chapter III contrasts the renewal of the politics of fear and disgust that have long surrounded Ebola with narratives of hope, care, and empathy that resist dehumanizing representations of the people affected by the disease. In Chapter IV, the tension between discourses that re-inscribe social and spatial distance between Ebola-affected places and spaces of privilege in the Global North, and those that threaten to collapse those distances and reallocate vulnerability to and culpability for Ebola beyond the borders of the high-transmission countries (HTCs). Chapter V examines questions of governance, and the narratives of failure—of states, of communities, of systems, and of institutions—that assign blame for the epidemic.

## **II – Situating Ebola: Global health, national security, and emerging infectious disease**

Global health has emerged in the past two decades as a discourse (Beckmann, 2013; Brown, 2011), as an academic discipline (Brown, Craddock, & Ingram, 2012), and, as Farmer et al. (Farmer, Kim, Kleinman, & Basilio, 2013) describe it, as a “collection of problems” that has not yet developed clear boundaries, principles, or aims. Global health unevenly incorporates the logics and concerns of humanitarianism and biosecurity (Lakoff, 2010), and is also inherently connected to the roles and responsibilities of states, their obligations to safeguard the health of their people, and their willingness and capacity to do so. These facets of global health are inherently overlapping and interconnected, though different actors within global health may identify themselves more or less with each one of them. Humanitarianism, broadly speaking, can act as both a compliment and a challenge to sovereign authority; there is a mutual mimesis between humanitarians and states through the borrowing or exchange of responsibilities, techniques, and technologies (Ophir, 2005). In global health, humanitarian actors often respond to perceived failures by states to fulfill the responsibility to provide for the health of their citizens (Redfield, 2005). This relationship is drawn especially clearly in the overlap between the strategies and sensibilities of humanitarians and the military (Duffield, 2007; Fassin & Pandolfi, 2010). Both the Bush and Obama administrations in the United States have relied heavily on the language of humanitarianism to morally ground military interventions abroad, and the humanitarian governance of spaces like refugee camps bears more resemblance to martial law than democratic politics (Weizman, 2011). The strategies of emergency medicine that humanitarians practice have their historical origins on the battlefield, and the logics and languages of medical humanitarianism have been increasingly coopted as a justification for military action. The medical humanitarianism that is involved in regimes of global health is

concerned with consequences of state failures and social inequalities—it seeks to provide and care for populations whose rights to health are endangered by inadequate healthcare systems, social marginalization, or economic exclusion from access to care. The language of underdevelopment as an impetus for humanitarian action implicates market failures as agents of crisis, though this narrative misrepresents the economic relations responsible for the persistence of poverty in the Global South: problems or needs that are interpreted as underdevelopment within these discourses do not exist in spite of wealth in the Global North, but rather are produced by the systems of capital accumulation that also create the fortunes that underwrite many development-oriented philanthropies. Humanitarian action is predicated in these ways upon crisis or emergency: a “perceived state of rupture that invites response” (Redfield, 2005, p. 328). The classic humanitarian emergency—a natural disaster, for instance—is precipitated by a catastrophic event that is clearly bounded in time and space, but the crises of global health tend to be less visible, more diffuse disasters—a form of “slow violence” (Nixon, 2011).

The field of global health has undergone a dramatic transformation in the first fifteen years of the 21<sup>st</sup> century, to the extent that this period is sometimes called a “golden age” (Messac & Prabhu, 2013). There was a vast increase in development assistance for health (DAH)—the so-called global health “scale-up,” (Dieleman et al., 2014)—driven in large part by a vast increase in spending on HIV/AIDS and other health issues prioritized by the Millennium Development Goals. The other ascendant orientation in global health, from the perspective of the Global North, at least, during this period was the conceptualization of health and disease as matters of national security, which dovetailed with the US-led global war on terror. The securitization of global health employed a systems-level approach in many respects (Lakoff, 2008), but with the aim of controlling, protecting, or securing populations—not providing care.

While the humanitarian ethical imperative to care for vulnerable populations is integral to these two paradigms of global health—as development and as security—neither tended to be concerned with primary healthcare or healthcare systems, and both downplayed or even erased the long-term, structural influences on inequalities of access and outcomes in global health. As the post-MDG global development agenda takes form, health systems have begun to emerge as a more prominent priority; within some global health discourses, the Ebola crisis has been interpreted as largely a failure of health systems, and a potent symbol of the importance of a renewed focus on health system strengthening.

### ***Global health as development***

Contemporary discourses linking health and development stem in large part from the World Bank's influential 1993 report which argued that improving health in developing countries would spur economic growth and prosperity (World Bank, 1993). In the language of development, the problems of global health are often understood in financial terms, as a complex calculus of dollars spent and lives saved. During the first decade of the 21<sup>st</sup> century, a distinct new phase of global health began to take shape, marked by a dramatic scale-up in development assistance for health, the creation of worldwide priority-setting Millennium Development Goals (MDGs), and the growth of powerful new public-private partnerships, most notably the Global Fund to Fight AIDS, TB, and Malaria, and the Global Alliance for Vaccines and Immunization (now known as Gavi, the Vaccine Alliance). Between 2000 and 2010, the total amount of development assistance for health nearly tripled, from about \$10 billion to nearly \$30 billion (Dieleman et al. 2014), an expansion that was largely driven by the growth of three channels of assistance: US bilateral agencies, US NGOs, and the Global Fund. The Bill & Melinda Gates Foundation, which was formally created in 2000, was also profoundly influential, both materially

and symbolically, during the global health scale-up (“History,” n.d.), through its own grant-making, and its involvement in the creation of separate initiatives, including Gavi and the Global Fund. More than any single project or agency, though, the MDGs gave shape to the landscape of this era of global health. Explicitly drafted as goals for the period between 2000 and 2015, the MDGs provided a concise, coherent framework that development projects could strive to fit into, and served as a model for the kind of project-oriented, time-limited approaches that dominated global health during its “golden age.”

The scale-up in DAH mobilized an enormous amount of capital and resources, but its signature projects have been criticized as being narrow, short-term, and shortsighted (Garrett, 2007). Priorities were strongly influenced by the MDGs, particularly the three goals that directly pertain to health: improving maternal health; reducing childhood mortality; and fighting HIV/AIDS, malaria, and other major infectious diseases. Almost 70% of all development assistance for health between 2000 and 2010 was allocated for programs that directly focused on MDG-related issues: HIV/AIDS, malaria, tuberculosis, and maternal and child health (Dieleman et al., 2014). The MDGs reinforced global health frameworks that took shape in the 1980s and 1990s that focused on addressing specific, targeted health issues or interventions. The 1978 Declaration of Alma-Ata had established a goal of “Health for All by 2000,” especially emphasizing universal access to primary health care (PHC), but few practical efforts attempted to actually implement the principles of Alma-Ata. Instead, more narrowly focused approaches grew in popularity, such as selective primary health care (Cueto, 2004), USAID’s child survival initiative, and UNICEF’s GOBI-FFF framework for reducing childhood mortality (**G**rowth monitoring, **O**ral rehydration therapy, **B**reastfeeding, **I**mmunizations; **F**amily planning, **F**emale literacy, **F**ood supplementation) (“WHO | Chapter 5,” n.d.). These projects were organized

around clearly identifiable, measurable indicators and relatively straightforward interventions that could be implemented quickly, and did not necessarily require expensive technology or robust medical infrastructure. HIV/AIDS is the paradigmatic problem of MDG-era global health; more than any other health issue, the pandemic of HIV/AIDS challenged and changed the status quo of global health (Crane, 2013; Messac & Prabhu, 2013). Mid-20<sup>th</sup> century predictions of the imminent end of infectious disease as serious health threats have clearly been proven incorrect, and no single issue has demonstrated this more than HIV/AIDS. Beckmann (2013, p. 160) argues that the unprecedented mobilization of resources that AIDS has provoked is the result of a “successful framing of AIDS as a public-health and development crisis.” This element of crisis contributed to the conceptualization of AIDS as a matter of security, which in turn gave it a place on policy agendas beyond public health alone (Altman, 2003; Ingram, 2011).

Global health is inherently both biopolitical and geopolitical. Fassin (2007) describes humanitarianism as both a biopolitics and a “politics of life,” in that it involves both the management of life-at-risk, at the level of the population, and the saving of individual lives-at-risk. Within global health, the politics of life—the power to determine which lives are to be saved—often takes the form of qualification for disease-specific interventions. Nguyen (2009) calls this a form of “therapeutic domination” in the context of African HIV treatment programs, in which American and European universities, NGOs, and hospitals hold powers of life and death for HIV-positive Africans. Ticktin (2011) discusses humanitarian regimes of care as being concerned with “morally legitimate” suffering; in her example of the French immigration system, certain forms of suffering become a kind of currency that grants access to political asylum and citizenship rights. Nguyen (2010) argues that within global health, the qualification of life based on particular forms of illness and suffering creates a form of “therapeutic

citizenship”—a biopolitical subjectivity within a system of non-state governance. These biopolitical regimes of global health frequently operate independently from state-led public health agencies in poor countries, and are governed by the logic of the privatized, decentralized aid and development industry—part of a larger process of the neoliberalization of humanitarianism. Global health has also taken shape as a field of academic knowledge within the past fifteen years. A number of top American universities—including Northwestern University, Harvard University, Brown University, the University of Pennsylvania, the University of Chicago, the University of California at Berkeley, and the University of Washington—founded institutes or entire academic departments devoted to the study of global health during this time, often using a mix of public and private funding. Many of departments of global health receive funding from the Gates Foundation and other major global health donors, and are sometimes directly involved with the implementation or evaluation of global health programs that these actors are involved with.

In recent years, health system strengthening (HSS) has begun to gain increased visibility and attention in global health. Both Gavi (“The health systems goal,” n.d.) and the Global Fund (“Health Systems Strengthening - The Global Fund to Fight AIDS, Tuberculosis and Malaria,” n.d.) have added HSS to their core focus areas, despite their origins as vertically-integrated projects. In 2008, WHO Director-General Margaret Chan explicitly called for a “return to Alma-Ata” and the principles of universal health coverage and primary health care (“WHO | Return to Alma-Ata,” n.d.).

### ***Global health as security***

Concurrent with the global health scale-up in first decade of the 21<sup>st</sup> century was a renewed securitization of infectious disease, punctuated by a series of global disease emergence

events. The “anthrax letters” that were sent to a number of US government officials and news outlets shortly after the September 11 terrorist attacks in 2001, while not an outbreak in the traditional sense, might be considered the first of these, and forged an initial connection between the war on terror and novel or re-emerging pathogens. This relationship was solidified through the “biological turn” in the war on terror, which brought emerging infectious disease directly into the purview of United States defense and security (Cooper, 2008), and through a series of disease emergence events that renewed and reinforced the perception of epidemic infectious disease as a security threat. In 2003, the emergence of Sudden Acute Respiratory Syndrome (SARS) intensified anxieties about globalized risks of new pathogens and triggered a rethinking of global systems of infectious disease surveillance and control (Davies, 2008). Outbreaks of highly pathogenic avian influenza (H5N1) in East Asia in 2003-2005 reinforced the ongoing relevance of the aftermath of SARS, and the 2009 H1N1 influenza pandemic, despite its relatively modest death toll, exposed the global interdependencies and inequalities that produced it, and itself produced discourses that re-entrenched them (Sparke & Anguelov, 2012). In early 2014, Middle East Respiratory Syndrome (MERS) appeared to be the next logical successor in this 21<sup>st</sup> century lineage of threatening, global infectious diseases. Like SARS, MERS is caused by a newly discovered coronavirus that was likely zoonotic in origin (though the animal reservoirs of both viruses remain unconfirmed), and had an unusually high case fatality rate. Even the names given to the two diseases mirrored each other, though the naming of MERS tailored the shared naming convention to more directly link the virus, and implicit blame for its emergence and spread, to a geographic region.

Emerging infectious diseases (EIDs), an amorphous category of truly new infections and older diseases that have re-emerged in new populations, are a central concern within projects of

the securitization of health. EIDs can provoke both “hysteria” and more measured “urgency” among policymakers, clinicians, and the general public (Farmer, 2001, p. 39), and attract generous levels of funding, research, and attention. One legacy of the 21<sup>st</sup> century history of new and re-emerging infections was the revision, in 2007, of the International Health Regulations. Drafted in response to the SARS outbreak, the IHR were intended to create a global response and reporting system for future outbreaks. One component of this, the responsibility of states to report and share information about disease outbreaks, was perceived by some (Heymann, 2006) to pose a potential challenge to sovereignty for some states, though Davies (2012) argues that this has not ultimately discouraged states from complying with the IHR reporting requirements. Shifting paradigms of biopreparedness and biosecurity (Lakoff, 2008) have strongly influenced international relations, concepts of national security, and notions of risk. Wald (2008) notes that outbreak narratives often rely upon conceptualizations of threatening diseases as being linked to foreigners, in a way that is often racialized and gendered; this figure of the suspicious, diseased immigrant features heavily in many of the discourses of health and security that shape migration policies, anti-terrorism, and foreign policy.

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During the same period of time in which these two biopolitical orders of global health took shape, outbreaks of Ebola virus disease occurred on an approximately annual basis in central Africa, none of which comprised more than a few hundred total cases or lasted for more than three months (see table on p. 15). Outbreaks were treated as acute crises of intense concern, but in comparison with “flagship” diseases like HIV/AIDS or influenza, Ebola was not considered to be a threat on a larger scale.

*Table 1: Major 21<sup>st</sup> Century Outbreaks of Ebola Virus Disease*

<b>Year</b>	<b>Location</b>	<b>Cases</b>	<b>Deaths</b>
2001	Uganda	425	224
2002	Gabon	65	53
	Rep. of Congo	57	43
2003	Rep. of Congo (x2)	143	128
		35	29
2004	Sudan	17	7
2007	DRC	264	187
2008	Uganda	149	37
2009	DRC	32	15
2012	Uganda	11	4
	DRC	36	13
2013	Uganda	6	3
2014	DRC	66	49
ongoing	Guinea, Sierra Leone, and Liberia	27,181	11,162

Source: WHO Ebola Situation Report – 3 June 2015

Ebola did not fit neatly into the categories that were given precedence in global health. It did not meet the criteria for inclusion onto most major development agendas; its global disease burden was so small, and research costs so high, that any funding that might be directed toward it would surely not be cost-effective, and since it emerged sporadically and unpredictably, it would be extremely difficult to demonstrate the efficacy of Ebola prevention or treatment projects to funders. Ebola would make a very poor bioweapon, since it spreads only through direct, intimate contact with the infected, and hence was largely ignored by state security apparatuses involved in biological research. And it did not have the potential global impact that other emerging threats, such as avian influenza and antibiotic resistant bacteria, presented. Ebola never disappeared, but during the “golden age” of global health, it remained a peripheral concern in comparison with the problems that were perceived to be at the center of the projects of development and security in global health.

From their inception, the Millennium Development Goals were designed as benchmarks to be achieved by the year 2015, and the post-2015 agenda for global development has undergone intense discussion in the years leading up to the MDG deadline (“Post 2015 process,” n.d.). The United Nations will announce its vision for the tentatively named Sustainable Development Goals in September, 2015 (“United Nations Summit to adopt the post-2015 development agenda,” n.d.). Ebola’s emergence in West Africa in 2014 occurred at a moment of transition in global health—a rupture concurrent with and, in some ways, disruptive to a planned opening and rearrangement of official priorities. Its transformation from localized (even neglected, according to some classifications) tropical disease into a global threat drew renewed international attention to the geopolitical and geoeconomic consequences that emerging infections can have and the multiple, interconnected, structures and processes that shape the problems of global health and responses to them.

### **III –Representing Ebola: Heroes, victims, martyrs, monsters**

Understanding Ebola requires consideration of political, social, and institutional structures across many scales, but it begins with the human body. The vulnerabilities and machinations of the body are of central concern in discourses about the disease; the infected body is presented as an object of fear, mystery, and disgust, but also of pity, compassion, and care. Responses to the epidemic have been aimed at controlling threatening bodies in some cases, at caring for suffering bodies in others, and often at doing some combination of the two at once. The representations of Ebola as distant but terrifying that Richard Preston and other science journalists popularized in the mid-1990s were revived with a new urgency, as the horrific but localized disease became an integral part of discourses about infectious disease as a global security threat. At the same time, Ebola was presented as a humanitarian crisis; the scale of human suffering and breadth of the potential political and economic fallout provoked discussions of global responsibility and blame for the outbreak.

The most prominent descriptions of Ebola in news media and other public discourse amplified elements of fear (of both pathogens and people) and disgust that are embedded in conventional representations of the disease. The human body infected with the virus is suggested to be almost other-than-human: it is uncontrollable, secreting deadly liquids until it seems that it might dissolve entirely, and impervious to the arsenal of chemicals that keep other, less virulent diseases, in check. Though clinically inaccurate, the language of “liquefying” or “melting” organs is viscerally terrifying and portrays the progression of the disease—through an individual body, among communities, or across international boundaries—as rapid and uncontrollable. The intensity of physical and psychosocial suffering that EVD inflicts is unquestionably extreme; “Ebola,” according to one survivor, “is like a disease from another planet” (Van Cutsem, 2015).

But representations of the disease that focus on its most extreme and alien qualities ultimately dehumanize and stigmatize those who are infected with, or otherwise affected by, Ebola.

Disgust, as it operates in political contexts, “expresses a universal human discomfort with bodily reality, but then uses that discomfort to target and subordinate vulnerable minorities” (Nussbaum, 2010, p. 10). In the context of her argument regarding discourses about homosexuality, Nussbaum illustrates the ways in which opponents of gay rights portrayed homosexuality not only as immoral, but as physically disgusting and unsanitary. The language of public health lent authority and credibility to characterizations of people or groups as potentially dangerous and in need of reform. Depictions of lifestyles and activities as “unsanitary” or “unhygienic” suggest ignorance and incompetence as well. This politics of disgust reduces people to bodies and behaviors, decontextualizing them and eroding their status as autonomous, rights-bearing human beings. Calain (2013, p. 79) notes that humanitarian visual imagery typically depicts “‘suffering bodies’ instead of ‘suffering persons’...anonymous, speechless, ahistorical or generic stereotypes of victims.” Many of the familiar visual tropes of medical humanitarianism that Calain critiques are ubiquitous in the photographic documentation of the Ebola epidemic: passive, dark-skinned victims of a deadly disease, predominantly white humanitarians dispensing care and aid, a dirty and decaying built environment, and rudimentary medical equipment. Sontag (1990, p. 111) claims that “AIDS, like cancer, does not allow romanticizing or sentimentalizing, perhaps because its association with death is too powerful.” While AIDS is still far from being a “romanticized” illness, its reputation has been tempered somewhat since the 1980s, as effective treatments (though no outright cure) for HIV infection have become more and more widely available. In contrast, there are few, if any, known illnesses more closely linked to death than Ebola virus disease. Its brief (in comparison to HIV)

incubation period, rapid onset, brutal symptoms, and very high case fatality rate make it nearly synonymous with a quick, horrible death. This reputation was well-established before Ebola's emergence in West Africa, and many discourses about the epidemic in 2014 have further reinforced this understanding of the disease. The extremely high case fatality rate, along with gruesome and sometimes inaccurate descriptions of symptoms, contributes to an image of Ebola as a kind of living death. Discourses of disgust related to Ebola involve not only detailed and often sensationalized descriptions of the Ebola-infected body, but also a generalized disgust with behaviors and practices that are perceived as unsanitary and primitive, and through representations of pathologized relationships between humans and nature—and especially between humans and animals.

Nussbaum contrasts the politics of disgust with a politics of humanity, which is predicated on “a serious and sympathetic attempt to imagine what interests they are pursuing” (p. 50), their individual histories, responsibilities, desires, and intentions. In order to grant full respect and dignity to human beings otherwise marked for exclusion or persecution through discourses of disgust, it is necessary to recognize their capacity for affect and sociality and the circumstances of their life-courses. The politics of humanity promotes a relational understanding of individual existences: instead of generic types, human beings are recognized as unique and possessed of agency and empathy. During the 2014 epidemic, alternative representations of Ebola victims as more than doomed, dangerous vectors of disease emerged, and helped to restore a degree of humanity to those who are affected by the disease. These depictions highlight the fact that Ebola is often spread through practices of care, and contest prevailing assumptions about the survivability of the disease and the range of symptoms it produces. By disrupting the elements of

fear and disgust associated with Ebola, these counter-narratives of care and relationality offer both humanity and hope.

***“The Hot Zone” revisited: The mythology of epidemic Ebola***

Although Ebola became much more visible in mid-2014, the disease had already occupied a position of intense fear and fascination in the public consciousness for decades. Richard Preston’s (1994) best-selling book *The Hot Zone* and its 1995 film adaptation, *Outbreak*, presented a vision of Ebola that was reinforced by representations of Ebola in the news media, and that continues to resonate today. Joffe and Haarhoff (2002, p. 962), in a content analysis of British newspaper coverage of the 1995-96 outbreak in the city of Kikwit in the Democratic Republic of the Congo, identify three elements that were persistently employed to evoke fear: “speculation concerning the potential globalization of Ebola, ... explicit mention of Ebola being terrifying and horrific, and... comparisons between AIDS and Ebola.” All of these were strongly represented in *The Hot Zone*, and continue to pervade discursive constructions of Ebola as a disease of worst-case scenarios, perhaps the most monstrous of the novel pathogens involved in the late 20<sup>th</sup> century resurgence of infectious disease. Its special horror stemmed in part from its alarmingly high case fatality rate, often reported without qualification as 90%, and its excruciating symptoms, but its zoonotic etiology and geographical origins also contributed to the exoticism and disgust that surrounded the disease. Popular understandings of Ebola were of a nightmare illness characterized by liquefying organs and heavy bleeding from every orifice of the body—a horrifying way to die, as though the body was dissolving from the inside out. Media coverage of the Kikwit outbreak reinforced a narrative in which “Ebola always comes from elsewhere,... is *always* paired with ‘killer’ or ‘deadly’, and is almost always accompanied by descriptions of liquefying organs and profuse bleeding” (Washer, 2004, p. 2563; emphasis in

original). Ebola has frequently been compared to the literally extraterrestrial pathogen from Michael Crichton's science-fiction classic *The Andromeda Strain* (1969) in both scientific (Johnson, 1979) and popular sources ("The Scariest Virus," n.d.).

The context of the HIV/AIDS pandemic implicitly, and sometimes explicitly, contributes to the urgency and vividness of Preston's descriptions of Ebola. Ebola's geographic origins in Central Africa reinforce its association with HIV, and the progression of HIV's global spread provides a template for the catastrophic potential of emerging infectious disease. Wald (2008) notes that the map that Preston includes in the front matter of *The Hot Zone* is bisected by the so-called "AIDS highway," a choice which foregrounds the region's historical role in the emergence of HIV. *The Hot Zone* was formative for many readers' understanding of Ebola, as an exotic new disease in and of itself, but also as a potential successor to HIV: a uniquely virulent African virus, transferred to humans by nonhuman primates, with the potential to spread to the Global North by way of cosmopolitan human carriers. Though it is not his central focus, Preston draws frequent connections and comparisons between HIV and the Ebola and Marburg viruses; his account of their effects "reads like a description of the ravages of HIV on fast forward," suggesting the "nightmare scenario...[of] a virus with the traits of the hemorrhagic fevers and the scope of HIV" (Wald, 2008, pp. 34-35). In the early 1990s, the available treatments for AIDS were not particularly effective, and it was functionally a fatal illness. The reimagining of AIDS as a chronic, rather than terminal, condition would not begin until the introduction of highly active antiretroviral therapy (HAART) in 1995 began to demonstrate that HIV infection could be survivable, and it was possible for people who were HIV-positive to lead relatively normal lives (Looney, Ma, & Johns, 2015). A certain callousness and fatalism colors Preston's references to the AIDS pandemic; he remarks that a Kenyan woman working as a prostitute who was involved

with a case of Marburg disease was “lost in the warrens of Mombasa, and by now she has probably died of AIDS” (Preston, 1994, 10). Comparing this woman to an animal, and making somewhat cavalier assumptions about her death, Preston reduces and dehumanizes her—a mode of representation that is also notable in his descriptions of victims of the Ebola and Marburg viruses in later chapters.

Zerner (2003, p. 252) discusses Preston’s “obsessive” attention to “the surface of human skin and the possibilities of its rupture” in an early scene, and the integrity (or lack thereof) of the human body is of central concern throughout the book. Throughout the book, the language that Preston uses to describe the pathophysiology of Ebola and Marburg seems to be calibrated for maximum disgust, horror, and dehumanization. Neurological damages in the late stages of the disease produce “depersonalization,” and after death, “the internal organs, having been dead or partially dead for days, have already begun to dissolve” (p. 75). In a very literal sense, Preston describes Ebola as an agent of living death, and its sufferers as no longer quite fully human. Preston describes the physiological symptoms of hemorrhagic fevers in exquisite detail, especially the violent release of various infected fluids from the body. In a typical passage, Preston describes Charles Monet’s collapse in a Nairobi hospital:

The human virus bomb explodes....He leans over, head on his knees, and brings up an incredible quantity of blood from his stomach and spills it onto the floor. The only sound is a choking in his throat as he continues to vomit while unconscious. Then comes a sound like a bedsheet being torn in half, which is the sound of his bowels opening and venting blood from the anus. The blood is mixed with intestinal lining. He has sloughed his gut. (p. 16-17)

Lest the reader lose sight of where this gruesome sequence takes place, Preston notes that as Monet’s liquefied viscera pour onto the floor, “the clear, strong, ancient light of East Africa pours through a row of windows” (16). The “ancient light” marks the world outside the hospital (and the virus that Monet has brought into it) as primordial and powerful, older and more

permanent than human civilization. Preston repeatedly refers to Ebola as a “slate wiper,” a virus so deadly that a pandemic might have the capability of obliterating humanity entirely, and often depicts it in ways that grant it a kind of malevolent agency—as a parasite or a predator, or, on a larger scale, as an instrument of retribution for the ecological insults of human civilization. Like the physical landscapes of Africa, Preston represents these African viruses as almost mystically pure, ancient, and powerful.

*The Hot Zone* is as concerned with the places where killer viruses originate and spread to as it is with the people they infect. The book’s “African gothic” (Zerner, 2003, p. 252) rendering of the forests that harbor the virus employs many familiar stereotypes of Africa as dark, primordial, mysterious, exotic, and threatening. Crucially, though, the majority of the book focuses not on the history and impact of the virus in Africa, but on the 1989 outbreak in the United States of a novel strain of Ebola (named Ebola Reston for the Virginia town where it was identified) among laboratory monkeys—the first victims of Ebola on American soil. While four Americans were found to be seropositive for Ebola Reston, none displayed any symptoms of EVD. The only casualties were green monkeys that had been imported from the Philippines, whose simian bodies act as stand-ins for the hypothetical victims of an outbreak of strain of Ebola that is pathogenic in humans. Ultimately, Preston’s primary concern is not with Ebola in general, but with the idea of a transnational outbreak that would bring Ebola (or something like it) to the United States and other countries of the Global North. The story that Preston begins his book with concerns a case of Marburg disease and takes place in central Africa, but even here he chooses to focus on a French expatriate rather than an African’s experience of the disease. The subject of his book, then, is not so much Ebola itself, but the transfer of the distinctively African disease to white Westerners, both within and outside of Africa.

The storyline of *The Hot Zone* mirrors Wald's model of the outbreak narrative: a foreign pathogen is brought into a community in the body of an immigrant (albeit in this case a non-human primate); it spreads quickly and lethally through a population; it is eventually identified and contained; the outbreak is extinguished; and ordinary life can resume for the survivors. The book is about more than isolated outbreaks, however; its overall message is a warning about the potential for the emergence of a new and deadly disease on a much larger scale, which would overwhelm society's ability to contain it, and have the potential to kill a large percentage of a population and ultimately rewrite human history. Ebola, the so-called slate-wiper, is the paradigmatic pathogen in this hypothetical scenario; epidemic Ebola, and especially an epidemic on American soil, is a mythology of world-changing destruction.

### ***Ebola's re-emergence through fear and disgust***

In early October 2014, Todd Kincannon, a former leader of the Republican Party in South Carolina, proposed via Twitter that the appropriate response to a positive Ebola test was "immediate humane execution" (Rothkopf, 2014). While this was by no means a mainstream opinion, the climate of fear, disgust, and misunderstanding surrounding Ebola made it possible for a public figure to broadcast this repulsive suggestion. In fact, Kincannon's comment simply took to its logical extreme the perception that infection with the virus led inevitably to an excruciating death, and hence that anyone carrying the virus should be viewed as a hopeless—but potentially dangerous—victim of the disease. In this understanding of Ebola, "incurable" is taken to be essentially synonymous with "unsurvivable," and infection with the virus is interpreted as certain death. Combined with the nightmarish symptoms of the disease, the assumption that Ebola patients have little to no chance of surviving the disease renders them less than fully human, and marks them as lives to be sacrificed rather than saved.

Much of the mainstream news coverage of the West African epidemic of EVD has been almost Prestonesque in its descriptions of the virus' effects on the body. The virus was described as "body-melting" ("The Andromeda Strain - Scientist who discovered Ebola virus says 'We're running out of time'," n.d.), producing "liquefied tissue" and uncontrollable bleeding throughout the body ("How Ebola Kills," n.d.). "Ebola is notorious," according to a *Huffington Post* article introducing its readers to the signs and symptoms of the disease, for causing "bleeding from the eyes and ears" ("What Actually Happens When A Person Is Infected With The Ebola Virus," n.d.). A press release from the Indiana state health department stated simply that, "The Ebola virus is marked by severe bleeding, organ failure, and in many cases, death" (Associated Press, 2014); a July headline from the *Mirror* neatly summarized this commonly understood progression of the disease: "Ebola virus symptoms start with sore throat before bleeding eyes, ears, and brain then deadly organ failure" (Griffiths & Mountford, 2014). Bleeding aside, Ebola victims also lose control of the contents of their bowels and their stomachs—the virus itself robs them of a degree of control over their bodies, and their lives seem to literally drain out of them as the virus runs its course. The representation of a body verging on complete dissolution amplifies Ebola's fearsomeness, and places it completely outside of the experience of the vast majority of audiences in the Global North. A disease that is so alien and so extreme fosters less empathy with its sufferers than those that are more easily imaginable as lived experiences. As in Preston's world, Ebola was frequently been discursively linked to HIV/AIDS, through their intertwining histories, geographies, and politics. As the epidemic drew increasing international attention, it was frequently compared to AIDS, and sometimes the question of whether Ebola could become "the next AIDS" was explored explicitly (Rettner, n.d.).

A persistent disconnect between the medical realities of Ebola and its discursive construction as an otherworldly super-virus perpetuates the culture of fear surrounding it. Misrepresentations or exaggerations of the pathophysiology of the disease, such as suggestions that asymptomatic carriers can transmit the virus to others, highlight gaps in the established clinical knowledge about the disease, but also contribute to intense and unfounded fears about its potential to spread in high-income countries with robust healthcare systems. In a *Fox & Friends* interview in October 2014, anchorwoman Elisabeth Hasselbeck interrogated Dalilah Restrepo, an infectious disease specialist, about the threat of the disease in the United States:

HASSELBECK: When we're talking about Ebola, how contagious is it in your mind? You have to be in close contact, but now it's here in the United States—the conversation's ramped up.

RESTREPO: So, Ebola is not as contagious—it's a very infectious virus, but it's not as contagious. You can't catch Ebola from food, from talking to someone, from coughing—you really have to have contact with bodily fluids, so that puts a little bit of extra barrier. The other issue is that the infectious time of it is when you develop symptoms, so we're fortunate to at least have that....The minute you develop a fever, that's when the infectious part begins, so [contacts of Thomas Eric Duncan, the first Ebola patient diagnosed in the US] will have to be monitored for 21 days during the period of incubation.

H: What about the people who were on the plane with him, though? I mean, no follow-up? Just to be safe? Like, better to be safe than sorry? No 8-10 day follow-up with anyone who was on that plane? That's close enough contact for some.

R: He was asymptomatic during the plane ride, so there really is no risk during that plane ride this time, but there should be, obviously, heightened caution, because you can't get on a commercial plane with a fever coming from an endemic area.

....

H: You have a very calm tone, and I think it must come by nature with what you do professionally, doctor, but I think the rest of us are saying, wait a minute, there's a lot of panic when it comes to flu, to lice, you know, we're—as a parent, I'm thinking, there should be a little bit of a justification for worry here. Am I wrong?

R: The viruses behave a little bit different, and flu virus is something that's contagious through the air, through droplets, it's a little bit easier. This virus adds another layer because it requires bodily fluids—

H: But it's here.

R: It is here, but we're not in the same infrastructure as other areas where this has taken off.

(*Fox & Friends*, 30 September 2014)

Hasselbeck and Restrepo's very different baseline assumptions about Ebola, and about infectious disease in general, result in a conversation in which very little communication actually takes place. A point of confusion in technical terminology contributes to the dysfunction in this exchange: while the disease is extremely *infectious*, it is not highly *contagious*—that is, the likelihood of person-to-person transmission from casual contact is extremely low, but the amount of viral matter required to cause infection is extremely small (CITE). Beyond lacking a shared vocabulary, Hasselbeck and Restrepo conceptualize Ebola in fundamentally different terms, and attempt to have a conversation about two different things: Restrepo is describing Ebola virus disease, but Hasselbeck is concerned with Ebola as a discourse, constantly evolving and open to contestation.

Mansfield (2008) argues for a conceptualization of “health as a nature-society question,” and the relationship between humans and nature (or, rather, between humans and *a* nature of a particular kind) features heavily in descriptions of Ebola as something foreign, deadly, uncontrolled, and disgusting. The “viral forest” (Zerner, 2003) where the virus lurks is a mysterious, primordial, threatening place, and the disease that emerges from it is understood to be enigmatic, ancient, and powerful. The Ebola virus is closely linked to this exotic and untamed forest, but it is also a mobile, cosmopolitan pathogen, spreading quickly through the communities it comes in contact with; epidemic Ebola requires mobility and exchange between

wilderness and metropolis. The “nature-society question” is also at issue at the scale of the human body. The materials through which the Ebola virus is transmitted—blood, vomit, feces, semen, sweat, urine—remind us of the often messy realities of the human body: its “fluids, its excreta, its bloodiness” produce discomfort because “most human beings are not fully comfortable about having an animal body” (Nussbaum, 2010, p. 5). There is an intimacy to the bodily fluids that transmit Ebola; an MSF clinician in Sierra Leone attributed the deep fear of Ebola to “something about the way it is emitted—through the blood, sweat, and tears of human beings” (Médecins Sans Frontières, 2015). The involvement of the eyes in Ebola infection and transmission is a mark of distinction that elicits particular discomfort. Burst blood vessels can turn the whites of the eyes bright red and even produce ocular bleeding, one of the most distinctive signs of Ebola. Vision problems and blindness are some of the most serious known sequelae of EVD, and the virus was discovered inside the eye of a US physician who was thought to have fully recovered from EVD, Dr. Ian Crozier. “It like an assault,” Crozier said of the lingering virus in his eye, “it was so personal” (Grady, 2015).

The relationships between human and other animal bodies also play a crucial role in the cultivation of disgust in many narratives of Ebola’s emergence and spread. McGovern (2014) identifies a politics of disgust surrounding the depiction of bushmeat as the ultimate source of the Ebola epidemic. The term “bushmeat” in and of itself carries connotations of savagery and exoticism; in other contexts, the meat of undomesticated animals might be referred to instead as “wild game.” Despite the fact that the origin of the epidemic has not been conclusively linked to bushmeat, and that human-animal transmission was likely involved only in the index case, Ebola’s zoonotic origins are a key element in discourses that frame it as strange and exotic. This pathologized contact between humans and animals suggests primitive, premodern ways of living,

and is also one of many facets of Ebola discourses that implicitly incorporate issues of race. In August, *Newsweek* featured a heavily criticized cover story describing bushmeat as “Ebola’s back door to America,” using an image of a chimpanzee to accompany the headline (“Smuggled Bushmeat Is Ebola’s Back Door to America,” 2014). *The Onion*, an American satirical newspaper, ran the headline: “Experts: Ebola vaccine at least 50 white people away” (“Experts,” 2014). An illustration by the Portuguese cartoonist André Carrilho repeated this grim observation about the relative values placed on white and black lives in media coverage of the epidemic: amid rows of beds of dark-skinned bodies, a flock of reporters cluster around a single white patient (Kleeman, 2014; see below). The image critiques the disparities in representation between the thousands of Africans afflicted with Ebola and the handful of white aid workers who contracted the disease, an inequality that had an impact on access to care and, ultimately, chances of survival as much as it did on media attention.





Images of the Ebola crisis form a crucial part of dehumanizing discourses and contribute to the production of social distance between the people directly involved and onlookers in the Global North. Ebola is visually represented through maps (which will be discussed further in Chapter IV), colorized electron micrographs of the virus itself, and photographs. Many of the most iconic images of Ebola depict human bodies, but not human faces: aid workers ensconced in space suits, masked healthcare workers,

and corpses either wrapped in plastic or facing away from the camera. Even the *Time* magazine cover (left) that named “the Ebola fighters” as its Person(s) of the Year depicted a face that was mostly concealed within the hood, goggles, and respirator of full PPE (“Person of the Year,” 2014). There is perhaps no more potent signifier of humanity than the human face; the facelessness of the people in these images strips them of individual identity and, in some sense, their equal status as human beings. These dehumanizing images can then be used to reinforce stereotypical narratives about Africa, Africans, and the medical humanitarians who respond to this type of crisis.

The three images that follow are taken from a September *Daily Mail* article, and depict the collection of the corpse of a man who was suspected to have died of Ebola on the streets of

Monrovia (Robinson, 2014). Taken together, the images and the context in which they were presented convey a deep indifference to the lives and suffering of the communities most severely affected by Ebola.



This image, of the man's body lying in the street just as the health workers who will disinfect and remove it arrive in the white truck visible on the left side of the frame. In this shot, his body is startlingly reminiscent of a supine Christ on the cross, from his outstretched wrists and crossed ankles, to his plaintively upturned chin, to his attire and visible ribcage. The photo was published with the caption: "His corpse was left on a dirt road in the middle of the Liberian capital with pedestrians ignoring the body as they waked [sic] past"—but this is almost certainly a misreading of the image. The man in the foreground's gaze is directed away from the body, to be sure, but his gloved hand, notebook, and medical scrubs indicate that he is a healthcare worker, likely walking toward the recently arrived corpse-disposal team. The onlookers in the

background keep their distance from the unfolding scene, cautious but attentive. Suggesting that the body was “ignored” by Monrovia indicates a level of callousness and social breakdown in the extreme, and contributes to the discourses that alienate American and European audiences and reinforce stereotypes of Africans as passive, oblivious, and morally suspect.



Here, a health worker, anonymous and sheathed in plastic, sprays disinfectant on the man’s body and the ground he lies on. The “crowd [that] surrounds the gruesome scene,” as the photo’s caption describes them, are literally faceless as well: the way the photo is cropped decapitates them. While in the previous image, the people on the street are suggested to be indifferent, here their attention is cast as morbid and unseemly. Their facial expressions might potential provide some insight into their reaction to what they are seeing, but from the neck down, they are ambiguous.



Finally, a pair of health workers places the rigid corpse in a body bag, a plastic sheath even more impersonal than the protective equipment that they themselves wear. Again, the dead man's face is obscured, this time by one of the health workers' legs, but the faces of some of the onlookers are visible, albeit out of focus. They appear pensive and wary; one woman covers her mouth with her hand, perhaps out of horror or grief. It is unclear if the Monroviaans in the image are known to each other or to the dead man. Their relationships and their context—the social space in which the events depicted are taking place—are invisible.

Living Ebola patients are also often portrayed with their backs to the camera, prone and emaciated. They are shown as diseased bodies rather than suffering human beings. Interestingly, there are no photographs of the interiors of the confirmed Ebola wards within functioning ETUs; anything that enters those spaces is either incinerated or thoroughly doused with a disinfectant solution. The infected people that are represented in photographs, then, are those who were not able to secure a bed in a clean, modern ETU. The image below, of a sick child in a makeshift

ETU constructed in a Liberian primary school, is typical of this genre of Ebola imagery (Newton, 2014).



***Alternatives: Re-humanizing narratives of hope and care***

Representations of Ebola did not all reproduce or extend its associations with disgust, fear, and mystery. An alternative discourse characterizing Ebola as preventable, treatable, and survivable, and depicting those affected by it as fully realized human beings, challenged the perception of Ebola as an alien doomsday virus. Ebola is not generally associated with behaviors perceived to be deviant or dangerous and does not tend to concentrate within socially marginalized populations within the communities it affects. The bodily disgust that Ebola evokes is not inherently linked to a moral disgust in the way that the two are conflated within the discourses on homosexual behavior that Nussbaum (2010) analyzes. Rather, Ebola is spread through practices of care, and the groups most severely affected have been healthcare workers,

healers, pregnant women, children, and nonprofessional caregivers, who are often female family members of the sick: mothers, sisters, daughters, grandmothers, aunts, and cousins. The universal need for care—Tronto's (1992) "life-sustaining web"—humanizes both caregivers and the cared-for, situating them within their communities and societies. The way that distant, suffering others are represented is inherently political (Sontag, 2003), and has been deployed in ways that promote relational, care-ful understandings of Ebola within some critical counter-discourses during the current epidemic.

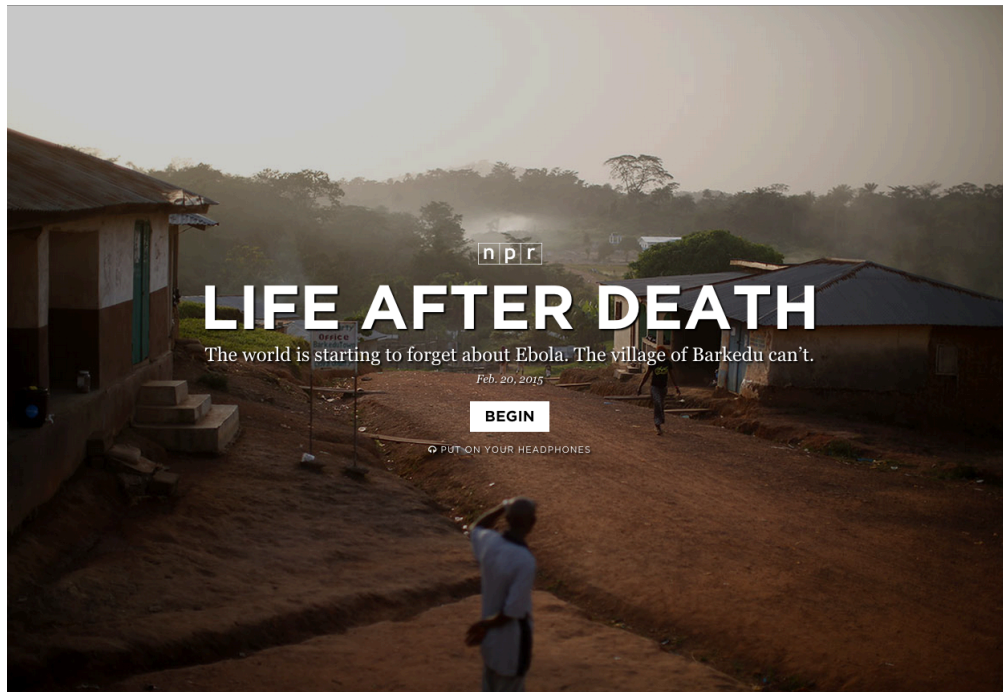
Although the Western media heavily trafficked in discourses of fear in its coverage of Ebola, there was also almost immediate pushback from other journalists against unrealistic, sensationalized portrayals of Ebola and the risks it posed in the U.S. The *New York Times* (Revkin, 2014), *NPR* (Greenfieldboyce, 2014), and other mainstays of the so-called liberal media portrayed Ebola panic as at least as destructive as the Ebola virus. The most striking fissure in the traditional, fear-laden Ebola narrative, however, came from the Fox News network, which is widely considered to be the heart of American right-wing media, and was one of the key purveyors of discourses of fear during the epidemic. Shepard Smith, a television news anchor for the network, gave an on-air monologue to provide "the facts on Ebola":

"Today, you should have no concerns about Ebola—none, I promise. Unless a medical professional has contacted you personally and told you of some sort of possible exposure, fear not. Do not listen to the hysterical voices on the radio and the television or read the fear-provoking words online. The people who say and write hysterical things are being very irresponsible. Here are the facts..." (Edwards, 2014)

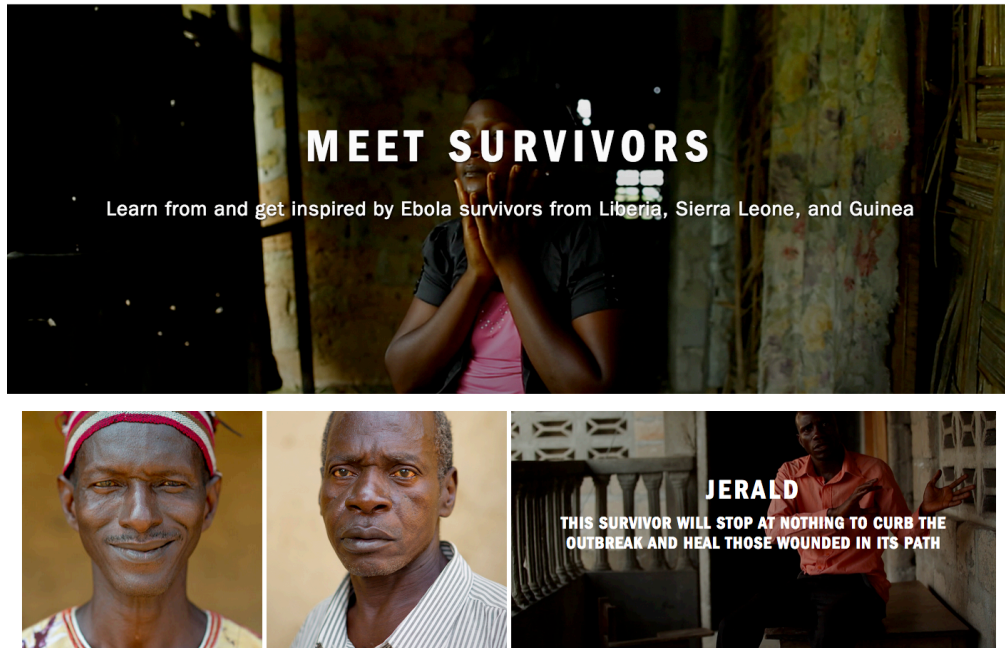
Smith's very public indictment was one of the most visible critiques of the tenor of many of his peers' discussions of Ebola. The American media's response to Ebola during the fall of 2014 did indeed frequently misrepresent the risks that it posed to audiences in the Global North. Narratives that exaggerated or spread doubts about the threat of Ebola, and the critical responses

to them, however, share a preoccupation with the idea of an outbreak on American soil. Like *The Hot Zone* before them, these discourses downplay or ignore the damage and suffering inflicted by outbreaks of the disease in Africa by focusing attention on real or imagined risks outside of Africa.

Some counterdiscourses provided resistance to dominant perceptions of Ebola by recentering various aspects of the epidemic in West Africa rather than privileging the consequences of Ebola outside the HTCs. The sheer scale of the current epidemic has produced a population of thousands of Ebola survivors. Previously, those who contracted the disease and survived were largely invisible from Ebola narratives, and within humanitarian responses to outbreaks, Ebola survivors were of less immediate concern than potential victims. Survivors provided evidence that Ebola infection was not necessarily a death sentence. Their immunity to the virus after recovery made them ideal caregivers in Ebola wards; many also donated blood to be used in experimental therapies. Many of them had endured the loss of family members and other loved ones, in addition to the suffering inflicted by their own illness. These characteristics made the Ebola survivor a uniquely sympathetic figure, almost superhuman in their moral fortitude and physical capacity. Survivor stories published by the *New York Times*, *NPR*, the *New Yorker* and other major news outlets attached human faces and life stories to the epidemic. They told the stories of individuals, or of individual places, as in the *NPR* interactive case study of the Liberian village Barkedu (“Life After Death,” n.d.; see p. 37). Rich visual imagery, accounts of the epidemic in the voices of Liberians themselves, and a detailed analysis of the specificities of the impact of Ebola in a single place restores nuance and individuality to populations that are otherwise represented as statistics or decontextualized, generic suffering bodies.



The #ISurvivedEbola project, led by the Paul G. Allen Foundation and UNICEF, catalogues individual survivor stories (“#ISurvivedEbola,” n.d.; see below). In this project, Ebola survivors are treated as individuals with names, faces, life histories, and distinct goals, hopes, and desires. Many are actively involved in their communities with advocacy or care for Ebola patients; they are shown to have an agency and capacity for empathy that are elided from representations of Ebola patients and caregivers as faceless, inscrutable, interchangeable bodies.



Less sensationalized, more clinical ways of describing the pathophysiology of EVD challenge the elements of bodily disgust in prevailing representations of Ebola. Many of the more outrageous claims about Ebola (e.g. liquefying organs, bodies drained of blood) have been routinely debunked in mainstream news sources, and some sources have gone further, and characterized Ebola as a treatable, preventable infectious disease. In the *London Review of Books*, Paul Farmer argued that hypovolemic shock—a sudden drop in blood pressure that is often the proximate cause of Ebola deaths—is not necessarily lethal with intensive oral or IV rehydration, and that “if patients are promptly diagnosed and receive aggressive supportive care...the great majority, as many as 90 per cent, should survive” (Farmer, 2014). Farmer’s contention inverts the “up to 90%” case fatality rate that is so often attached to Ebola, contradicting the perception that those who are infected with the virus should be written off as lost causes. A December news analysis piece in the *New York Times* echoed this sentiment, characterizing Ebola as “shockingly simple to treat” (Gettleman, 2014b). This assessment may

be an exaggeration, but arguments for intense attention to treating and caring for Ebola patients, rather than controlling and isolating them, recognizes their humanity and treats the severity of their illness as vulnerability, rather than simply a threat to others.

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The inequalities of representation that pervaded representations of Ebola reflected and paralleled inequalities of care for—and about—Ebola patients. Perceptions of which affected populations most deserved care and the decisions of how treatments were allocated were both manifestations of the humanitarian politics of life (Fassin, 2007) that determines which lives merit saving. The media focus on American aid workers reinforced the idea that their lives were more highly valued than those of their African patients and colleagues, but also drew attention to the severe inequalities in access to medical care that they were granted on the basis of their citizenship. In the United States, Ebola patients were given intensive supportive care, experimental treatments, and palliative care. In contrast, according to an American volunteer who worked at an ETU in Sierra Leone in the fall of 2014, the only drugs available to treat Ebola patients there were Valium, anti-malarials, and Tylenol: “we didn’t even have the meds to allow these people to die with dignity.” This division, between lives worth saving and those that would be allowed to die, was the product of a complex set of social and political relations; the conditions of chronic poverty, and especially the fragility of infrastructure and healthcare systems in the HTCs, was a central component of this.

#### **IV – Placing Ebola: Beyond the “viral forest”**

“Paul loves Africa,” explained a representative from the Paul Allen Foundation in November 2014, regarding the Foundation’s recent \$100 million donation to the fight against Ebola. Global health and humanitarian relief are not core program areas for the Foundation. “Wherever the Foundation gives,” according to its website, “there is a clear tie to the Allen family story” (“About - PGA Foundations,” n.d.). In the case of the Ebola donation, Mr. Allen’s personal affinity for and travel to the African continent apparently forms the basis of this connection. The comment, beyond providing insight into the Allen Foundation’s decision-making, highlights the fact that Ebola has been framed as a humanitarian crisis with global implications, but also as a fundamentally African one. Many of the inequalities of representation discussed in Chapter III are strongly geographical, but the ways that spaces and places themselves have been constructed and characterized in relation to Ebola similarly reinforce and contribute to discourses of blame and responsibility. The tension between conceptualizations of Ebola as a localized problem versus a global threat reflects an ambivalence not only in the spatial distribution of risk that the epidemic posed, but also about the distribution of responsibility for the conditions that made it possible to begin with. In what follows, I will examine the ways in which the geography of Ebola in West Africa has diverged from prior outbreaks of the disease, and how its geography of risk and blame has transformed the politics of Ebola. Ebola became a geopolitical issue in 2014, and came to be closely integrated into a diverse set of political discourses related to international relations, borders, and domestic electoral politics in the U.S. and beyond.

### *The new geography of Ebola*

One of the first indicators that the outbreak in Guinea in early 2014 would be different than all previous outbreaks was the pattern of its geographical spread. As early as March, MSF warned that the outbreak was “unprecedented” in the spatial diffusion of cases, even before the absolute number of cases reached alarming levels (“Guinea,” n.d.). It was later determined that a Guinean child who had died in December, 2013 was likely the index case of the outbreak, but by the time the Ministry of Health was made aware of the unidentified illness and alerted MSF and the WHO, it had already spread to at least four districts in southern Guinea. The disease had been previously unknown in the region, but its spatiality, more than its location, initially marked it as being exceptionally concerning. Earlier outbreaks had been confined to isolated, usually rural,<sup>1</sup> communities that were closely connected to the “viral forests” (Zerner, 2005) where they had ostensibly originated. Even at the very beginning of the outbreak in Guinea, its multisited geography compounded the challenge of containing its spread. The spatial epidemiology of Ebola in 2014 was certainly unique in and of itself, but the new geographies of Ebola extended far beyond the points on the map where each case was located.

The epidemic combined many simultaneous rural outbreaks, similar to those that had occurred in Central Africa in the past, with outbreaks in dense urban environments that each exceeded the scale of any individual previous outbreak. The spread of the disease via air travel to Nigeria, the United States, and Spain at first seemed to have the potential to be an initial phase of a truly global epidemic, of the sort depicted in the Hollywood film *Contagion* (Soderbergh et al., 2011), but the spread of the virus outside of the HTCs was quickly contained, which made the continued transmission within them seem all the more extreme. An epidemiologically

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<sup>1</sup> Though n.b. that the highly publicized 1995 outbreak occurred in Kikwit, a city of several hundred thousand in what is now the Democratic Republic of the Congo.

unconnected outbreak in the DRC during the fall of 2014 also provided a counterpoint to burgeoning epidemic in West Africa. The WHO called the outbreak in the DRC a case of “classic Ebola” that “began in the traditional way,” through infected bushmeat in an isolated, rural community (“WHO | Democratic Republic of Congo,” n.d.). Like prior outbreaks, it did not spread beyond a single community, and was declared to be over within three months of its index case. Existing standards and techniques for the control of Ebola were tailored to this “classic” outbreak form, and made the DRC outbreak relatively simple to contain. The contrast between the two concurrent outbreaks made the exceptional and extreme characteristics of the crisis in West Africa all the more apparent.

In previous outbreaks, Ebola had been predominantly characterized as being intrinsically and quintessentially African—or rather, as being quintessential to an imagined Africa that is impoverished, primitive, and remote. Joffe and Haarhoff (2002, p. 965) identify Ebola’s African-ness as a key element that British newspapers and their readers employ when they describe Ebola as “quite remote...something that’s over there, and not having any relevance to [them].” Within this discourse, Africa is represented as a place both spatially and socially distant from citizens of wealthy nations such as the U.K. During the current epidemic, a focus on elements of West African culture perceived to be catalysts for the spread of Ebola have served to renew and reinforce the social distance between Western audiences and Ebola-afflicted Africans. Foregrounding cultural practices and beliefs that contributed to the spread and persistence of Ebola—such as the washing of bodies before burial, the hiding of possible patients from health authorities, and habitual travel across national borders—shifts blame for the severity of the outbreak onto the communities it most severely afflicted. This social distancing was a common feature of popular media accounts, but also informs the way that the Ebola crisis is described in

official documents. A proposal to restructure the World Bank’s Liberian health systems strengthening project that was drafted in response to the Ebola epidemic identifies “cultural practices and traditional beliefs...[and] poor health care seeking behavior” as the primary factors promoting the spread of the disease. In addition to home care and “customary treatment of dead bodies,” the proposal links the frequent and unmonitored movement of people across poorly secured borders to disease transmission (World Bank, 2014, pp. 9-10). Health systems and mistrust of the government and other institutions are identified only as compounding factors to the “challenging” social and cultural environment. This explanation does recognize that the spread of the disease was facilitated by many different factors, but locates the strongest of these within communities, downplaying or outright ignoring the economic and political conditions across many scales that produced rural poverty and limited access to health care in these areas. Implicating culture in the spread of the disease localizes blame for the suffering and destruction the epidemic has caused, absolving actors in the Global North from responsibility for decades of resource extraction, predatory lending practices, and restrictions placed on the public sector by international financial institutions (which will be discussed further in Chapter V).

The impact of the West African epidemic beyond the spatial distribution of its cases also disrupted the “traditional” geography of Ebola. Although the number of cases outside of Africa ultimately proved to be limited, the new geography of Ebola transformed it into one of global health’s headline issues, and at the same time one of the most urgent geopolitical questions of late 2014. Ebola was frequently juxtaposed with other, more conventional, geopolitical conflicts. A December *New Yorker* (Osnos, 2014) profile of Samantha Power, a key architect of the Obama administration’s policies on humanitarian military intervention, identified “a mutating terrorist threat in Syria and Iraq, an Ebola outbreak that attracts intermittent attention in the

West, a failed peace initiative in Israel, and Russian aggression in Ukraine” as factors shaping the “varied and intractable” national-security interests of the United States. This framing takes for granted the idea that Ebola should be considered under the same rubric as geopolitical conflicts with deep connections to American interests. The United States has something of a “special relationship” with Liberia, to be sure, but the three small West African countries at the center of the Ebola crisis hold no particular strategic or symbolic importance to American politics in the way that states like Iraq, Israel, and Russia do. Echoes of the kind of agency that Preston associated with the Ebola virus conflate it, in these geopolitical discourses, with autocrats and insurgencies rather than predators or supernatural beings.

CNN drew widespread criticism for posing the question, “Is Ebola the ISIS of biological agents?” in a newscast at the height of Ebola panic in the US. *New York* magazine called it “self-parody,” as part of a larger tendency in cable news to link Ebola with ISIS, in increasingly tenuous ways: one CNN anchorwoman hypothesized that members of ISIS might voluntarily infect themselves with Ebola in order to spread the virus in the United States (Coscarelli, 2014). The Nigerian-American novelist Teju Cole satirized the Ebola-ISIS comparison in the *New Yorker*, posing similarly framed questions *ad absurdum*:

“Is Ebola the ISIS of biological agents? Is Ebola the Boko Haram of AIDS? Is Ebola the al-Shabaab of dengue fever?....At first there was, understandably, the suspicion that Ebola was the Hitler of apartheid, but now it has become abundantly clear that Ebola is actually the George W. Bush of being forced to listen to someone’s podcast.” (Cole, 2014)

In a way, though, Ebola *was* the “ISIS of biological agents,” or at least of global health, in American political discourse in the fall of 2014. Ebola and ISIS occupied the same region of the national imagination. Both had seemingly emerged out of nowhere (that is to say, outside of the attention of the American media) during the summer of 2014, in parts of the world with long

histories of colonial and civil violence, poverty, and oppression. Both were depicted as somehow out-of-time: “medieval” was a common descriptor for the so-called Islamic State, and Ebola was often described as ancient or primordial. Both were responsible for a great deal of suffering and death in distant places, and inspired intense fears of their encroachment onto American soil.

In a way, the arrival of Ebola onto American soil was not only the realization of a decades-old, terror-inducing hypothetical scenario, it was interpreted as an entirely different class of phenomenon from the epidemic up to that point. Žižek (2008, p. 10) identifies a “focus on subjective violence—that violence which is enacted by social agents, evil individuals, disciplined repressive apparatuses, [or] fanatical crowds” as a hallmark of contemporary liberalism. The foregrounding of subjective violence, or violence that represents a disruption in the normal or expected order, obscures other forms of violence that are produced by the very systems that subjective violence disrupts. These other forms of violence emerge from “the milieu in which we dwell, ...the air we breathe” (Žižek, 2008, p. 36). Žižek identifies Bill Gates—the “benevolent dictator” (Freschi & Shaikh, 2011), or at least patron saint of sorts, of global health—as a paradigmatic example of “the very agents of the structural violence which creates the conditions for the explosions of subjective violence” (pp. 36-37). Ebola in Africa, while tragic, was in effect a form of systemic violence, produced by conditions of poverty and disorder that were nonetheless considered to be the norm for the geographic imaginary of Africa, as viewed from the Global North. In contrast, Ebola in the United States was an aberration, a form of subjective violence, though the malevolent agent in question was a pathogen rather than a human being. The encroachment of a deadly, disgusting tropical disease in the United States was seen as an invasion or a violation, whereas such diseases seemed more acceptable, even expected, in Sub-Saharan Africa. Another of the key features of liberal capitalist society that

Žižek highlights in *Violence* is the centrality of “*the right not to be harassed*, which is a right to remain at a safe distance from others” (p. 41, emphasis in original). Ebola in the United States violated the spatial and social distance that separated Americans from the suffering, distant others who are the objects of humanitarian projects of saving lives-at-risk.

### ***Borders, fixity, and mobility***

Global health discourses frequently employ a cosmopolitan, humanistic rhetoric, such as the Gates Foundation’s assertion that “every life has equal value” (“Foundation Fact Sheet,” n.d.), that downplays the significance of national identities and citizenships. Claims that “disease knows no borders” (Adefuye, 2014) suggest that globalized commerce and transit create a broad, evenly distributed geographical expansion of risk to infection. Discourses about a borderless, globalized world overlook the extreme inequalities and uneven development that have been hallmarks of neoliberal globalization (Sparke, 2007). In a number of ways, the Ebola crisis has illustrated the continued importance of borders and border policy. The movement across borders in the region where the initial outbreak occurred, the tripoint frontier where the borders of Guinea, Liberia, and Sierra Leone converge, was a catalyzing factor of the epidemic. Discourses of fear drew attention to borders and practices of bordering on a global scale, and border closure was assumed to be a common sense measure for epidemic control within these discourses—despite the fact that public health officials universally argued against travel restrictions and border closings.

The unique characteristics of the frontier region where Ebola initially emerged contributed to the amplification and persistence of the epidemic. Now sometimes referred to as the “Ebola triangle,” the tripoint area where the borders of the three high-transmission countries converge is described as a place of both mobility and fixity, a source of danger due to both its

connections with the rest of West Africa and its lack of integration with central governments and social systems. Its unmonitored borders produce an ungoverned space that has presented serious logistical problems for healthcare workers and humanitarians responding to the Ebola crisis. The difficulties that the borders present are a direct legacy of the colonial era. As Oyewole Tomori, a Nigerian virologist, noted in the BMJ, they “artificially separate people of the same ethnic origin and cultural background into different nationalities, resulting in a high level of movement across borders” (Tomori, 2014). Tellingly, the problematic origins of the borders of West African countries are invisible in most American and European discussions of these borderlands. From a Northern perspective, it is the social and cultural organization of the tripoint region that fails to fit its political boundaries properly, rather than the other way around. While the tripoint area is a place of rapid movement and interconnection for the people who live there, for humanitarian and public health workers it has proven to be frustratingly impermeable and difficult to traverse. While the virus has been highly mobile in the tripoint region, transportation of its victims was hampered by poor road conditions, an absence of public health infrastructure in rural areas, and the lack of cartographic or geospatial knowledge of the region that was available to aid workers—though this last element was quickly addressed by global, humanitarian mapping projects (which will be discussed further in the next section).

Descriptions of the porous national borders and unmonitored movements of people and pathogens echo descriptions of Ebola itself; the virus dissolves boundaries within the body, producing pathogenic fluids that leak uncontrollably from the body, and as these bodies travel across national boundaries unmonitored and uninhibited, they allow it to migrate throughout the region. Guillaume Lachenal notes that in many ways the current Ebola epidemic echoes a 1939 outbreak of trypanosomiasis (“sleeping sickness”) that occurred in the same region; some of the

original Sleeping Sickness Service clinics in Guinea have even been repurposed as Ebola treatment units (Lachenal, 2015). Lachenal argues that the particularities of the border region have created “a bio-political environment producing rubber, diamonds, parasitic diseases, emerging viruses, and war injuries.” The porousness of the borders in the region and the mobility of its inhabitants are two factors that contribute to an overall pathologization of place. “It may be hard, thousands of miles away,” according to a *New York Times* Africa correspondent, “to appreciate just how broken these places are” (Gettleman, 2014a). The representation of the tripoint region as broken and dysfunctional further contributes to discourses that locate blame for the epidemic in the forests of West Africa and ignore the multiscale processes and structures that collectively contributed to it.

Fear, speculation, and exaggeration became so intense in the American news media in the weeks before the 2014 US midterm election that it became commonplace to describe Ebola-panic as an epidemic in and of itself. The narratives of risk and fear engaged with powerful existing discourses about the hopes and fears of the age of globalization (Sparke, 2007). During several different election campaigns, Ebola anxieties became integrated into familiar discourses about undocumented migration and the US-Mexico border, and into discourses of new fears about the rise of the group known as Islamic State, or ISIS. Sometimes, all three were synthesized into a sort of chimera of American nationalist paranoia. On a right-wing radio program, Republican Congressman Duncan Hunter criticized what he saw as the Obama administration’s inadequate commitment to border security:

“You simply have to secure the border and make sure that people we don’t want coming in the country whether they have Ebola or they’re terrorists, name your terrorist organization, they’re coming in through the southern border.” (Knowles, 2014)

The WHO, CDC, and other health authorities have consistently asserted that imposing travel restrictions or closing borders would have far more negative consequences than positive ones, and would be, overall, an ineffective strategy for containing the spread of Ebola. Right-wing pundits in the U.S., perhaps unsurprisingly, saw things differently. Ann Coulter decried the Obama administration's decision to not impose travel restrictions as a “platform for Obama to demonstrate that we are citizens of the world”—that is to say, that it was motivated by ideology and political correctness rather than pragmatism (Coulter, 2014). Coulter's vitriolic rhetoric about Ebola described efforts to control the virus in West Africa as “cuddling victims in their huts” and suggested that allowing travellers from West Africa to enter the United States would inevitably spark a large-scale outbreak in the U.S.

The discourses of fear had consequences beyond the production of absurd political rhetoric in the United States, which took very different forms in different regions of the U.S. As a number of states in the Northeast imposed mandatory quarantines on travelers returning from the HTCs, many others opted to pursue less stringent monitoring and contact tracing measures. Washington's state epidemiologist described this as a distinctly geographical phenomenon during an October town hall meeting in Seattle, contrasting the measured West Coast approach with attitudes on the East that verged on hysteria (Duchin, 2014). A geographical blindness about Africa, coupled with the intense fears that surrounded the representations of Ebola, contributed to the persecution of Africans, or even foreigners who had traveled to any part of the continent, who had no risk of coming into contact with the disease. Two Rwandan students were forced to stay home from their elementary school in New Jersey well past the 21-day incubation period for EVD (Chang, 2014). Despite the fact that the Rwandan children came from a country that is located thousands of miles from the high-transmission countries, and that even if they had been

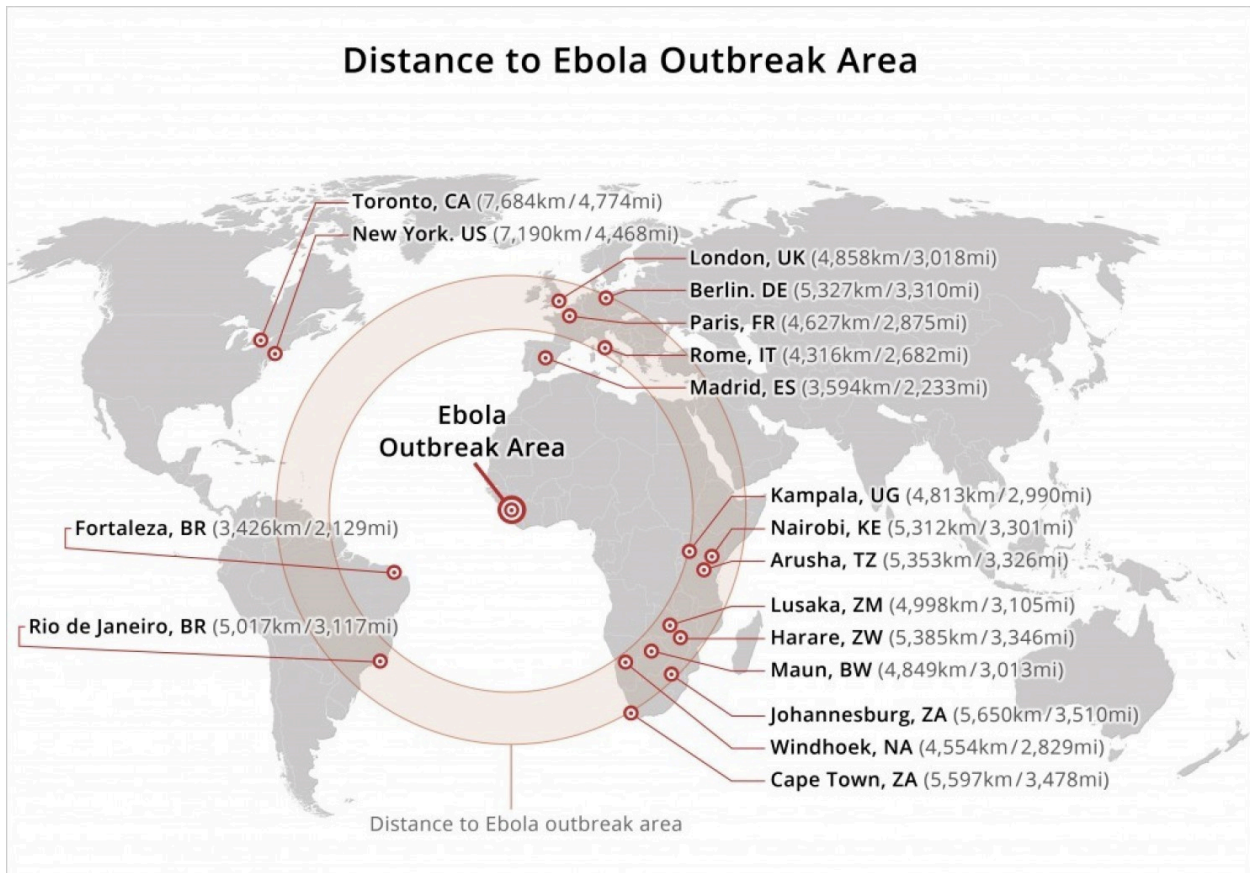
somehow exposed to the virus, they would no longer be at risk of contracting EVD if they showed no signs or symptoms of the disease after the incubation period had ended. As one of the concerned parents from the school saw it, once the Rwandan students agreed to an extended absence from school, “Now we don’t have to worry about anything. . . . We actually know that they’re going to be fine when they come to school. So we have no worries on our shoulders.” The opinions of the Rwandan students’ parents—or, indeed, of the students themselves—were not represented in the news reporting on the controversy. Other similar incidents—tourists cancelling planned trips to Kenya (Paris, 2014), three-week quarantines imposed on schoolteachers returning from trips to South Africa (Associated Press, 2014) and other parts of Africa far from the HTCs—stigmatized individuals who had no risk of being exposed to Ebola, based on a flawed perception of Africa as a single, uniform—and uniformly threatening—place.

### ***Mapping Ebola***

Mapping has been a crucial tool for both managing and visualizing the spread of Ebola, and a key component of discourses that both reinforce and challenge perceptions of social, as well as spatial, distance between Ebola-affected areas and audiences in the Global North. Several maps published in major media outlets were designed not to simply track the disease’s spread, but to highlight the fact that the vast majority of the African continent was Ebola-free and to contest the notion of a distant (and therefore irrelevant) Africa, from the point of view of Europeans and Americans. These mappings of Ebola attempt to contest the perception of Africa as a uniform landscape characterized by disease, poverty, war, and underdevelopment.

The *Washington Post* published a map to accompany a “geography lesson” emphasizing the sheer scale of the continent to resist this one-dimensional view of Africa, and to stress the importance of taking geography into account in considerations of African politics (Dionne &

Seay, 2014). The article is well-intentioned, and raises very valid criticisms of the way Africa is often represented in maps and in discourse, but the map (see below) that was selected as an illustration is perplexing.



The concentric circles surrounding the Ebola “epicenter” certainly do demonstrate the fact that many African cities are as far away, locationally speaking, as urban centers in Europe and South America. It is unclear, however, if Fortaleza and Madrid are to be considered in greater peril than the cities outside of the innermost circles, or why, exactly, it is significant that Berlin and Johannesburg are approximately equidistant from Monrovia. In contrast to globalization discourses in which modern logistics and air travel functionally collapse the space between cities, the world presented in this map is flattened: the distance or proximity between two places

is reduced to their coordinates, erasing social, political, and technological structures that might differentiate their relative levels of risk and vulnerability.

Another map (below), which was widely circulated on social media, also attempted to highlight the fact that the Ebola epidemic was occurring within a small corner of a very large continent (Taylor, 2014). The HTC's are identified by name, but the rest of the continent is simply labeled "No Ebola." There are no political boundaries, no cities, and no physical features, aside from the Great Lakes. All meaningful social and geographic difference is erased, leaving behind an Africa that is a solid, undifferentiated mass, or a blank canvas, onto which the anxieties of outsiders might be projected. The extremely tight framing of the map—there is no empty space between the continent and the edge of the map area—and the lack of any orienting features, like a compass rose or scale, or the inclusion of bordering land masses, further flatten and abstract the imagination of

Africa the map represents. The "No Ebola" Africa is stripped of context, history, and meaning. It also assigns a very narrow spatiality to Ebola. The vast majority of cases were confined to the HTC's, but the political, social, and economic impacts of the disease have been distributed, albeit unevenly, across the continent, and beyond Africa as well.



In response to the “No Ebola” map, Nigerian blogger Nkem Kalu created an analogous map of the United States: “The America without Ebola for Interested Africans” (Kalu, 2014; see below). Using the same color scheme, labeling, and map design, Kalu’s map similarly reduces the U.S. to a blank landmass, distinguished only by the states that have recorded one or more cases of Ebola. When the two maps are compared, Ebola in the United States appears to be much more serious than in West Africa. Guinea, Liberia, and Sierra Leone occupy a small, peripheral area on the map of Africa, but New York and Texas are both quite geographically expansive, and Texas’ position at the center of the map makes it seem particularly alarming as a site of a deadly disease. Both of these maps were presented with some degree of humor or irony, but Kalu’s map asserts a serious critique of American perceptions of Africa, and when it was featured on the widely-read blog allAfrica, it appeared under the headline “It’s Time to Change the Africa Narrative” (allAfrica.com, 2015). The map cleverly subverts the earnest message of the original map and its assumptions about the ignorance of its audience, turning the paranoid American gaze back upon itself.



In another way, cartographic data—or, rather, its absence—was a manifestation of the global inequalities that promote, among other things, the spread of infectious disease. Humanitarian aid workers needed detailed, reliable maps of the areas affected by the epidemic, but the available data for the rural areas of the HTCs was virtually nonexistent. In response to this need, the collaborative mapping project OpenStreetMap began mapping the affected regions to support the Ebola response. Crowdsourced mapping provided a way to directly connect ordinary people—or at least those with a reliable Internet connection and some amount of spare time—to the humanitarian relief work in the HTCs. The Humanitarian OpenStreetMap Team (HOT), at the request of MSF, began the mapping project on March 24, 2014, just one day after the WHO made its first formal statement about the outbreak (“West Africa Ebola Epidemic | Humanitarian OpenStreetMap Team,” n.d.). For the Ebola project, volunteers worldwide coded otherwise unmarked roads, buildings, waterways, and other places, using satellite imagery from Bing and Mapbox, to provide on-the-ground humanitarian aid workers with detailed, accurate maps of the areas in which they were working (“2014 West Africa Ebola Response - OpenStreetMap Wiki,” n.d.). Volunteers are not required to have any cartographic or GIS experience. The mapping work is presented as a series of simple tasks (e.g. marking roads or footpaths that are visible in the imagery that HOT has access to, but is not labeled in cartographic datasets) that are accessible via a web interface. These humanitarian mapping projects provided a way to enroll volunteers from around the world directly into the Ebola response. Participants were able to express care about the Ebola crisis, but they also gained access to a uniquely detailed way of knowing the places affected by Ebola. The kind of close visual reading of the physical territory and lived spaces of the Ebola-affected areas forces an engagement with the landscape of the HTCs that would otherwise be impossible from thousands of miles away.

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HOT describes the work as a collaborative, open-source project to “fill in the gaps” of existing base map data of areas affected by humanitarian emergencies. The “gaps” that projects like HOT’s Ebola mapping attempt to fill in are not only composed of missing data. Empty spaces on maps and the lack of reliable epidemiological and demographic data about these areas are manifestations of the absence of strong, functional state actors in these places. Legacies of colonial-era administration, civil war, exploitative resource extraction, and structural adjustment programs converged in the “Ebola triangle” to produce a crisis of global magnitude. Representations of place complement and reinforce the representations of people in relation to Ebola that are so deeply ingrained with discourses of fear, disgust, and distance, but also inherently connected to discourses of responsibility, care, and justice.

## **V – Governing Ebola: State and non-state failures**

As the Ebola crisis spiraled out of control during the summer and fall of 2014, it seemed clear that something, somewhere had gone very wrong. There was no evidence that the virus itself had undergone any significant transformation that might increase its infectivity or virulence in comparison to previous outbreaks, so purely biological explanations could not account for the unprecedented scale and scope of the epidemic. Discourses of blame implicated a number of different human actors and agencies: the governments of Guinea, Liberia, and Sierra Leone; pharmaceutical companies and state-sponsored research programs for failing to develop effective vaccines or antiviral drugs; the coalitions of experts whose predictions and assurances about Ebola were repeatedly proven wrong; and especially to the WHO and the overall system of governance—public, private, and nonprofit—that comprises the global health regime. Beyond the missteps or shortcomings of any individual or group, however, there was a sense that the global system of surveillance and control of acute health threats had been tested and unequivocally failed. The International Health Regulations (IHR), which were heavily revised in response to the global outbreak of SARS in 2003, were designed to “prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide” (“WHO | International Health Regulations (IHR),” n.d.). A core principle of the IHR is the “duty to report” (Davies, 2012), or the obligation for states to notify the WHO of potential health emergencies, and provide ongoing information about their status as needed. The ability for the network of actors who assumed responsibility for the Ebola response to effectively communicate and collaborate with each other, as intended by the IHR, proved to be a major obstacle to Ebola relief efforts. The disorder and dysfunction revealed flaws and gaps in the administrative, humanitarian, and knowledge-production regimes of global health.

### *Failures of expert knowledges*

Academic institutions form an integral component of the systems of global health. Research organizations that focus on global health—such as PATH, the Infectious Disease Research Institute (IDRI), the Institute for Health Metrics and Evaluation (IHME), and the Center for Infectious Disease Research (CID, formerly Seattle BioMed), all of which are based in Seattle alone—are often receive financial support from the same public agencies, philanthropic organizations, and private corporations that underwrite the global health industry more broadly. The neoliberal ideologies that are entrenched in the dominant systems and structures of global health privilege evidence-based policies with measurable, preferably quantifiable results (Desai & Kharas, 2008). This approach requires a knowledge-production apparatus to evaluate existing programs, conduct research to recommend future projects, and create new technologies and strategies for global health work. Private, academic, and nonprofit research institutions can provide this legitimation and guidance, in exchange for continued support and commitment. This field of research and inquiry is a diverse and contested one, but the expert knowledges that it produces play a crucial role in shaping policy decisions and the assumptions that guide other actors in global health. There was a deep disconnect between the perspectives of experts and on-the-ground responders, in terms of resources, rhetoric, and the lived experiences of those involved. An official who led the United States National Institute of Allergy and Infectious Disease (NIAID) compared the Ebola crisis to the beginning of the HIV/AIDS pandemic—in terms of the number of meetings that he had personally attended (Lane, 2015). Clinicians have instead spoken of the “indescribable horror” of turning away very sick people from Ebola treatment units that were filled beyond capacity, watching patients die at

the doorsteps of ETUs, and providing only the most basic palliative care to the patients who did make it into the ETU (Médecins Sans Frontières, 2015).

The International Society for Infectious Diseases (ISID) has maintained the Program on Monitoring Emerging Diseases email reporting system and listserv (ProMED-mail) since 1999 (“ProMED-mail,” n.d.). Reports and updates on outbreaks of infectious disease, with a particular emphasis on emerging or re-emerging diseases, are submitted to ProMED from tens of thousands of subscribers around the world, and its editorial staff screens and provides commentary on these reports before publically disseminating them, providing researchers and clinicians with information about emerging diseases in as close to real time as possible. In 2003, ProMED-mail subscribers were some of the first people in the world to be alerted about the emergence of SARS, and provided a forum for international information-sharing and coordination (Yu & Madoff, 2004). ProMED-mail has closely followed the Ebola epidemic from the initial reports in news media in March 2014, and its coverage provides useful insight into both popular and expert perspectives on Ebola throughout the trajectory of the epidemic.

In retrospect, some of the earliest Pro-MED-mail posts about the initial outbreak in Guinea are ominous, or poignant, or both. “In this day and age,” a moderator comment remarked shortly after the laboratory confirmation that the disease spreading in Guinea was indeed EVD, “there is no need for doctors, nurses, other health staff or burial parties to die from viral haemorrhagic fever” (ProMED-mail, 2014a). Other early comments similarly expressed confidence that quick action and adherence to accepted guidelines regarding protective equipment, safe burials, and contact monitoring would bring a swift end to the outbreak. Other posts, though, began to raise concerns about the state of the medical infrastructure in Guinea. In early April, ProMED-mail contributors noted that Conakry’s Donka teaching hospital, where the

WHO had sent protective equipment for an Ebola isolation ward, had previously been reported by an employee to lack electricity, running water, and basic medical and sanitation equipment (ProMED-mail, 2014b). Details about the built environment, infrastructure, and resources available at the site of the outbreak suggested that adherence to a generic set of best practices would be ineffective in this setting, casting doubt on the otherwise sanguine attitudes that global health experts seemed to hold about the future progression of the outbreak.

One striking element of the ProMED-mail coverage in April and May of 2014, when the epidemic was thought to be confined to Guinea, is its frequent praise of the Sierra Leonean government's preparation for the potential spread of Ebola across its borders. Sierra Leone worked closely with Metabiota, a for-profit, San Francisco-based organization that describes itself as a "pioneer in comprehensive risk analytics that improve the world's resistance to epidemics" ("About Metabiota," n.d.), to develop its Ebola preparedness plan. The program is affiliated with the Viral Hemorrhagic Fever Consortium (VHFC) that was formed in 2010 at Tulane University, in partnership with other research institutions in the US and a group of West African hospitals and other organizations (VHFC, n.d.). In an April 6 ProMED-mail post, a moderator commented that,

"Sierra Leone with its Metabiota and WHO collaborators is very well prepared should cases appear in that country. This outstanding organization and preparedness for response could serve as a good model for the rest of West Africa." (ProMED-mail, 2014c)

A Metabiota scientist submitted an update directly to ProMED-mail, during the period in mid-May when the outbreak was thought to have been successfully contained, claiming that,

"For the 1<sup>st</sup> time in EVD history, that type of wide preparedness...has been done in heretofore ebolavirus 'virgin' territories...which have ultimately protected, or at least uniquely prepared, Sierra Leone." (ProMED-mail, 2014d)

It is quite possible that without these measures, the epidemic in Sierra Leone would have been much more catastrophic, but by most metrics Ebola's impact was at least as severe there as it was in the other two HTCs, which presumably did not have the same caliber of preparation programs in place as Sierra Leone did. Regardless of the extent to which Sierra Leone was or was not prepared for Ebola, the congratulatory tone of this early praise of its preparations reads as dangerously complacent in light of the later progression of the epidemic. MSF's March 2015 report indicates that in the first few months after the first cases of Ebola were reported, it focused its efforts only in Guinea and Liberia, since Métabiota and the Sierra Leonean Ministry of Health had already implemented their own Ebola monitoring program, and no confirmed cases had yet been identified in Sierra Leone. MSF identifies the failure of the MOH and its partners to detect Ebola during this time as a major factor that contributed to the resurgence of the epidemic:

“After a short period of raised hopes in May as cases appeared to be declining in Guinea and Liberia, the hidden outbreak in Sierra Leone mushroomed and reignited the outbreak for its neighbors.” (Médecins Sans Frontières, 2015, p. 7)

According to MSF, even after the situation in Sierra Leone had deteriorated to the point that their assistance was requested, the Métabiota team “refused to share data or lists of contacts with us, so we were working in the dark while cases just kept coming in” (MSF, 2015, p. 7). The level of dysfunction described here presents a troubling contrast to the way the Métabiota partnership was depicted both by its own members, and by outside experts.

### ***“Feckless African governments”***

Explicitly or implicitly, discourses of blame for the Ebola crisis frequently characterized the governments of Guinea, Liberia, and Sierra Leone as chaotic, impotent, corrupt, and ultimately at fault for the spread of Ebola in their respective countries. *Time* magazine's “Person of the Year” feature described the “Ebola fighters” as operating in an

environment made even more challenging by “feckless African governments and complacent Western powers, rival healers and turf-guarding bureaucrats” (“Person of the Year,” 2014), invoking a classic set of stereotypical figures in discourses about the shortcomings of contemporary Africa. Some of the critiques of African public health agencies’ response to Ebola have come from within Africa. In November 2014, Oyewale Tomori, a Nigerian virologist, delivered a highly critical speech at the International Meeting on Emerging Diseases and Surveillance (IMED) convened by the International Society for Infectious Diseases (ISID).<sup>2</sup> Tomori argued that the underlying cause of African unpreparedness for Ebola was “not poverty; it’s misuse of what we have,” pointing to the misallocation of aid money, and its contribution to production of an African elite at the expense of the poor (Kupferschmidt, 2014).

There were certainly many problematic aspects to the HTC’s responses to the epidemic, but many of these were directly related to the HTC’s relations with the international community rather than domestic mismanagement alone. Early in the epidemic, for example, the Guinean government came into conflict with the WHO on the issue of reported case and fatality numbers. While the WHO followed the accepted standard of reporting a combined figure that included confirmed, probable, and suspected cases, the Guinean government reported only laboratory-confirmed cases—and accused the WHO of using inflated numbers to foment panic. Guinea likely attempted to downplay the severity of the outbreak to minimize Ebola’s potential consequences for its perception by foreign donors and investors, and in doing so created an additional obstacle for humanitarian responders. At the peak of the epidemic, financing and attention from international experts were no longer lacking, but the lack of medical infrastructure and trained personnel continued to impede the response. A key factor in Nigeria’s successful containment of Ebola was its existing infrastructure and capacity for contact tracing that had

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<sup>2</sup> ISID also maintains the ProMED infectious disease surveillance listserv discussed in this chapter.

been created for polio elimination efforts there. Ultimately, almost 1,000 contacts of individuals at risk of exposure to Ebola were located, a task deemed “almost impossible” in Guinea by a ProMED-mail commentator (ProMED-mail, 2014e). Crucially, the infrastructure involved human resources more than buildings or roads. Some observers, particularly those involved with HIV research and control, attribute the HTC’s inability to effectively respond to Ebola to the fact that none of them were affected as severely by the HIV/AIDS pandemic as many other Sub-Saharan African countries.

The fragility of the healthcare systems in Guinea, Liberia, and Sierra Leone and the culture of mistrust surrounding their governments were undoubtedly key facilitators of Ebola’s spread, but assigning blame to the governments of these countries, especially by uncritically invoking stereotypes of callous and corrupt African politicians, overlooks historical and structural factors that have contributed to the weaknesses of their public health systems. In the passage that follows, *The Economist* implicates the healthcare systems in the HTCs that enabled Ebola’s spread:

“The inadequacies of the health-care systems in the three most-affected countries help to explain how the Ebola outbreak got this far. Spain spends over \$3,000 per person at purchasing-power parity on health care; for Sierra Leone, the figure is just under \$300. The United States has 245 doctors per 100,000 people; Guinea has ten.” (“The toll of a tragedy,” 2015)

This assessment pays no attention, however, to external structural factors that have limited the capacity for these countries’ governments to fund and operate strong public health systems. A February, 2015 commentary in *The Lancet Global Health* (Kentikelenis, King, McKee, & Stuckler, 2015) argued that the state of the healthcare systems in the HTCs was in part the product of many years’ worth of “conditionalities” attached to financial support from the International Monetary Fund (IMF). The authors identified three particularly damaging

provisions: reductions in overall government spending, and the prioritization of debt repayment that even further reduced budgets for social services; wage caps for public-sector workers, which drove many health workers to private clinics or out of the country entirely; and systematic decentralization of healthcare systems. Taken together, these factors made it extremely difficult, if not impossible, for countries to allocate enough of their budgets toward social spending, which allowed their healthcare systems to become weaker and weaker. The story of healthcare systems in the HTCs is one of decay and systematic degradation, not simply a lack or mismanagement of resources.

The IMF committed more than \$400 million to support the fight against Ebola, and has represented its role as providing leniency, flexibility, and support for the HTCs during a time of crisis. The repercussions of Ebola have even, at least in part, prompted the IMF to revise the parameters of its Post-Catastrophe Debt Relief (PCDR) Trust. The PCDR was created in 2010, in the aftermath of the massively destructive earthquake in Haiti that year, and the 2015 revisions expand the types of catastrophes that are eligible for assistance from the fund (IMF, 2015). Tellingly, the IMF's policy paper describing the changes characterizes the Ebola epidemic and EID events like it as "a type of natural disaster of special concern to the international community" (p. 5). The IMF's framing of Ebola as a "natural disaster," produced by forces exogenous to the economic systems that it has played a role in shaping, supports its denial of culpability for the crisis.

### ***Humanitarian governance of global health***

The governance of global health is organized through assemblages of public agencies, multilaterals, humanitarian and philanthropic organizations, the private sector, and academic institutions. A dominant interpretation of global health governance in the 21<sup>st</sup> has been one of

failure (Rushton & Williams, 2012)—the massive increase in resources dedicated to global health has not had a proportional impact on inequalities in access and outcomes worldwide. The Ebola crisis strongly reinforced this narrative of failure, and the WHO in particular became the target of widespread criticism in post-hoc analyses of Ebola. In response to the disorganization and ineffectiveness of the overall management of the crisis, the UN created its first health-related emergency mission, the UN Mission for Ebola Emergency Response (UNMEER). More than implicating any individual agency, the Ebola crisis revealed the shortcomings of a system in which response to emergencies and disasters is relegated to humanitarians, especially for situations that trouble the distinction between short-term crises and long-term, systemic problems. Framings of Ebola as analogous to a natural disaster obscured the historical and structural context that produced and perpetuated it.

The salient moment in the narrative of the WHO's failure is the period in the spring and early summer of 2014 between its assurances in mid-May that the outbreak was under control and would soon be extinguished entirely, and its declaration on August 4, after many weeks of criticism for its inaction, that the epidemic was a “public health emergency of international concern.” MSF has implied that this long-delayed declaration was prompted not by the scale of suffering and danger in West Africa, but by the arrival of two infected American aid workers in the United States, transforming it from “a humanitarian crisis affecting a handful of poor countries” into “an international security threat” (Médecins Sans Frontières, 2015). In the weeks prior to the declaration, which initiated a significant scale-up in the mobilization of capital and resources dedicated to containing the epidemic, Ebola had spread to a new country via air travel for the first time in history, when an infected Liberian-American businessman flew from Monrovia to Lagos on July 20. The combination of these events, along with the rapid

progression of the crisis in the HTCs, created an atmosphere in which a truly global Ebola epidemic seemed possible, and even imminent. Ebola was transformed from a disease of poverty to a transnational threat.

The Ebola crisis troubled the way that the UN system classifies and responds to humanitarian emergencies. The United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) was not heavily involved in the coordination of a centralized humanitarian response; according to a UN representative, “Corporately, this is not a humanitarian emergency” (Gettleman, 2014a). In 2014, UNOCHA included crises in four countries (Iraq, Syria, South Sudan, and the Central African Republic) in its highest “L3” categorization of emergencies. On UNOCHA’s website, however, Ebola was included as a kind of secondary crisis, relegated to a sidebar, but nonetheless placed alongside the crises that were deemed the most urgent (see below).

The screenshot shows the UNOCHA website's 'Emergencies' page. The header includes the UNOCHA logo and navigation tabs: ABOUT US, WHAT WE DO, THEMES, WHERE WE WORK, MEDIA RESOURCES, and TOP STORIES. The main content area is titled 'Emergencies' and includes a breadcrumb trail: Home > Where We Work > All Countries > Emergencies. A text block states: 'The UN and its humanitarian partners are currently responding to four 'L3' emergencies. This is the UN classification for the most severe, large-scale humanitarian crises.' Below this is a 'Subscribe here' button. A large image shows a group of people in Iraq, with a caption: 'The surge in violence between armed groups and government forces has displaced an estimated 2.5 million people across Iraq and left hundreds of thousands of people in need of assistance. OCHA Iraq>>'. On the right sidebar, there is a 'Where We Work' section with a dropdown menu showing 'All Countries' and 'Emergencies', with 'Ebola Virus Disease' selected. Below this is a 'Ebola Virus Disease Outbreak' graphic showing a person wearing a protective mask.

Source: <http://www.unocha.org/where-we-work/emergencies> (accessed 16 April, 2015)

Visually as well as corporately, Ebola did not fit the parameters for UNOCHA's full engagement, but nonetheless could not be left off of its agenda entirely.

Many other actors, in addition to the UN system and the WHO, are crucial to the narratives of failure that are posed as explanations for the crisis. MSF has played a central role in the international response to Ebola throughout the epidemic, and the Guinean Ministry of Health actually notified MSF about the nascent outbreak in Guéckédou province even before it contacted the WHO. MSF, which had extensive experience working in previous outbreaks of Ebola, was among the first and most active first responders in the spring and summer of 2014, and in some ways became the public face of the humanitarian response to the crisis. A French official went as far as calling the epidemic "the first major international crisis in which the lead should be given to an NGO—in this case, Médecins Sans Frontières." MSF strongly disagreed with this assessment:

"MSF—a private medical and humanitarian organization can certainly make a significant contribution to medical and operational leadership....However, we cannot, and simply should not replace governments in assuming their responsibilities on public health." (Médecins Sans Frontières, 2014).

MSF describes itself as "Pushed to the Limit and Beyond" in a report published one year after the beginning of its involvement with Ebola in West Africa (Médecins Sans Frontières, 2015). The role of MSF revealed the limitations of relegating emergency response to humanitarian organizations. Without centralized planning and support, individual humanitarian actors could not adequately respond to disasters of this scope on their own. The VHFC and the Ebola program that its members implemented in Sierra Leone is in many ways paradigmatic of the partnership model in global health. Partnerships are a neoliberal innovation that have become more widespread in global health and attracted significant scholarly attention in recent years (Buse & Harmer, 2004, 2007; Craddock, 2012; J. T. Crane, 2010; De Pinho Campos K, 2011; Mahoney,

2011; Moran M, 2010; Morvaridi, 2012). They include public-private partnerships, affiliations between partners in the Global North and Global South, partnerships between nonprofit and for-profit organizations, and a variety of combinations of the above. Partnerships spread the risk and financial responsibility involved in global health projects, but can also create a diffusion of responsibility and accountability. As the VHFC example in Sierra Leone demonstrates, they can also create problems of coordination both within partnerships and with external actors.

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Paul Farmer has popularized the notion that an effective Ebola response would require “staff, stuff, space, and systems” (Farmer, 2014). The “systems” that were needed included not only state-run public health systems, but also a more robust, equitable system of global health governance at an international level. The historical and structural influences that made the epidemic possible are not isolated within the HTC, but encompass an international system that prioritizes problems of global health of a certain kind, informed by discourses of security, development, and economic notions of cost-benefit ratios and return on investment, assigning relative values to human life based on geography, history, and politics.

## **VI – Conclusion: The “long” epidemic**

Historians sometimes use the term “the long 19<sup>th</sup> century,” out of recognition that the social and political changes that characterized that pivotal period are not neatly bounded by the years 1800 and 1899. Similarly, the factors that precipitated the Ebola epidemic in West Africa and its implications for the HTC and the international community predate the December, 2013 index case, and the long-term consequences of the epidemic will certainly outlast its formal end, 42 days after the last case is reported. The spatial extent of the impact of Ebola similarly extends far beyond the borders of the HTCs, into international political discourses and geographical imaginations. Redfield (2005, p. 329) claims that “rupture is more central to modern order than we frequently choose to remember,” and the violations—of human bodies, of communities, and of international systems—that Ebola effected were inherently tied to other forms of structural and subjective violence. Ebola became something that was both exceptional and expected, challenging the same systems of global health that it was produced by.

The “post-2015” agenda for global development has yet to be formally announced, but the Ebola crisis has already unsettled perceptions of a strong, stable system of global health governance and management. Challenges to the spatial imaginaries of emerging infectious disease, discourses of fear and disgust, and social distance between the Global North and South also generated ruptures and fissures in traditional discourses of disease emergence, globalization, and responsibility. The persistence of Ebola in Guinea and Sierra Leone has raised the terrifying possibility of yet another unprecedented phenomenon: endemic Ebola, or the persistent spread of the disease in the region with no discernable end in sight. If all three HTCs do become Ebola-free in the near future, though, the epidemic will nonetheless have a profound, lasting impact in the region and beyond. The possibilities for what form that impact will take—as a catalyst for

health systems reform, as an additional economic burden, or as the beginning of a global conversation about the future of global health—remains to be seen.

## References

- 2014 West Africa Ebola Response - OpenStreetMap Wiki. (n.d.). Retrieved May 21, 2015, from [http://wiki.openstreetmap.org/wiki/2014\\_West\\_Africa\\_Ebola\\_Response](http://wiki.openstreetmap.org/wiki/2014_West_Africa_Ebola_Response)
- About - PGA Foundations. (n.d.). Retrieved May 14, 2015, from <http://www.pgafamilyfoundation.org/About>
- Adefuye, A. (2014, December 4). Nigeria's Ebola Success: Disease Knows No Borders. Neither Should the Human Spirit of Cooperation | Ebola Deeply, Covering the Crisis. Retrieved from <http://www.eboladeeply.org/op-eds/2014/12/6806/nigerias-ebola-success-disease-borders-human-spirit-cooperation/>
- Altman, D. (2003). AIDS and Security. *International Relations*, 17(4), 417–427.
- Associated Press. (2014, October 21). Stokes County assistant principal in South Africa raises concerns over Ebola. Retrieved May 19, 2015, from [http://www.journalnow.com/news/state\\_region/stokes-county-assistant-principal-in-south-africa-raises-concerns-over/article\\_1f340f26-5924-11e4-82db-001a4bcf6878.html](http://www.journalnow.com/news/state_region/stokes-county-assistant-principal-in-south-africa-raises-concerns-over/article_1f340f26-5924-11e4-82db-001a4bcf6878.html)
- Beckmann, N. (2013). Responding to medical crises: AIDS treatment, responsabilisation and the logic of choice. *Anthropology & Medicine*, 20(2), 160–174.
- Brown, T. (2011). “Vulnerability is universal”: Considering the place of “security” and “vulnerability” within contemporary global health discourse. *Social Science & Medicine*, 72(3), 319–326.
- Brown, T., Craddock, S., & Ingram, A. (2012). Critical Interventions in Global Health: Governmentality, Risk, and Assemblage. *Annals of the Association of American Geographers*, 102(5), 1182–1189. <http://doi.org/10.1080/00045608.2012.659960>
- Buse, K., & Harmer, A. (2004). Power to the Partners?: The politics of public-private health partnerships. *Development*, 47(2), 49–56.
- Buse, K., & Harmer, A. M. (2007). Seven habits of highly effective global public-private health partnerships: Practice and potential. *Social Science & Medicine*, 64(2), 259–271.
- Calain, P. (2013). Ethics and images of suffering bodies in humanitarian medicine. *Social Science & Medicine*, 98, 278–285. <http://doi.org/10.1016/j.socscimed.2012.06.027>
- Chang, D. (2014). New Students Kept Home Amid Ebola Concerns. Retrieved May 19, 2015, from <http://www.nbcphiladelphia.com/news/local/Ebola-Fears-and-Arrival-of-2-African-Students-Prompt-Parents-to-Keep-Kids-Home-From-Local-School--279718882.html>
- Cole, T. (2014, October 7). Ebola: What It Is. Retrieved from <http://www.newyorker.com/books/page-turner/what-is-ebola>
- Cooper, M. (2008). *Life as surplus: biotechnology and capitalism in the neoliberal era*. Seattle: University of Washington Press.
- Coscarelli, J. (2014, October 6). Ebola Coverage Goes Extra Dumb on CNN, Fox News -- NYMag. *New York*. Retrieved from <http://nymag.com/daily/intelligencer/2014/10/ebola-coverage-extra-dumb-cnn-fox-news.html>
- Coulter, A. (2014, October 15). We'll tell you how dangerous Ebola is after the election. Retrieved June 7, 2015, from <http://www.anncoulter.com/columns/2014-10-15.html>
- Craddock, S. (2012). Drug partnerships and global practices. *Health and Place*, 18(3), 481–489.
- Crane, J. (2013). *Scrambling for Africa: AIDS, Expertise, and the Rise of American Global Health Science*.
- Crane, J. T. (2010). Unequal “Partners”. AIDS, Academia, and the Rise of Global Health. *Behemoth A Journal on Civilisation*, 3(3), 78–97.

- Crichton, M. (1969). *The Andromeda strain*. New York: Knopf : [Distributed by Random House].
- Cueto, M. (2004). The ORIGINS of Primary Health Care and SELECTIVE Primary Health Care. *American Journal of Public Health*, 94(11), 1864–1874.
- Davies, S. E. (2008). Securitized Infectious Disease. *Inteaffaroyainst International Affairs (Royal Institute of International Affairs 1944-)*, 84(2), 295–313.
- Davies, S. E. (2012). The international politics of disease reporting: Towards post-Westphalianism? *International Politics*, 49(5), 591–613.
- De Pinho Campos K, N. C., Jadad AR. (2011). Product development public-private partnerships for public health: a systematic review using qualitative data. *Social Science & Medicine (1982)*, 73(7), 986–94.
- Desai, R. M., & Kharas, H. (2008). The California Consensus: Can Private Aid End Global Poverty? *Survival (00396338)*, 50(4).
- Dieleman, J. L., Graves, C. M., Templin, T., Johnson, E., Baral, R., Leach-Kemon, K., ... Murray, C. J. L. (2014). Global Health Development Assistance Remained Steady In 2013 But Did Not Align With Recipients' Disease Burden. *Health Affairs*, 10.1377/hlthaff.2013.1432.
- Dionne, K. Y., & Seay, L. (2014, October 13). It's Columbus Day. Let's talk about geography (and Ebola). *The Washington Post*. Retrieved from <http://www.washingtonpost.com/blogs/monkey-cage/wp/2014/10/13/its-columbus-day-lets-talk-about-geography-and-ebola/>
- Duchin, J. (2014, October). *Ebola Facts and Fiction*. Town Hall, Seattle, WA.
- Duffield, M. R. (2007). *Development, Security and Unending War: Governing the World of Peoples*. Cambridge: Polity.
- Ebola haemorrhagic fever in Zaire, 1976. (1978). *Bulletin of the World Health Organization*, 56(2), 271–293.
- Ebola Situation Report - 3 June 2015 | Ebola. (n.d.). Retrieved June 4, 2015, from <http://apps.who.int/ebola/en/current-situation/ebola-situation-report-3-june-2015>
- Edwards, A. (2014, October 16). News anchor delivers Ebola message everyone needs to hear. Retrieved from <http://fox13now.com/2014/10/16/news-anchor-the-ebola-message-everyone-needs-to-hear/>
- Experts: Ebola Vaccine At Least 50 White People Away. (2014, July 30). Retrieved June 6, 2015, from <http://www.theonion.com/article/experts-ebola-vaccine-at-least-50-white-people-awa-36580>
- Farmer, P. (2001). *Infections and inequalities: the modern plagues*. Berkeley, Calif.: University of California Press.
- Farmer, P. (2014, October 23). Diary. *London Review of Books*, pp. 38–39.
- Farmer, P., Kim, J. Y., Kleinman, A., & Basilio, M. (Eds.). (2013). *Reimagining global health: an introduction*. Berkeley: University of California Press.
- Fassin, D. (2007). Humanitarianism as a Politics of Life. *Public Culture*, 19(3).
- Fassin, D., & Pandolfi, M. (2010). *Contemporary states of emergency: the politics of military and humanitarian interventions*. New York; Cambridge, Mass.: Zone Books ; Distributed by the MIT Press.
- Foundation Fact Sheet. (n.d.). Retrieved June 6, 2015, from <http://www.gatesfoundation.org/Who-We-Are/General-Information/Foundation-Factsheet>

- Freschi, L., & Shaikh, A. (2011, September). Gates: A benevolent dictator for public health? *Alliance*, 16(3), 36–37.
- Garrett, L. (2007). The Challenge of Global Health. *Foreign Affairs*, 86(1), 14–38.
- Gettleman, J. (2014a, December 6). As Ebola Rages, Poor Planning Thwarts Efforts. *The New York Times*. Retrieved from <http://www.nytimes.com/2014/12/07/world/africa/as-ebola-rages-in-sierra-leone-poor-planning-thwarts-efforts.html>
- Gettleman, J. (2014b, December 20). Ebola Should Be Easy to Treat. *The New York Times*. Retrieved from <http://www.nytimes.com/2014/12/21/sunday-review/ebola-should-be-easy-to-treat.html>
- Grady, D. (2015, May 7). After Nearly Claiming His Life, Ebola Lurked in a Doctor's Eye. *The New York Times*. Retrieved from <http://www.nytimes.com/2015/05/08/health/weeks-after-his-recovery-ebola-lurked-in-a-doctors-eye.html>
- Greenfieldboyce, N. (2014, October 17). Why Won't The Fear Of Airborne Ebola Go Away? Retrieved from <http://www.npr.org/sections/health-shots/2014/10/17/356966590/why-wont-the-fear-of-airborne-ebola-go-away>
- Griffiths, A., & Mountford, E. (2014, July 30). Ebola virus symptoms start with sore throat before bleeding eyes, ears and brain then deadly organ failure. *The Mirror*. Retrieved from <http://www.mirror.co.uk/news/world-news/ebola-virus-symptoms-start-sore-3933920>
- Guinea: Mobilisation against an unprecedented Ebola epidemic. (n.d.). Retrieved June 5, 2015, from <http://www.msf.org/article/guinea-mobilisation-against-unprecedented-ebola-epidemic>
- Health Systems Strengthening - The Global Fund to Fight AIDS, Tuberculosis and Malaria. (n.d.). Retrieved June 10, 2015, from <http://www.theglobalfund.org/en/about/diseases/hss/>
- Heymann, D. L. (2006). Review Articles - SARS and Emerging Infectious Diseases: A Challenge to Place Global Solidarity above National Sovereignty. *Annals of the Academy of Medicine, Singapore.*, 35(5), 350.
- History. (n.d.). Retrieved April 28, 2015, from <http://www.gatesfoundation.org/Who-We-Are/General-Information/History>
- How Ebola Kills: What The Deadly Virus Does To The Human Body. (n.d.). Retrieved June 5, 2015, from <http://www.ibtimes.com/how-ebola-kills-what-deadly-virus-does-human-body-1706965>
- IMF. (2015). *Proposal to Enhance Fund Support for Low-Income Countries Hit By Public Health Disasters*. The International Monetary Fund. Retrieved from <http://www.imf.org/external/pp/ppindex.aspx>
- Ingram, A. (2011). The Pentagon's HIV/AIDS Programmes: Governmentality, Political Economy, Security. *Geopolitics*, 16(3), 655–674. <http://doi.org/10.1080/14650045.2010.494001>
- Integrated Delivery. (n.d.). Retrieved June 12, 2015, from <http://www.gatesfoundation.org/What-We-Do/Global-Development/Integrated-Delivery>
- #ISurvivedEbola |. (n.d.). Retrieved June 7, 2015, from <http://isurvivedebola.org>
- Joffe, H., & Haarhoff, G. (2002). Representations of far-flung illnesses: the case of Ebola in Britain. *Social Science & Medicine*, 54(6), 955–969. [http://doi.org/10.1016/S0277-9536\(01\)00068-5](http://doi.org/10.1016/S0277-9536(01)00068-5)

- JOHNSON, K. M. (1979). Ebola Virus and Hemorrhagic Fever: Andromeda Strain or Localized Pathogen? *Annals of Internal Medicine*, 91(1), 117–119. <http://doi.org/10.7326/0003-4819-91-1-117>
- Kalu, N. (2014, November 4). The America Without Ebola for Interested Africans. Retrieved from <https://twitter.com/NkemEKalu/status/529718354513510401>
- Kentikelenis, A., King, L., McKee, M., & Stuckler, D. (2015). The International Monetary Fund and the Ebola outbreak. *The Lancet Global Health*, 3(2), e69–e70. [http://doi.org/10.1016/S2214-109X\(14\)70377-8](http://doi.org/10.1016/S2214-109X(14)70377-8)
- Kleeman, S. (2014, October 7). One Powerful Illustration Shows Exactly What’s Wrong With How the West Talks About Ebola. Retrieved June 6, 2015, from <http://mic.com/articles/100618/one-powerful-illustration-shows-exactly-what-s-wrong-with-media-coverage-of-ebola>
- Knowles, D. (2014, October 9). 8 Leaders Who Want to Close the Border for Ebola or ISIS. Retrieved from <http://www.bloomberg.com/politics/articles/2014-10-09/republicans-who-want-mexican-border-secured-from-islamic-state-and-ebola>
- Kupferschmidt, K. (2014, November 3). Nigerian virologist delivers scathing analysis of Africa’s response to Ebola [Text]. Retrieved May 14, 2015, from <http://news.sciencemag.org/africa/2014/11/nigerian-virologist-delivers-scathing-analysis-africas-response-ebola>
- Lachenal, G. (2015, January). Outbreak of Unknown Origin in the Tripoint Zone | *Limn*. *Limn*, (5). Retrieved from <http://limn.it/outbreak-of-unknown-origin-in-the-tripoint-zone/>
- Lakoff, A. (2008). The Generic Biothreat, or, How We Became Unprepared. *Cultural Anthropology*, 23(3), 399–428. <http://doi.org/10.1111/j.1548-1360.2008.00013.x>
- Lakoff, A. (2010). Two Regimes of Global Health. *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, 1(1), 59–79.
- Lane, H. C. (2015, February). *Ebola treatment and vaccine development and implementation*. Presented at the Conference on Retroviruses and Opportunistic Infections (CROI).
- Life After Death. (n.d.). Retrieved June 6, 2015, from <http://apps.npr.org/life-after-death/>
- Looney, D., Ma, A., & Johns, S. (2015). HIV Therapy-The State of ART. *Current Topics in Microbiology and Immunology*, 389, 1–29. [http://doi.org/10.1007/82\\_2015\\_440](http://doi.org/10.1007/82_2015_440)
- Mahoney, R. T. (2011). Product Development Partnerships: Case studies of a new mechanism for health technology innovation. *Health Research Policy and Systems*, 9, 33. <http://doi.org/10.1186/1478-4505-9-33>
- Mansfield B. (2008). Health as a nature - Society question. *Environ. Plann. A Environment and Planning A*, 40(5), 1015–1019.
- Médecins Sans Frontières. (2014, December 2). Ebola: MSF Should Not Replace Governmental Responsibilities. Retrieved from <http://blogs.plos.org/speakingofmedicine/2014/12/02/ebola-msf-replace-governmental-responsibilities/>
- Médecins Sans Frontières. (2015). *Pushed to the Limit and Beyond: A year into the largest ever Ebola outbreak*.
- Messac, L., & Prabhu, K. (2013). Redefining the possible: The global AIDS response. In P. Farmer, J. Y. Kim, A. Kleinman, & M. Basilio (Eds.), *Reimagining global health: an introduction* (pp. 111–132). Berkeley: University of California Press.
- Metabiota. (n.d.). Retrieved May 17, 2015, from <http://metabiota.com/>

- Moran M, G. J., Ropars AL, Illmer A. (2010). The role of Product Development Partnerships in research and development for neglected diseases. *International Health*, 2(2), 114–22.
- Morvaridi, B. (2012). Capitalist Philanthropy and Hegemonic Partnerships. *Third World Quarterly*, 33(7).
- Mukherjee, S. (2010). *The emperor of all maladies: a biography of cancer*. New York: Scribner.
- Newton, J. (2014, August 15). Ebola is running away from us, warn international doctors. Retrieved from <http://www.dailymail.co.uk/news/article-2725754/Ebola-vastly-worse-thought-warns-World-Health-Organisation-America-evacuates-diplomatic-families-affected-country.html>
- Nguyen V.K. (2009). Government-by-exception: Enrolment and experimentality in mass HIV treatment programmes in Africa. *Soc. Theory Health Social Theory and Health*, 7(3), 196–217.
- Nguyen, V.-K. (2010). *The republic of therapy: triage and sovereignty in West Africa's time of AIDS*. Durham, NC: Duke University Press.
- Nixon, R. (2011). *Slow Violence and the Environmentalism of the Poor*. Cambridge, Mass: Harvard University Press.
- Nussbaum, M. C. (2010). *From disgust to humanity: sexual orientation and constitutional law*. Oxford; New York: Oxford University Press.
- Ophir, A. (2005). Disaster as a Place of Morality: The Sovereign, the Humanitarian, and the Terrorist. *QUI PARLE*, 16(1), 95–116.
- Osnos, E. (2014, December 22). The Samantha Power Doctrine. *The New Yorker*. Retrieved from <http://www.newyorker.com/magazine/2014/12/22/land-possible>
- Paris, N. (2014, October 20). Ebola fears hurting African tourism. Retrieved from <http://www.telegraph.co.uk/travel/destinations/africaandindianocean/11174041/Ebola-fears-hurting-African-tourism.html>
- Person of the Year: The Ebola Fighters. (2014, December 10). *Time*. Retrieved from <http://time.com/time-person-of-the-year-ebola-fighters/>
- Post 2015 process .:. Sustainable Development Knowledge Platform. (n.d.). Retrieved June 11, 2015, from <https://sustainabledevelopment.un.org/post2015>
- Press, A. (n.d.). Indiana health officials monitor 5 for Ebola symptoms. Retrieved June 5, 2015, from <http://www.wcpo.com/news/state/state-indiana/indiana-health-officials-monitor-5-for-ebola-symptoms>
- Preston, R. (1994). *The hot zone*. New York: Random House.
- ProMED-mail. (2014a). Ebola Virus Disease - Sierra Leone: susp. alert, RFI. *ProMED-Mail*, (20140322.2349697). Retrieved from <http://www.promedmail.org/>
- ProMED-mail. (2014b). Ebola Virus Disease - West Africa (08): WHO, Miscellaneous reports. *ProMED-Mail*, (20140403.2379386). Retrieved from <http://www.promedmail.org/>
- ProMED-mail. (2014c). Ebola Virus Disease - West Africa (09). *ProMED-Mail*, (20140406.2385791). Retrieved from <http://www.promedmail.org/>
- ProMED-mail. (2014d). Ebola Virus Disease - West Africa (38): Sierra Leone Preparedness. *ProMED-Mail*, (20140512.2467545). Retrieved from <http://www.promedmail.org/>
- ProMED-mail. (2014e). Ebola Virus Disease - West Africa (57): WHO Update, Challenges. *ProMED-Mail*, (20140607.2525234). Retrieved from <http://www.promedmail.org/>
- ProMED-mail. (n.d.). Retrieved June 5, 2015, from <http://www.promedmail.org/aboutus/>
- Redfield, P. (2005). Doctors, Borders, and Life in Crisis. *Cultural Anthropology*, 20(3).

- Rettner, R. (n.d.). Could Ebola Really Be the “Next AIDS”? Retrieved March 3, 2015, from <http://www.livescience.com/48232-ebola-aids-comparison.html>
- Revkin, A. (2014, October 24). Why Americans Should Fear Fear of Ebola More than the Virus. Retrieved from <http://dotearth.blogs.nytimes.com/2014/10/24/why-americans-should-fear-fear-of-ebola-more-than-the-virus/>
- Robinson, W. (2014, September 4). Can Ebola be cured by using the BLOOD of survivors? Experimental treatment proposed to halt spread of virus – as more bodies are carried away in the streets of Liberia. *The Daily Mail*. Retrieved from <http://www.dailymail.co.uk/news/article-2743999/Can-Ebola-cured-using-BLOOD-survivors-Experimental-treatment-proposed-halt-spread-virus-bodies-carried-away-streets-Liberia.html>
- Rothkopf, J. (n.d.). A message to American media: Stop spreading Ebola fear and start being ashamed. Retrieved June 5, 2015, from [http://www.salon.com/2014/10/06/a\\_message\\_to\\_the\\_media\\_stop\\_being\\_scared\\_of\\_ebola\\_and\\_start\\_being\\_ashamed\\_of\\_yourselves/](http://www.salon.com/2014/10/06/a_message_to_the_media_stop_being_scared_of_ebola_and_start_being_ashamed_of_yourselves/)
- Rushton, S., Williams, Owain David, & Williams, O. D. (2012). Frames, Paradigms and Power: Global Health Policy-Making under Neoliberalism. *Global Society*, 26(2), 147–167.
- Soderbergh, S., Burns, S. Z., Shamberg, M., Sher, S., Jacobs, G., Cotillard, M., ... Warner Home Video (Firm). (2011). *Contagion*.
- Sontag, S. (2003). *Regarding the pain of others*. New York: Farrar, Straus and Giroux.
- Sontag, S., & Sontag, S. (1990). *Illness as metaphor ; and, AIDS and its metaphors*. New York: Doubleday.
- Sparke, M. (2007). Geopolitical Fears, Geoeconomic Hopes, and the Responsibilities of Geography. *ANNA Annals of the Association of American Geographers*, 97(2), 338–349.
- Sparke, M., & Angelov, D. (2012). H1N1, globalization and the epidemiology of inequality. *Health & Place Health & Place*, 18(4), 726–736.
- Storeng, K. T. (2014). The GAVI Alliance and the “Gates approach” to health system strengthening. *Global Public Health*, 9(8), 865–879. <http://doi.org/10.1080/17441692.2014.940362>
- Taylor, A. (2014, November 3). Map: The Africa without Ebola. *The Washington Post*. Retrieved from <http://www.washingtonpost.com/blogs/worldviews/wp/2014/11/03/map-the-africa-without-ebola/>
- The Andromeda Strain - Scientist who discovered Ebola virus says “We”re running out of time’ - Africa - International - News - Catholic Online. (n.d.). Retrieved June 5, 2015, from <http://www.catholic.org/news/international/africa/story.php?id=56075>
- The health systems goal - Phase III (2011-15) - Gavi’s strategy - About Gavi - Gavi, the Vaccine Alliance. (n.d.). Retrieved June 10, 2015, from [http://www.gavi.org/about/strategy/phase-iii-\(2011-15\)/health-systems-goal/](http://www.gavi.org/about/strategy/phase-iii-(2011-15)/health-systems-goal/)
- The Scariest Virus: Ebola Is Back, and It’s Worse Than Ever. (n.d.). Retrieved June 5, 2015, from <http://www.psmag.com/health-and-behavior/scariest-virus-ebola-back-worse-ever-87348>
- The toll of a tragedy. (2015, May 10). *The Economist*. Retrieved from <http://www.economist.com/blogs/graphicdetail/2015/05/ebola-graphics>
- Ticktin, M. I. (2011). *Casualties of care immigration and the politics of humanitarianism in France*. Berkeley: University of California Press. Retrieved from <http://site.ebrary.com/id/10482140>

- Tomori, O. (2014). Ebola in an unprepared Africa. *BMJ: British Medical Journal*, 349(7976). Transcript of Remarks at the Event: Impact of the Ebola Crisis: A Perspective from the Countries. (n.d.). Retrieved June 4, 2015, from <http://www.worldbank.org/en/news/speech/2014/10/09/transcript-event-impact-ebola-crisis-perspective-countries>
- United Nations Summit to adopt the post-2015 development agenda .:. Sustainable Development Knowledge Platform. (n.d.). Retrieved June 10, 2015, from <https://sustainabledevelopment.un.org/post2015/summit>
- Van Cutsem, G. (2015, February). *The Doctors Without Borders experience with the current Ebola outbreak*. Presented at the Conference on Retroviruses and Opportunistic Infections (CROI).
- Viral Hemorrhagic Fever Consortium. (n.d.). VHFC. Retrieved June 5, 2015, from <http://vhfc.org/consortium>
- Wald, P. (2008). *Contagious: cultures, carriers, and the outbreak narrative*. Durham: Duke University Press.
- Washer, P. (2004). Representations of SARS in the British newspapers. *Social Science & Medicine*, 59(12), 2561–2571. <http://doi.org/10.1016/j.socscimed.2004.03.038>
- Weizman, E. (2011). *The least of all possible evils: humanitarian violence from Arendt to Gaza*. London; New York: Verso.
- West Africa Ebola Epidemic | Humanitarian OpenStreetMap Team. (n.d.). Retrieved June 7, 2015, from [http://hotosm.org/projects/west\\_africa\\_ebola\\_epidemic](http://hotosm.org/projects/west_africa_ebola_epidemic)
- What Actually Happens When A Person Is Infected With The Ebola Virus. (n.d.). Retrieved June 5, 2015, from [http://www.huffingtonpost.com/2014/08/02/ebola-symptoms-infection-virus\\_n\\_5639456.html](http://www.huffingtonpost.com/2014/08/02/ebola-symptoms-infection-virus_n_5639456.html)
- WHO | Chapter 5. (n.d.). Retrieved June 4, 2015, from <http://www.who.int/whr/2002/chapter5/en/index5.html>
- WHO | Democratic Republic of Congo: “classic” Ebola in a country experiencing its seventh outbreak. (n.d.). Retrieved June 3, 2015, from <http://www.who.int/csr/disease/ebola/ebola-6-months/drc/en/>
- WHO | International Health Regulations (IHR). (n.d.). Retrieved May 14, 2015, from [http://www.who.int/topics/international\\_health\\_regulations/en/](http://www.who.int/topics/international_health_regulations/en/)
- WHO | Return to Alma-Ata. (n.d.). Retrieved June 10, 2015, from <http://www.who.int/dg/20080915/en/>
- WHO | WHO Director-General addresses UN Security Council on Ebola. (n.d.). Retrieved June 4, 2015, from <http://www.who.int/dg/speeches/2014/security-council-ebola/en/>
- World Bank. (1993). *World Development Report 1993 Investing in Health, Volume I*. Washington, D.C.: The World Bank. Retrieved from <http://www.worldbank.icebox.ingenta.com/content/wb/2292>
- World Bank. (2014, August 4). Restructing Paper on a Proposed Project Restructing of the Liberia Health Systems Strengthening Credit and Grant. Retrieved from [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/10/16/000350881\\_20141016100514/Rendered/PDF/RES159040REVIS00900IDA0R20140027101.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/10/16/000350881_20141016100514/Rendered/PDF/RES159040REVIS00900IDA0R20140027101.pdf)
- Yu, V. L., & Madoff, L. C. (2004). ProMED-mail: An Early Warning System for Emerging Diseases. *Clinical Infectious Diseases*, 39(2), 227–232. <http://doi.org/10.1086/422003>
- Zerner, C. (2003). The viral forest in motion: ebola, african forests, and emerging cartographies of environmental danger. *In Search of the Rain Forest*.

- Zerner, C. (2005). Emerging Cartographies of Environmental Danger: Africa, Ebola, and AIDS. In B. Hartmann, B. Subramaniam, & C. Zerner (Eds.), *Making threats: biofears and environmental anxieties* (pp. 221–280). Lanham, Md.: Rowman & Littlefield Publishers.
- Zinsser, H. (1935). *Rats, lice and history; being a study in biography, which, after twelve preliminary chapters indispensable for the preparation of the lay reader, deals with the life history of typhus fever ...* Boston: Printed and Pub. for the Atlantic Monthly Press by Little, Brown, and Co.
- Žižek, S. (2008). *Violence: six sideways reflections*. New York: Picador.