

# Biosecurity Interventions

GLOBAL HEALTH & SECURITY IN QUESTION

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CHAPTER SIX

# Vital Mobility and the Humanitarian Kit

Peter Redfield

"Speed saves lives."

—MSF fundraising brochure, 2005

As numerous commentators have noted, graphic moments of human suffering elsewhere play a significant role in contemporary moral and political imagination.<sup>1</sup> Once reported and framed as a humanitarian emergency, disasters worldwide now regularly elicit calls for action, and both the affected communities and those experiencing anguish secondhand through the wonders of global media commonly expect a response. But what might it actually entail to try to protect the well-being of distant populations? What techniques and logics might be involved, in order for the expectation of a response to become a norm? And how might they relate to security concerns focused on matters of life?

In this chapter I approach "biosecurity" from the perspective of medical humanitarianism, particularly the dramatic form featured in contemporary crisis response. Such a vantage point alters the field of assumptions surrounding biological emergencies such as outbreak diseases from those of a defensive model of national public health to a more altruistic, international vision of medical care. Although actively involved in responding to epidemics worldwide, and deploying similar strategies and equipment to those of military and public health authorities, medical humanitarian organizations do not commonly think through the category of "biosecurity." For the humanitarian actor, the problem of securing populations and vital infrastructure is not primarily a matter of self-interest or defensive strategy. Rather, it involves a concern for others, even very distant others, and their

continuing welfare. Considering "security" from this perspective may reorient the schema laid out by Stephen Collier and Andrew Lakoff in several ways.<sup>2</sup> First, it shifts the focus one step away from the nation-state, given that intergovernmental and nongovernmental entities play significant roles in defining and enacting humanitarian projects. Second, it also moves concerns about people and things one step closer to the domain of ethics, to the extent that humanitarian conceptions of suffering commonly and overtly mobilize discourses about good, evil, and moral obligation. And finally, if the horizon is truly global, it both enlarges and diminishes the sense of infrastructure involved, amplifying the degree of mobility essential to achieving care from a distance even as it reduces the sense of "life" to a minimal proportion of needs. The populations in question here are generally poor and often displaced, the states weak or fractured, and the material conditions limited and fragile even before any state of emergency. The sense of welfare involved is often that of physical survival, not any social fulfillment. The humanitarian project, at least in this "classic" form, then, constitutes a work of minimalism.

I will try to outline these general points by reference to one story of preparedness: the development and limitations of the humanitarian "kit." The kit is a mobile repository of potentially useful implements. Forms of it feature in the long history of military equipment and logistics, as well as craft production. Humble medical versions are common features of private and public, stored in small boxes found in closets, automobiles, aircraft, schools, and many other nonmedical settings in anticipation of minor emergencies. The humanitarian form is particularly interesting in that it casts the problem of "first aid" at a more global level. As primary protagonist for this story, I will feature the organization I have tracked on and off since 2000: Médecins Sans Frontières, otherwise known as Doctors Without Borders, or MSF.<sup>3</sup> MSF is hardly the only entity to develop or use kits in humanitarian work. However, it offers the advantage of embodying humanitarian ambition in global terms, and doing so in an oppositional, restless, and frequently innovative way. Emerging in response to the older Red Cross movement, MSF both carries forward a longer tradition and marks a break within it. Although the scope of the group's action now extends far wider, emergency response defined its primary technical and ethical ethos, and continues to inflect its public image. Moreover, the bulk of MSF's projects unfold in places that public health describes as "resource-poor settings,"

places, in other words, without much health infrastructure. Due to its rebellious self-conception, MSF also produces a steady stream of external and internal criticism, commenting on humanitarian shortcomings while also seeking to provide aid. Thus MSF can serve as a barometer of sorts for a wider field. The story of medical logistics outlined here, I suggest, is thus both particular and particularly telling.

Even as humanitarian-inspired operations proliferate, and versions of their associated technologies appear in all manner of agencies, MSF's wider experience also reveals the limits of the kit form itself. Embodying essential techniques of mobility, a standardized package performs well in emergencies and outbreaks, but falters when facing chronic conditions. What works for a rapid health threat like cholera cannot encompass a slower disorder like AIDS, which requires longer-term intervention in a wider social milieu. The point is both obvious and always in danger of being overlooked, particularly by those seeking quick technical solutions. If something like the mobile medical kit didn't already exist, biosecurity advocates with global ambitions would have to invent it. Yet not all health risks come in the form of sudden outbreaks, any more than risk in general spreads evenly across the world's population. The antipolitical political space that humanitarianism claims remains a special case, not a general model for strategic action. As members of MSF well know, the politics and ethics of health extend beyond the seductive and significant metric of "saving lives."

### "Populations in Danger"

*"Nobody should die from cholera."*

—MSF fundraising letter, March 2007

MSF often uses the phrase "populations in danger" to identify its primary object of concern. Appearing across numerous internal and public events and documents (including an occasional book series published since 1992), the expression combines categorical concern for human suffering with a realistic commitment to evaluation.<sup>4</sup> Like the group's related tradition of annually listing the top ten "underreported" crises, MSF's identification of populations in danger claims a degree of authoritative expertise, one motivated by humanitarian principle rather than political interest.

It is, in this sense, a properly medical opinion, cast on a world scale out of human interest, rather than technical curiosity alone. Monitoring the globe as a concerned, independent observer, the group sees dangers to human life and welfare in many directions. The most recent volume in MSF's series brims with potential disaster.<sup>5</sup> Ordinary people can be threatened by warlords (Liberia) or by strong states (U.S. action in Afghanistan and Iraq). They may be hurt by a shortage of international attention (Democratic Republic of Congo) or by the misappropriation of humanitarian aid (North Korea, Sudan). In addition to suffering derived from human conflict and displacement, MSF also worries about potential outbreaks of disease, both exotic and mundane. And it is increasingly concerned about general issues of biomedical infrastructure, including discriminatory policies of pharmaceutical pricing, and the general lack of medicines for unprofitable conditions. In terms of categories like "security, territory and population," then, the frame is strikingly large and the threats quite varied.<sup>6</sup>

Beyond efforts to sway public opinion, MSF also practices "frontline" medicine, mounting projects almost anywhere in the world it deems sufficiently endangered and to which it can gain access. In the case of crisis situations such as sudden population displacements or disease outbreaks, the goal is to arrive on site as quickly as possible, with sufficient equipment to be effective. To quote a line from fundraising material used by MSF-USA, "speed saves lives." Although the slogan made some veteran members of the larger organization wince when I mentioned it to them, it does capture the essential logic of emergency response. Since MSF casts itself as global organization, it needs to travel across all sorts of terrain when pursuing emergency projects. The core technical challenge facing this variety of humanitarian medicine, then, is that of mobility, and the rapid, seamless transfer of enough equipment to operate. Unsurprisingly, the group has developed considerable expertise in logistics. To better frame this logistical tradition, I will sketch elements of the larger organizational history from which it emerged.

### The Geopolitics of Suffering, "Sans Frontières"

For all that the Holocaust shadows contemporary conceptions of human suffering and disaster, it is important to remember that Auschwitz was never televised

or framed as a "humanitarian crisis" in the manner it might be today.<sup>7</sup> The close of the Second World War may have ushered in a new political configuration, along with categories and institutions for its governance, but its massive relief works transpired in a less visual and instantaneous era of communications. Rather, the conventional demarcation for televised suffering is that of the Biafran war in Nigeria at the end of the 1960s, when satellite broadcast brought starvation into middle-class living rooms worldwide. Whatever the actual causal history of that tragic episode, it provoked reflection and reorganization on the part of a number of existing humanitarian organizations and inspired the formation of others.<sup>8</sup>

By the time of Biafra, the Red Cross movement had been in existence for a century, even if its efforts to transform military medical practice and international law rarely addressed colonial settings.<sup>9</sup> The slow dismantling of empire, however, created a new humanitarian terrain for the second half of the twentieth century. As the United Nations expanded fitfully into an institutional framework for international governance, it enlarged expectations, if not always results. At the same time the development of emergency medicine out of military medicine (institutionalized in the French context by the establishment of a national service known as the Service d'Aide Médicale Urgente [SAMU] in the 1960s), along with the routinization of air travel and rapid transport, extended the scope of potential action.<sup>10</sup> Suffering, whether near or far, could now elicit expectations of response.

MSF itself appeared at the end of 1971 in Paris, when journalists from a medical publication helped bring together a small group of doctors who had volunteered for the French Red Cross in the Biafran conflict in Nigeria and a similar group with a background in Bangladesh. Troubled by their experience of ineffectual and constrained relief work, they sought to establish an independent alternative to the Red Cross, unfettered by the constraints of national and international mandates, and hence free to be daring (and, some hoped, outspoken). At the outset MSF existed largely on paper, but by the end of the decade it had mounted a number of short interventions into areas afflicted by natural disasters and war as well as achieving greater prominence within France by launching a publicity campaign around the slogan, "Two billion people in their waiting room."<sup>11</sup> The ambition of aid now stood grandly global.

Although the ethos of MSF proved thoroughly antiestablishmentarian, and a number of its prominent members had backgrounds of political activism, the organization presented itself as an alternative to both anticolonial and Cold War loyalties. Rejecting all justification for civilian suffering, it would oppose the French intellectual romance of "third worldism" and denounce leftist regimes that proved inhumane. Amid the disillusionment of post-1968 France and the evident excesses of state socialism, MSF offered the prospect of ethical action to defend the life and well-being of ordinary people. A "rebellious" form of humanitarianism would be both nonaligned and thoroughly engaged through the practice of medicine. Bernard Kouchner, the charismatic one-time student activist instrumental in the group's founding, could thus discover both himself and the third world as a physician, practicing "without illusion." Rony Brauman, his most prominent successor within the organization, could similarly trade Maoism for clinical work in Benin and Thailand, redirecting his militant sensibilities from the streets to refugee camps.<sup>12</sup>

Even as MSF found its calling, the geopolitics of the Cold War struggle shifted increasingly in the direction of proxy wars after the end of U.S. involvement in Vietnam.<sup>13</sup> In the paralyzing shadow of nuclear apocalypse, irregular armies fought savagely in settings like Angola, Afghanistan, and Mozambique during the 1970s and 1980s. These confrontations only enhanced the international flow of conventional weaponry, fueling ancillary conflicts and alliances, while prompting the displacement of civilian populations. The number of refugees worldwide grew exponentially during these decades, providing a surplus of humanitarian need well beyond the capacity of UN agencies. A nongovernmental group with a global vision thus had plenty of opportunity to offer medical assistance.

Three early engagements were particularly formative for MSF. First, the exodus of boat people from Vietnam, combined with mass suffering in Cambodia under the Khmer Rouge, set the ground for an ethics of action that prioritized "humanity" over political ideology. As longtime opponents Raymond Aron and Jean Paul Sartre marched together in Paris, young MSF volunteers worked in refugee camps in Thailand, becoming radicalized through encounters with suffering rather than revolution. Even though the group would experience loud squabbles and schisms alongside growth, the different factions continued to share this common perspective. Next, the Soviet invasion of Afghanistan only further confirmed the French

humanitarian break with socialism. MSF undertook clandestine missions in the Afghan mountains, experiencing its own romance of third world solidarity alongside the mujahideen. Finally, during the mid-1980s famine in Ethiopia, the original French branch of MSF found itself evicted after denouncing the Derg regime's policy of forced resettlement. The episode, which resonated amid the televised glamour of *Live Aid*, established the group's outspoken reputation and willingness to oppose all political orders that produced suffering. At the same time, MSF faced criticism of its own, suggesting that it was an amateurish organization, long on hot air but short on actual capacity. The charges stung enough that MSF redoubled its efforts to improve its technical abilities.<sup>14</sup> By the end of the decade it had in place both a new logistics system and an epidemiological subsidiary. Soon it would be known not only for taking oppositional positions, but also for fulfilling its rhetorical claims to speed and efficiency.

### Limits and Anticipation in Uganda, 1980–1986

What would effective humanitarian action actually entail at a material level? To illustrate the technical problems involved, I will focus briefly on another case from the early 1980s, that of Uganda. Uganda was never a central front in the Cold War, though its post-independence turmoil had deeper colonial and regional roots behind the rise and fall of Idi Amin.<sup>15</sup> Nonetheless, the Ugandan period of crisis occurred at a transitional moment, and holds the comparative advantage of combining a less mythic profile with widely recognized deficiencies.

At the beginning of the 1980s, the Karamoja and West Nile regions of the country experienced extreme famine. The crisis in Karamoja, an arid area bordering Kenya and peopled largely by seminomadic, photogenic cattle herders with a fierce reputation, received a good deal of media attention, and a number of aid agencies responded to the images of starvation by rushing teams and materials into the field. Amid the greater aftermath of the fall of Idi Amin, the general situation in Uganda was, in the words of a UNICEF official of the time, "at best chaotic," and the relief operation quickly encountered a host of problems. Subsequent analysis by a group of scholars and humanitarian workers identified a long list of specific setbacks as well as some general issues: lack of coordination and turf struggles

between different organizations (and even branches of the same organization), a greater landscape of need extending beyond the targeted recipients of aid, and the "disaster within a disaster" of food supply and the greater infrastructure of logistics required for its movement and distribution.<sup>16</sup> A former representative of another UN agency observed that many of the people who had been alongside her in Uganda had participated in major relief operations elsewhere over the previous decade, and their discussions identified a repeated pattern of failure: "One of the recurring themes was that time and time again the same problem arose in every disaster situation: logistics."<sup>17</sup> She imagined creating a "strike force" of reservists within the UN system, a cadre of experienced professionals with access to stockpiles of equipment, who would be ready to leave at a moment's notice. The UNICEF official similarly concluded that responses like this must be "quick, rational and experienced" rather than "prolonged, irrational and nonexperienced," but doubted that his own agency, created for long-term activities, would be suitable for the task: "To use a metaphor, such a rapid shift in activities and allocation would amount to demanding a shipping company to turn into an airline overnight."<sup>18</sup>

Included among the many organizations briefly present in both the Karamoja and West Nile crises was MSF. At the time it was not yet ten years old and still a relatively minor, if flamboyant, entity in the world of humanitarian affairs. The missions to Uganda were its first in a famine zone, and not a particular success. As a lead participant dryly noted in an interview with me years later, "in that era we improvised; later we became more efficient."<sup>19</sup> The group's bulletin report at the time summed up the general situation with one graphic image: a bullet-ridden bulldozer sitting useless, its brand new tires stolen by raiders to make sandals.<sup>20</sup> Within a decade, however, MSF had grown into a large and complex organization, fully capable of both technical innovation and logistical efficiency in crisis settings. Its professional system of logistics guidelines and kits embodied the UN administrator's vision of a global humanitarian strike force.

Indeed, MSF already saw its mission in something like those terms. At the time of the Karamoja famine, it had just survived a schism in which a number of its original members, including the future French political figure Bernard Kouchner, lost a power struggle and subsequently established another group known as Médecins du Monde (Doctors of the World, or MDM). There are a number of possible ways

to understand this split in terms of personalities and political differences. But the stated ambition of those who now controlled MSF was to make it a more effective organization, favoring greater pragmatism over symbolic protest.<sup>21</sup> This ambition was to prove remarkably productive. Not only would MSF grow from its French base into an international movement, but it would also establish a technical template for expanding humanitarian operations at the end of the Cold War.<sup>22</sup>

Before proceeding to a description and analysis of MSF's technical florescence, however, I will first introduce an additional layer of background. To understand the nature of the apparatus MSF eventually set in place, as well as its spatial significance and temporal politics, it is helpful to return to the Second World War, and the advent of large-scale aerial warfare and the landscape of destruction it produced. Humanitarian logistics has many obvious lines of descent, from military supply lines to industrial food distribution; but the need for a portable medical infrastructure became critically visible amid the rubble of European cities during the 1940s. A key antecedent for this third world story thus appears in the fading centers of empire, newly pulverized by waves of bombers.

### A Prototype: *Materia Medica Minimalis*

Amid the devastation of the Second World War, the newly formed Joint Relief Commission of the International Red Cross (JRCIRC) faced a significant technical problem. Created to coordinate the efforts of the Red Cross's mosaic of national societies with those of the Swiss-based International Commission of the Red Cross (ICRC), the commission found itself at a loss in the face of massive aerial bombardments that left civilian populations in urban centers medically bereft:

"There is a total lack of medical supplies here." It was by a summary appeal of this kind that the Joint Relief Commission of the International Red Cross was asked in the beginning of its activities to send medical relief to a capital which had just undergone an air raid. Such a request, put so tersely, left us somewhat nonplussed. What should be sent? What medicaments would be required by a large city which had been devastated by an air attack? What quantity of each medicament would be required? No statistics were there to enlighten us, no document on the problem was available. We had to improvise.<sup>23</sup>

How best to provision a landscape of total devastation? Most urgently, what medications to provide when the entire health infrastructure was knocked out? The commission first surveyed the national Red Cross societies about the medical requirements of their respective countries. The response was, however, "surprisingly diverse, one might almost say, disconcerting." No simple, uniform agreement could be found. Therefore the commission took it upon itself to quickly marshal medical experience and science, in an effort to determine what was "absolutely indispensable to ensure medical care and to meet the emergency needs of a population which has been deprived of food and medical supplies."<sup>24</sup> Newly sensitized to local culture, the commission also took note of the fact that national preferences and therapeutics both varied across the European continent. The Red Cross, then, needed a document that would be simultaneously encompassing and precise, allowing for regional differences and yet conducive to medical and pharmacological accuracy.

The condensed result was entitled *Materia Medica Minimalis* (MMM). Produced in Latin, it was subsequently published in French, German, and English editions. The inherited tongue of Rome served as a convenient means of scientific expression, the collective authors of the text explained, being "a language which does not confine to any frontiers and which unites all minds that have grown up in the culture of the classic world."<sup>25</sup> Balancing this scholarly touch with a quartermaster's eye for practical detail, the authors offered estimated quantities necessary to treat a "population unit" of one hundred thousand persons for six months. They based their estimates on the consumption of medicaments in Switzerland, recognizing that these figures may prove controversial and require alterations. Given the urgent need to be immediately useful, however, they ventured into the messy realm of calculation. Recognizing that "circumstances and difficulties" may affect actual delivery, they further divided the MMM into two categories, the first of which should receive the greatest priority. The list itself included only the pharmaceutical end of medical supplies; bandages, cotton and surgical instruments were to be handled in separate consignments.<sup>26</sup> Nonetheless, its content lived up to its name in defining a baseline state of medical infrastructure.

The MMM marks a catalytic moment in humanitarian thinking. Although the Red Cross's international meetings had addressed a variety of training activities

related to medical techniques in the past, with the MMM it was now constructing a mobile template for crisis response around a principle of flexible standardization. The final report of the commission composed after the war mused that "[t]his work, which was called into existence by the needs of the moment, possessed a usefulness which it seemed would outlast the war period," an assessment that would prove prophetic.<sup>27</sup> For although the MMM may not have directly become an icon of relief work, its conceptual descendents proliferated in the coming decades. As the zone of crisis recognition shifted beyond Europe, the reconstruction of a minimal biomedical infrastructure emerged as a central problem for all manner of disasters in resource-poor settings. Effective medical assistance required basic equipment and guidelines, preferably prepared in advance.

### Standardization: The Moment of the Kit

When MSF reoriented its logistics system in the middle of the 1980s, it focused on creating modular, standardized kits. The concept of the kit itself has a long military and medical history. The *Oxford English Dictionary* suggests that by the late eighteenth century the English term had expanded from a wooden vessel or container to indicate the collection of articles in a soldier's bag. An equipment case or chest had long been the steady companion of naval surgeons and other mobile healers, and by the early twentieth century groups like the Red Cross assembled first aid kits. MSF's variant would be more comprehensive and ambitious: collections of supplies designed for a particular need and preassembled into a combined package. These packages could then be stockpiled and shipped rapidly to any emergency destination in the world. As an MSF catalogue later summarized the approach: "A kit contains the whole of the needed equipment for filling a given function. Intended for emergency contexts, it is ready to be delivered within a very short time frame."<sup>28</sup> Thus the diffuse problem of acquisition was effectively translated into a concentrated one of transportation, more easily solved from a central office. Essential materials no longer had to be hastily assembled anew in response to every crisis, or uncertainly negotiated on the ground amid fluctuating availability, quality, and price. Moreover, by preassembling materials with a checklist, the kit could function as a form of materialized memory, whereby previous experience extends directly

into every new setting without having to be actively recalled. For an organization built around both crisis settings and a constantly shifting workforce of volunteers and temporary employees, such continuity would prove especially valuable.<sup>29</sup>

The kit system was the product of a small number of early MSF masterminds, now receding into organizational legend. Its immediate origin lay in the experience of a French pharmacist responsible for Cambodian refugee camps on the border of Thailand in 1980. Guerilla raids from there led to periodic Vietnamese bombing runs, whereupon the Thai army would seal the camps, preventing access for several days at a time. In due course the MSF teams learned to assemble essential equipment until they had the process down to a system. As the main protagonist recalled, this evolved less from any grand design than the banal practice of packing a bag for a series of weekend trips, and translating the experience into anticipatory habit:

The kit, it's nothing more than someone who's leaving for the weekend [would take]...who needs his backpack with something to drink, something to eat, something to put on his feet if they get sore. He needs all that. So, how does he do it? The first time he imagines what will happen, and assembles his bag with that imagination. And then after that first experience, he sees that there are things that didn't amount to much and others he was missing. And then after the second, third time, he'll finally have a perfect bundle and he prepares it before the weekend, checks it, and then leaves and it works.<sup>30</sup>

The head of that mission went on to take charge of MSF-France's logistics operation, and, together with a close associate, applied the principle learned in Thailand to analogous problems elsewhere.

A central health concern for displaced people living in crowded conditions is cholera. Anticipating this problem step by step in detail, the MSF logistics team developed a general kit:

We knew that we were going to have a cholera epidemic there. OK, we get together people who have already worked on cholera, when we get there, there's nothing of what we need to put in place for a cholera epidemic. So, we need a cholera camp, that is to say an isolation tent.... If there are thousands of people, that's too many, so we'll create a unit to treat 500 patients.... What will be necessary? Some tents; OK, how many tents? OK, we'll need a hundred 50-square-meter tents. We'll have

perfusions because we're going to give infusions and on average there are those who have 2-3 liters and then there are those who have up to 20 liters. So we'll say 10 liters on average, OK. Out of 500 patients there are how many who will receive 10 liters; OK, there will be a hundred...when we finish planning, voilà, we have the kit. We try to really make this kit, in order to see how it is, how it fits into boxes, how much it weighs. We physically create this kit, and then we use it in the next cholera epidemic...and then an evaluation. And then we revise it.... It's like that that the kits advanced, succeeded, not so much because of the notion of the kit, which is really something supremely banal [*archi-banal*], but following many years where we imagined the kits and evaluated them in numerous situations. And then we divided the operations up like sausages [*saucissonné*], we cut, we sliced. That is to say, there's a cholera epidemic, a measles epidemic, put in place in a dispensary of a refugee camp. In doing all that, all the units like that, then when it's necessary to mount an operation we have all our equipment.<sup>31</sup>

Through this combination of organic practice and assembly-line routine, MSF created a more global, component variation of the Red Cross MMM. By the latter part of the decade the concept of the kit became central to the group's emergency work. MSF-France also established a logistics depot in 1986 and worked to standardize its supply chain across the board, constantly adjusting and refining its techniques on the basis of experience.

To provide a sense of the level of detail involved, I will briefly examine Kit 001, designed for refugee camps, although capable of being modified for either rural or urban displaced populations. Built on a unit of 625 treatments, it weighs in at just over 6,000 kilograms and includes an array of drugs (e.g., 6,500 sachets of oral rehydration salts and 10,000 tablets of the broad-spectrum antibiotic doxycycline) as well as materials for taking patient samples (e.g., dissecting forceps and a permanent black marker) and performing basic medical procedures (e.g., surgical gloves, tunics, trousers, and boots of several sizes, ten 500g rolls of cotton wool, 25 arm splints, and catheters and bandages galore). But the kit does not stop there; it also features support items such as well over a hundred buckets and a hundred disposable razors, not to mention logistical articles like notebooks, pens, wire ties, and even two staplers. Simply put, the degree of preparedness contained within this collection of trunks and boxes would put most Boy Scouts to shame.



Alongside the kit system MSF also created a system of guidelines: short, informative instruction books detailing responses to practical problems, and available in several major international languages (English, French, Spanish, some Russian and Arabic). The core subject matter centers on clinical and engineering dilemmas volunteers might encounter in the field, such as how best to conduct minor surgery in a war zone or how to set up a simple water sanitation system. The guideline system acknowledges that even volunteers with established general expertise may possess inadequate technical background for unfamiliar conditions; neither a nurse from Lille nor a logistician from Toronto, for example, are likely to have much training in combating cholera or building a pit latrine.

While the MSF's different sections pursue slightly different logistics strategies, the kit system has greatly expanded within the overall organization. It has also influenced other groups like the ICRC, where several former MSF figures ended up working.<sup>32</sup> Kits are now available for all manner of eventualities. The Toyota Land Cruiser, the workhorse vehicle for MSF like for many other NGOs, comes as a kit (modified for either warm or cold climates); so too does a collection of stickers and flags to mark its affiliation. Members of a mission can order an "emergency library kit" and request items from a field library list that includes such assorted titles as "How to Look after a Refrigerator," "Human Rights in a Nutshell," and "Blood Transfusion in Remote Areas."<sup>33</sup> Governing the overall design are principles of quality, efficiency, and simplicity of maintenance. In some domains a spirit of standardization dictates a particular brand of product (for example, MSF only orders Toyota vehicles, greatly simplifying its parts list), in others a desire for flexibility of procurement allows substitution of any generic equivalent (most articles are listed as "open" rather than brand specific). MSF also has a long tradition of improvisation, and modifying the designs of others to fit its needs, usually working to simplify systems and reduce their cost.<sup>34</sup>

### Analysis: Evaluating the Equipment

The first point I wish to stress analytically is that MSF's kit system represents a self-consciously *global* system, mobile and adaptable to "limited-resource environments" worldwide. While parts of it may be flexible in application, the result is

not at all fluid in the sense of flowing around community involvement.<sup>35</sup> Indeed, the kit system is the exact opposite of local knowledge in the traditional sense of geographic and cultural specificity in place. Rather, it represents a mobile, transitional variety of limited intervention, modifying and partially reconstructing a local environment around specific artifacts and a set script. While in practice it may require considerable negotiation to enact (in keeping with actor network theory), its very concept strives to streamline that potential negotiation through provisions that reconstitute a minimal operating environment. The cold chain system used in vaccine distribution serves as a useful general analog in this regard.<sup>36</sup> Just as a cold chain extends the essential environment of a vaccine alongside the vaccine itself with different forms of refrigeration, so too the kit system extends the essential environment for biomedicine into the landscape of a disaster. To insure reliability and quality, MSF is willing to ship almost anything anywhere during an emergency.

Deeply invested in a practical logic of standards, the kit system reflects something of Bruno Latour's analysis of circulating inscriptions as "immutable mobiles."<sup>37</sup> MSF's constellation of guidelines and tool kits collect and distill local clinical knowledge into a portable map of frontline medicine. Developed and refined through practice, they connect one outbreak and crisis to another. In this sense the cholera epidemic in Thailand travels to stabilize the cholera epidemic in the Congo. Together, as a vast chain, the kit assemblage standardizes disaster through responding to it worldwide. Such a characterization reveals the degree to which biomedical knowledge and practice depends on infrastructure, and the background work necessary to translate it into a new setting.

Second, I would like to emphasize that the kit system is not the product of either corporate or state need. Rather, it stems from a humanitarian focus on the moral imperative of responding to immediate human suffering. To be sure, the greater logic of standardization has a long history in both military and business settings. Moreover, MSF's tool chests draw from commercial commodities, and its administration maintains plenty of balance sheets. However, the central motivation for its decisions derives from valuing human life rather than profit.<sup>38</sup> And although MSF may find itself in a position of temporary governance relative to a population in crisis, that governance remains ever partial and impermanent and it refuses the

responsibility of rule. Thus, although I have initially cast the emergence of the kit system somewhat along the lines of Fordist production, with factory-like processes of centralized control, that analytic comparison should never lose sight of the fact that the kits were designed to respond to situations of *crisis*, social rupture where the goal is temporary stabilization. Moreover, standardization here was never an end unto itself, nor part of an effort to reshape or capture economic terrain.

The defining role of crisis has grown all the more clear as MSF activities extend beyond emergency interventions into an array of other projects targeting specific diseases over a longer term, advocating policy positions and even facilitating pharmaceutical research and production. In these contexts the logic of the kit no longer holds sway, and missions both purchase a greater variety of materials from local sources and place orders for items in bulk rather than in prepackaged assemblies. At the same time MSF's kit system has recently experienced alterations of a more "post-Fordist" nature, with outsourcing and flexibility playing an increased role in their production.<sup>39</sup> Once beyond crisis settings the group's missions reenter a larger world of exchange and circulation, and here autonomous standardization melts away.

To illustrate this last point I return again to Uganda, and the post-Cold War present. Two decades after the initial forays there, several sections of MSF ran a variety of programs in the country. Among them was a workshop to maintain and repair vehicles, and an ambitious project to provide antiretroviral medications for an expanding number of AIDS patients, both of which I visited in 2003 and 2004.<sup>40</sup> Located in Kampala, the workshop was the domain of a veteran French logistician, a taciturn but dedicated man who nursed it as a longer-term venture amid MSF's many short-lived interventions. In addition to servicing the vehicles of MSF-France and MSF-Switzerland in the country, it also cared for some in less stable neighbors like Sudan and the Congo, where parts were unavailable, and undertook contract work for other NGOs. Well equipped with standards, catalogues, and a computerized ordering system connecting it to MSF's depot, the workshop exemplified stabilized humanitarian infrastructure. At the same time, however, its continued existence was under continual threat, not only from the turnover rate of MSF's fluid administration and their varying visions, but also the pressures of competing interests on the part of the local mechanics who labored there. Once trained, they

would often leave for a better paying position, and even when on the job they did not always work with the fervor the director expected. As he noted wryly, they were, after all, driven less by humanitarian ideals than a search for their livelihoods. The workshop also faced potential competition from commercial garages that threatened to undercut it, and the impatience of field personnel in project sites who wanted to circumvent central control and make purchases directly. "It's a constant battle," he acknowledged, especially since some parts could be found in local markets more cheaply, and quality was improving. Although a firm believer in the value of the kit system, and the advantages of using standard, well-selected materials, he emphasized that MSF's logistics network was really designed for crisis settings. A stable entity like the garage regularly interacted with the local economy, each small transaction pulling it away from the institutional orbit.

Similarly, efforts to address specific diseases and broader health inequities altered MSF's technical circulatory system, exposing its limits in the process. The project in the northern town of Arua was part of an ambitious, worldwide foray into HIV/AIDS medicine. After years of resisting extensive involvement with the disease, the organization threw itself into the movement to demonstrate the feasibility of treating poor people in poor places, rolling out a wave of antiretroviral projects in 2001. MSF added Uganda to the list a year later, locating the project in a region where it had extensive prior experience. By 2004, the Arua clinic served over one thousand patients, and was set to expand further. In one sense the AIDS clinic represented a metakit. By combining experience from multiple locations, MSF could create a mobile set of treatment protocols, less dependent on full-scale laboratory support and adapted to shifting personnel. In this way no project would be open to the charge of representing only an anomaly, since the larger chain was clearly replicable. In another sense, however, the AIDS clinic revealed the limits of the kit approach. MSF's initial commitment was to five years of treatment. The therapy provided, however, would need to last a lifetime, since the drugs produced temporary remission rather than a cure. MSF's approach depended on imported materials, personnel, and funding, none easily substitutable in a provincial town. The team worried about these issues, even as they worked frenetically to expand patient rolls in the face of tremendous demand. "It's not an emergency project, but most days we work at this speed," the mission head told me, wondering how it

would all keep going. At the same time, as patients improved they began to refocus on the hardships of their everyday life, and seek support and counsel well beyond medical therapy. Finding jobs and forging new relationships were matters of keen interest for members of patient support groups I encountered. Although sympathetic, MSF was poorly equipped to respond to matters of poverty, unemployment, and family expectations. The translation of treatment from rich to poor countries could not alter the structural imbalance between contexts in economic terms. That particular crisis exceeded the boundaries of a shipping container.

MSF's growing involvement in disease-specific work also reconfigured its form of nonaligned humanitarian engagement. Concerned about drug availability and pricing, not only for AIDS, but also less profitable conditions like sleeping sickness, the organization began aggressive advocacy on the issue, and even created a spin-off nonprofit venture for pharmaceutical research and development. This "Campaign for Access to Essential Medicines" produced its own wave of documentation related to patents and trade agreements, featuring titles like "What to Watch for in Free Trade Agreements with the United States."<sup>41</sup> Inscribing MSF's field experience into political and legal struggles around health policy, the effort highlighted everyday implications of economic inequity, not just exceptional episodes of political failure. Nonetheless, the organization retained its historical focus on health and medical action, even while embracing an expanded sense of crisis.

### The Suffering Human Amid Security

*"In terms of the destruction of human life, what difference is there  
between the wartime bombing of a civilian population  
and the distribution of ineffective medicines during a pandemic  
that is killing millions of people?"*

—Jean-Hervé Bradol, President MSF–France

What then to make of humanitarian logistics amid contemporary problems of biosecurity? The field of humanitarian concern is clearly focused on a fluid and expansive conception of vital need, spread beyond the citizen to the figure of the human. To respond to widespread instances of suffering, humanitarian actors

have borrowed central techniques from military logistics, as well as commercial supply lines (such as refrigeration cold chains) to achieve mobility through the modular kit. The kit solves the problem of missing infrastructure by transporting a skeletal operating environment for biomedical operation. But it provides only a temporary patch, in the form of minimal infrastructure dislocated from another setting. To maintain such a graft is expensive in every sense. The expanding scope of humanitarian operations reveals a further limit of this modular approach. What works well for rapid forms of epidemic such as cholera, might not work as well for a more sustained medical condition such as HIV/AIDS, let alone psychological trauma. And once any urgent threat has passed, daily struggles of poverty come back into view.

Over the final decades of the twentieth century, humanitarian operations have become a common, indeed normative, part of international affairs. New agencies mushroomed within and around the UN and other international bodies, while NGOs proliferated to champion a range of causes. At the same time personnel involved in aid projects professionalized, following career trajectories that span multiple governmental and nongovernmental agencies, and formal degree programs at universities and specialized institutes.<sup>42</sup> With the circulation of personnel and ideas, practices and technologies standardized. Kits are now common among most organizations that engage in emergency response, and such work has become an increasingly visible part of global health concerns.<sup>43</sup> Although embodying the technical principle of modular mobility, with all attendant possibilities and limitations, the kit is ultimately an open container. Like humanitarianism itself, it remains available for appropriation into a wide range of projects related to global health and well beyond.<sup>44</sup>

MSF's sense of endangered populations is generally broader than that of state institutions, and is positioned as an ethical response to political failure rather than as a political concern for security. That said, just as military and humanitarian traditions intertwine, areas of common concern certainly exist. Although frequently caustic about inflated fears surrounding emerging diseases compared the actual threats of longstanding ones, MSF actively participates in responding to them. When an outbreak of Ebola threatened Gulu, Uganda, in 2000, MSF specialists joined with counterparts from WHO, CDC, and other international and local teams

to combat it. Such threats of sudden outbreak fit readily into the humanitarian tradition of vital mobility. The group's logistics catalogue includes a kit for Ebola (also deployed for Marburg in Angola in 2005), and it produced a SARS kit based on its experiences in Vietnam in 2003. Moreover, the wide publicity surrounding these activities also contributes to the organization's medical reputation.<sup>45</sup>

Nonetheless, MSF worries more about mundane threats well within the capacity of biomedicine to treat. Members of the organization like to point out that most people die not from exotic causes, but rather from "stupid things," effectively condemned by a lack of infrastructure and care.<sup>46</sup> The humanitarian project from this point of view remains largely a minimalist endeavor, focused on fostering existence rather than enhancement. Its biopolitics are those of survival. This minimalism, however, offers no clearly defined end. In an essay outlining biosecurity as a problem area for anthropology, Stephen Collier, Andrew Lakoff, and Paul Rabinow echo Foucault in noting that both health and security lack internal principles of limitation, and thus pose inflationary demands.<sup>47</sup> One can never be too healthy, or too secure. Positioned at the intersection of those twin concerns, and facing a species-level landscape of need, humanitarianism offers no exception to this rule. Within a value of life one can never have too much survival.

# NOTES

- 1 See, for example, Luc Boltanski, *Distant Suffering: Morality, Media and Politics* (Cambridge: Cambridge University Press, 1999); and Craig Calhoun, "A World of Emergencies: Fear, Intervention and the Limits of Cosmopolitan Order," *Canadian Review of Sociology and Anthropology* 41, no. 4 (2004): 373-95.
- 2 Stephen J. Collier and Andrew Lakoff, "Vital Systems Security," Laboratory for the Anthropology of the Contemporary Discussion Paper (2006), [http://anthropos-lab.net/wp/publications/2007/01/collier\\_vital-systems.pdf](http://anthropos-lab.net/wp/publications/2007/01/collier_vital-systems.pdf) (accessed August 1, 2007).
- 3 Although I present it here as a single entity, MSF is actually an assemblage of semiautonomous national sections. For more on the group's general history and profile, see Dan Bortolotti, *Hope In Hell: Inside the World of Doctors Without Borders* (Buffalo, NY: Firefly Books, 2004); Renée Fox, "Medical Humanitarianism and Human Rights: Reflections on Doctors without Borders and Doctors of the World," *Social Science and Medicine* 41, no. 12 (1995): 1607-16; and especially Anne Vallaes, *Médecins sans frontières: La biographie* (Paris: Fayard, 2004). For elements of this project, see Peter Redfield, "Doctors, Borders and Life in Crisis," *Cultural Anthropology* 20, no. 3 (August 2005): 328-61; and "A Less Modest Witness: Collective Advocacy and Motivated Truth of a Medical Humanitarian Movement," *American Ethnologist* 33, no. 1 (2006): 3-26.
- 4 "Every November on its International Day for Populations in Danger, Médecins Sans Frontières tries to draw the attention of public opinion to the ten most urgent humanitarian crises in the world." Jacques de Milliano, "Foreword," in *Life, Death and Aid: The Médecins Sans Frontières Report on World Crisis Intervention*, ed. François Jean (New York: Routledge, 1993), vii. "The 'danger' mentioned in the book's title is the danger of death, the very thing we struggle with on a daily basis." MSF, "Introduction," in François Jean, ed., *Populations in Danger* (London: John Libbey, 1992), 4.
- 5 Fabrice Weissman, ed., *In the Shadow of "Just Wars": Violence, Politics and Humanitarian Action* (Ithaca, NY: Cornell University Press, 2004).
- 6 See Michel Foucault, *Security, Territory, Population: Lectures at the Collège de France, 1977-78* (New York: Palgrave Macmillan, 2007). Although MSF clearly occupies a different era, and resists political positioning beyond humanitarianism, it shares general concerns that Foucault outlines for the emergence of European liberalism by conceiving of human groups as populations in relation to milieu and "the nature of things." Thus while not sovereign in any conventional sense, the organization participates in government, or more precisely "nongovernmental government," by addressing the welfare of ordinary people. See Didier Fassin, "Humanitarianism: A Nongovernmental Government," in *Nongovernmental Politics*, ed. Michel Feher, Gaëlle Krikorian, and Yates McKee (New York: Zone Books, 2007), 149-59.
- 7 Rony Brauman, *Humanitaire, le dilemme* (Paris: Editions Textuel, 1996), 76; and David Rieff, *A Bed for the Night: Humanitarianism in Crisis* (New York: Simon and Schuster, 2002), 75, 86, 166. These authors caustically suggest how little protection this would offer. The apotheosis of the Holocaust as the extreme of evil may well have occurred a generation later in the 1960s; see Paul Rabinow, "Midst Anthropology's Problems," *Cultural Anthropology* 17,

- no. 2 (2002): 135–49; and Peter Novick, *The Holocaust in American Life* (Boston: Houghton Mifflin, 1999).
- 8 Rieff, *A Bed for the Night*; and Alex de Waal, *Famine Crimes: Politics and the Disaster Relief Industry in Africa* (Oxford: James Currey, 1997).
- 9 Suffering in the colonies was primarily a matter for missionaries or the civil service of empires, and colonial warfare usually operated by different rules. For more on colonial medicine in Africa, see Rita Headrick, *Colonialism, Health and Illness in French Equatorial Africa, 1885–1935*, ed. Daniel Headrick (Atlanta: African Studies Association Press, 1994); and Megan Vaughn, *Curing Their Ills: Colonial Power and African Illness* (Stanford, CA: Stanford University Press, 1991). For a suggestion of the complex colonial history surrounding the term civil society, see John L. Comaroff and Jean Comaroff, eds., *Civil Society and the Political Imagination in Africa: Critical Perspectives* (Chicago: University of Chicago Press, 1999); and for a collection on military logistics, see John A. Lynn, ed., *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present* (Boulder, CO: Westview Press, 1993). While the Red Cross focused on civilizing conflicts between “civilized” countries, it helped transform both military medicine and international law. See David Forsythe, *The Humanitarians: The International Committee of the Red Cross* (Cambridge: Cambridge University Press, 2005); and John Hutchinson, *Champions of Charity: War and the Rise of the Red Cross* (Boulder, CO: Westview Press, 1996).
- 10 MSF–France’s former leader and long-time philosopher, Rony Brauman, frequently underscores the tie to SAMU, travel, and media technologies when recounting MSF’s history, including in my own interview with him; see Rony Brauman, *Penser dans l’urgence: Parcours critique d’un humanitaire* (Paris: Seuil, 2006), 58; also Joelle Tanguy, “The Médecins Sans Frontières Experience,” in *Framework for Survival: Health, Human Rights and Humanitarian Assistance in Conflicts and Disasters*, ed. Kevin M. Cahill (New York: Routledge, 1999), 226–44; and an online variant posted at <http://www.doctorswithoutborders.org/volunteer/field/themsfexperience.cfm> (accessed July 31, 2007).
- 11 “Dans leur salle d’attente deux milliards d’hommes.” The publicity campaign is outlined in *Bulletin Médecins Sans Frontières* 6 (1977); see Vallaëys, *Médecins sans frontières*, for a more complete history of the group’s origins and early squabbles.
- 12 Bernard Kouchner, *Le malheur des autres* (Paris: Editions Odile Jacob, 1991), 327; Rony Brauman, *Penser dans l’urgence*, 39–70. Following a power struggle in 1979, Kouchner left MSF to found Médecins du Monde (Doctors of the World), and later emerged as a significant political figure in France. For a caustic assessment of his trajectory as a generational icon, see Kristin Ross, *May ‘68 and Its Afterlives* (Chicago: University of Chicago Press, 2002), esp. 147–69. Although opposed on such matters as a “right to interference” and state humanitarianism, Kouchner and Brauman both define their ethics of engagement around a response to suffering, understood in medical terms. See Tim Allen and David Styan, “A Right to Interfere? Bernard Kouchner and the New Humanitarianism,” *Journal of International Development* 12 (2000): 825–42; and Bertrand Talthe, “Reinventing (French) Universalism: Religion, Humanitarianism and the ‘French Doctors,’” *Modern and Contemporary France* 12, no. 2 (2004): 147–58.
- 13 For more on proxy wars and their significance during the post-Vietnam period, see Odd Arne Westad, *The Global Cold War* (Cambridge: Cambridge University Press, 2007); and Mahmood Mamdani, *Good Muslim, Bad Muslim: America, the Cold War, and the Roots of Terror* (New York: Pantheon, 2004).
- 14 Vallaëys, *Médecins sans frontières*, and de Waal, *Famine Crimes*.
- 15 Tim Allen, *Trial Justice: The International Court and the Lord’s Resistance Army* (London: Zed Books, 2006); and Mark Leopold, *Inside West Nile: Violence, History and Representation on an African Frontier* (Santa Fe, NM: School of American Research Press, 2005).
- 16 See the collected papers in Cole P. Dodge and Paul D. Wiebe, eds., *Crisis in Uganda: The Breakdown of Health Services* (Oxford: Pergamon Press, 2005). Karl-Eric Knutsson uses the evocative phrases “at best chaotic” and “disaster within a disaster” in his chapter, “Preparedness for Disaster Operations,” in Dodge and Wiebe, *Crisis in Uganda*, 183–89. As a number of the contributors note, the Karamoja famine could be traced not only to drought, but also to a background of social factors, including colonial land management policies in the region, shifting practices of cattle raising, and increased availability of automatic weapons that altered the balance of cattle raids.
- 17 Melissa Well, “The Relief Operation in Karamoja: What Was Learned and What Needs Improvement,” in Dodge and Wiebe, *Crisis in Uganda*, 177–82. The model for Well’s strike force was a Swedish government team known as the Swedish Special Unit, whose efficient work in the West Nile region received accolades from several contributors to the volume.
- 18 Knutsson, “Preparedness for Disaster Operations,” 187–88.
- 19 Interview conducted in Paris by author; field notes, June 2003.
- 20 Rony Brauman, “Karamoja: les difficultés d’un sauvetage,” *Bulletin d’information de Médecins Sans Frontières* 7 (1980): 9–12. Brauman, who would go on to become the longtime leader of MSF–France and one of the forces behind its technical improvement, recalled the chaos of the Ugandan action relative to later interventions in an interview in June 2003. Unlike Oxfam or Action Contre la Faim (Action Against Hunger, or ACF), MSF has never been centrally devoted to nutritional issues. Nonetheless, famine relief has played a significant role in its history, most notably in Ethiopia in 1985.
- 21 Fox, “Medical Humanitarianism”; Tanguy, “The Médecins Sans Frontières Experience”; and Vallaëys, *Médecins sans frontières*.
- 22 While there are now nineteen national sections of the larger movement, the central five directing operations remain European: MSF–France (founded 1971), MSF–Belgium (1980), MSF–Switzerland (1980), MSF–Holland (1984), and MSF–Spain (1986). For the purposes of this brief essay I am treating MSF as a single entity, since the sections share a general logistical system if not all particulars. However, the different sections remain effectively autonomous, even if linked by flows of funds and personnel as well as a charter and a loose international association. At times they have experienced moments of extreme acrimony and near civil war, particularly between the largest three (France, Belgium, and Holland).
- 23 Joint Relief Commission of the International Red Cross, *Materia Medica Minimalis* (Geneva: International Committee of the Red Cross and League of Red Cross Societies, 1944), 1.
- 24 Ibid.
- 25 Ibid.
- 26 Ibid., ii.

- 27 Joint Relief Commission of the International Red Cross, *Report of the Joint Relief Commission of the International Red Cross* (Geneva: ICRC and LRCS, 1948), 245.
- 28 This and all descriptions refer to the 2003 English edition of the MSF catalogue. The current version is available online at <http://www.msfsupply.be/UK/Frame/FramesetUK.htm> or [http://www.msflogistique.org/public/pub\\_an/pub\\_an.htm](http://www.msflogistique.org/public/pub_an/pub_an.htm) (both accessed July 31, 2007).
- 29 Here I should also note that while MSF may remain an association of doctors in nominal terms, only 25% of its overall expatriate volunteers in 2001–2002 fit that category, with another 32% being nurses or paramedical and 43% nonmedical. In addition to the 1,605 field posts that cycle, the organization counted 13,320 “national” staff hired locally; see *MSF Activity Report 2001–2002* (Brussels: MSF International, 2003), 97.
- 30 This account of the origins of MSF’s kit system draws from an interview with Jacques P. conducted in French by Johanna Rankin, December 21, 2004; see Johanna Rankin, “A New Frontier for Humanitarianism?” *Médecins sans frontières Responds to Neglected Diseases* (honors thesis, Curriculum in International and Area Studies, University of North Carolina at Chapel Hill, 2005). The translation is mine.
- 31 Ibid.
- 32 The ICRC also began significant logistics developments in the late 1970s, and established a unit to centralize vehicle purchase and management in 1984; see International Committee of the Red Cross, *Logistics Field Manual* (Geneva: ICRC, 2004), 24. The UN established the United Nations Joint Logistics Center (UNJLC) after the 1996 crisis in eastern Zaire. For a more general account of the larger humanitarian “apparatus,” see Emile Cock, *Le dispositif humanitaire: Géopolitique de la générosité* (Paris: L’Harmattan, 2005).
- 33 MSF Field Library List, as recorded by the author in Brussels, July 2003.
- 34 Innovations include such items as insect netting on vehicle grilles to simplify maintenance, or experiments to improve a portable system for mixing food used in nutritional therapy. To quote the logistics director of MSF–Belgium when I interviewed him in 2003: “The market usually favors things that are expensive and use a lot of energy. We want to try and find things that are less so, for example solar panels or a bike as an energy source.”
- 35 Marianne de Laet and Annemarie Mol, “The Zimbabwe Bush Pump: Mechanics of a Fluid Technology,” *Social Studies of Science* 30, no. 2 (April 2000): 225–63.
- 36 For an overview of the history of refrigeration, see David Wilson, *The Colder the Better* (New York: Atheneum, 1980).
- 37 See Bruno Latour, *Science in Action* (Cambridge, MA: Harvard University Press, 1987), 226–27; and *Pandora’s Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999).
- 38 In recent years MSF has emerged as a relatively wealthy and financially independent NGO, with over 450 million euros in annual income, some 80% of which derives from private sources (MSF, *Manuel des Acteurs de l’Aide* [2007], 113). It thus maintains a high measure of independent capacity, and is not directly dependent on donor agencies or foundations for the bulk of its operations. Although private fundraising through public appeals may have its own pressures of image management, these are not identical to those of private capital.
- 39 As the kit concept has spread and the humanitarian market expanded, many kits are no longer manufactured in-house at either MSF Logistique in Bordeaux (the primary logis-

- tics depot for MSF–France, MSF–Switzerland, and MSF–Spain), or MSF Supply in Brussels (a similar unit for MSF–Belgium, formerly named Transfer). Instead of maintaining a proprietary logistics center at all, MSF–Holland relies on agreements with established suppliers to provide it with materials on a flexible, rapid-response basis (interview notes, Holland, November 2002). For more on Fordist and post-Fordist production, see David Harvey, *The Postmodern Condition* (Oxford: Basil Blackwell 1989). However, the historical comparison only partially applies, given that the spatial ambition of the kit has always differed from the national space and scope of Fordist regulation. I thank Stephen Collier for pointing this out in discussion.
- 40 Observations and quotations drawn from author’s fieldnotes, Kampala, July 2003 and May 2004.
- 41 See websites for the Campaign for Access to Essential Medicines, <http://www.accessmed-msf.org/>, and the Drugs for Neglected Diseases Initiative, <http://www.dndi.org> (both accessed July 31, 2007).
- Epigraph: Jean-Hervé Bradol, “The Sacrificial International Order and Humanitarian Action,” in *In the Shadow of “Just Wars”: Violence, Politics and Humanitarian Action* (Ithaca, NY: Cornell University Press, 2004), 8.
- 42 For example, the French training institute Bioforce offers programs in management and logistics: <http://www.bioforce.asso.fr/english/english.htm> (accessed August 1, 2007).
- 43 For example the WHO, a policy-oriented entity, now maintains a set of guidelines for “health actions in crises”: <http://www.who.int/hac/techguidance/en/> (accessed August 1, 2007).
- 44 On the one hand, see, e.g., Laurie Garrett’s “Doc-in-a-Box” project at the Council on Foreign Relations, [http://www.cfr.org/project/1247/docinabox\\_project.html](http://www.cfr.org/project/1247/docinabox_project.html) (accessed August 1, 2007); and, on the other, the humanitarian projects of Mandalay International, <http://www.humanitarianproducts.com/> (accessed August 1, 2007). I thank Carlo Caduff for alerting me to the former project.
- 45 MSF press releases issued April 30, 2003; March 24, 2005; May 23, 2005; as well as *MSF Activity Report 2001–2002*, 35.
- 46 In 2004 MSF–Switzerland was back in Gulu, treating a cholera outbreak as well as running a night shelter for displaced children, complete with counseling for former child soldiers. By the time I visited the cholera project it was already winding down in textbook fashion, a matter of local public health far more than international security.
- 47 Stephen J. Collier, Andrew Lakoff, and Paul Rabinow, “Biosecurity: Toward an Anthropology of the Contemporary,” *Anthropology Today* 20, no. 5 (2004): 7; see also Michel Foucault, “The Risks of Security,” in *Power: Essential Works of Foucault, 1954–1984*, vol. 3, ed. Paul Rabinow (New York: The New Press, 2000), 373.