



# Ebola separations: trust, crisis, and 'social distancing' in West Africa

HANNAH BROWN Durham University

ALMUDENA MARÍ SÁEZ Robert Koch Institute

The Ebola outbreak in West Africa involved the introduction of new forms of social and physical separation that aimed to curtail the spread of the disease. People changed the ways they lived to avoid contact with those who might be sick. A suite of governmental instruments was introduced, ranging from by-laws and public health campaigns to the use of specialist treatment centres and military force. These events transformed social connections and affected possibilities for trust in intimate, governmental, and therapeutic relations. Drawing upon fieldwork in Sierra Leone, Liberia, and Guinea, this article explores these forms of separation and social distance ethnographically, with a focus on material objects, touch, and spaces of separation. In doing so, we contribute to discussions on the constitution of trust and distance within social relations, and the ways in which separation can enable certain kinds of closeness. Our analysis offers insights for those seeking to understand the impact of the ongoing COVID-19 pandemic on the ways that people relate to, and care for, others.

Responses to the 2014-16 Ebola virus disease outbreak in West Africa were one of the largest sustained attempts to interrupt and reconfigure social relations and interaction. They prefigured measures used to contain the ongoing COVID-19 pandemic in important ways, although modes of viral transmission of the two diseases differ considerably. The Ebola virus is not air-borne. It is transmitted by close contact with infected people, animals, or contaminated objects (Fischer *et al.* 2015; Judson, Prescott & Munster 2015). In outbreaks, conventional forms of caregiving for the living and deceased are risky. During the West African epidemic, attempts to treat the sick and prevent further spread of the virus were characterized by new forms of separation, or the reconfiguration of existing kinds of physical contact. Many people stopped touching their colleagues, friends, and, on occasions, even their family members. Schools and universities were shut for almost a year. Some children spent months without leaving home. Others were forbidden to play with other children, even their own neighbours. Hospitals transformed the way they operated, or were closed, and specialist treatment centres were set up to care for (and contain) Ebola patients. Curfews

Journal of the Royal Anthropological Institute (N.S.) o, 1-21

© 2020 The Authors. *Journal of the Royal Anthropological Institute* published by John Wiley & Sons Ltd on behalf of Royal Anthropological Institute

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

and travel restrictions curtailed people's ability to trade and socialize with friends and family. 'Traditional' forms of burial became the subject of government control (Lipton 2017). Checkpoints were set up along all major transport routes and some communities built roadblocks at the entrances to villages. In many types of interaction, people endeavoured to keep what was called 'social distance': they did not touch others, get too close, or shake hands. Ebola affected many communities across Sierra Leone, Liberia, and Guinea, but the distribution of these effects was unequal. Whilst communities that experienced Ebola cases were most affected, many people experienced economic impacts and restrictions in their movements. Children were not permitted to go to school even when they didn't have Ebola cases in their neighbourhood.

At the time of our fieldwork and during the writing of this article, we had no idea how resonant these experiences would become for understanding COVID-19. We wrote about these topics because they mattered to people we encountered in our fieldwork and because they raised interesting issues for us as anthropologists. In this article, our focus is on people who were more severely impacted by the Ebola epidemic, for whom minimizing their risk of an Ebola virus infection entailed altering the way they related with other people, including both strangers and those with whom they were most intimate. As in those places most seriously affected by COVID-19, the long-term effect of such reorderings of closeness and distance within social relations remains uncertain.

This article examines these practices of separation ethnographically, as aspects of the continual making and remaking of epidemic control that took place in private as well as public spaces. We also explore the ways that possibilities for closeness and connection were reconfigured through these processes. We reflect on governmental and epidemiological attempts to enforce forms of separation during the epidemic, especially through the use of medical objects and spaces. We place this analysis alongside people's experiences of these novel forms of detachment and their own attempts to create new forms of distance and closeness in their lives. Maintaining distance from others was not an unfamiliar concept or practice in this context. What was new were the ways that distance was practised and the rationale for doing so. We describe practices of distancing and the meanings they entailed for the people who undertook them, including how these practices reorganized possibilities for closeness as a mode of relating. Our analysis draws upon interviews and ethnographic fieldwork with health workers, aid response staff, and people from affected communities. All these people were engaged in creative attempts at what Pedersen (2013) has termed a 'labour of division': purposeful efforts to craft interruptions and distances, pushing apart relations that would otherwise be too close (see also Hetherington & Munro 1997). This deliberate and sudden undoing of relations constituted a radical reorganization of closeness and distance within people's social worlds and reconfigured possibilities for trusting and interacting with others.

The material presented in this article draws upon the experiences of both authors and their work in West Africa during the epidemic doing ethnographic and applied research of different kinds. Predominantly, we draw on Brown's work with health workers in Sierra Leone in the context of an intervention to improve infection prevention and control and Marí Sáez's involvement setting up an Ebola Treatment Unit in Liberia. We situate our analysis within insights gained from longer-term ethnographic research in Sierra Leone and Guinea undertaken since 2013.

We studied Ebola from a distance, and sometimes from places of proximity where we, too, had to negotiate unfamiliar configurations of connection and separation. Doing

fieldwork during the epidemic blew apart many of the ways of engaging with research participants that we had previously taken for granted as foundational to ethnographic fieldwork, including giving and accepting hospitality and conforming to local forms of engagement and interaction. We refused to shake people's hands, stay overnight in people's homes, or eat food from a shared plate. At times, we were afraid. At the height of the epidemic, we carried our own plastic chairs into fieldsites so that we could sit down and talk to people and sprayed bleach on the soles of our shoes before entering our homes or hotel rooms after travelling to Ebola 'hot-spots', or accompanying contact tracers in their work. We found ways to talk and listen to people, but Ebola transformed the kinds of interactions that were possible in our own research practices. Because the crisis also changed the temporality of our work, sometimes we had to rely primarily on short interactions and interviews rather than deep relationships that were built up over time. Instead, the 'thickness' of our ethnography comes from the comparisons that we were able to make across different sites where we spent several weeks or months (e.g. Marí Sáez spent eleven months in West Africa during the epidemic across all three affected countries, and she lived in Sierra Leone for nine months in 2013 before the epidemic). The thickness of our ethnography also comes from the longer-term relationships with research collaborators, participants, and friends that pre-dated, and that now extend beyond, the months of the outbreak itself. This mode of ethnographic fieldwork is reflected in the material presented below, where interview material is used to flesh out and illustrate comparative and more in-depth ethnographic insights. In this sense, the forms of distance that we experienced as pushing apart classic ethnographic encounters also allowed us to make new kinds of connections and comparisons across the diverse (yet often strikingly similar or surprisingly entangled) sites of our work (cf. Strathern 2004). That is to say, the geographical, interpersonal, and temporal ruptures that we experienced during our fieldwork not only helped reveal the fractal nature of the Ebola response across the three affected countries, but also helped to open up new vantage points for connection and comparison in our ethnography.

### Fields of separation

Control measures during the 2014-16 Ebola epidemic involved multiple kinds of separation. People who were suspected of or confirmed as suffering from Ebola were viewed as at risk of transmitting the virus to others, and needing to be separated from those who were healthy. Epidemiological principles state that at the population level an epidemic can be brought under control only when each infected person infects fewer than one other person. As in the ongoing coronavirus pandemic, the rate of reproduction (or 'R' number) was a key measure used to ascertain the severity of the pandemic. To reduce the 'R' number, epidemiologists emphasized disease control methods that reduced opportunities for transmission.<sup>2</sup> Studies of communities who have experienced Ebola describe indigenous forms of separation as an important tool for bringing epidemics under control (Hewlett & Amola 2003; Richards 2016). Given that Ebola is spread by direct contact with bodily fluids, in an outbreak, physical contact becomes a problem to which separation or distance is the solution. Ebola therefore deeply troubles many of the 'mutualities of being' (Sahlins 2011) that constitute kinship. People usually risk infection from those with whom they are most deeply entangled; those they love, care for, and are close to. In the West African epidemic, then, proximity was most perilous in intimate relations. This was also precisely where separation was often most difficult and painful.

Ebola separations extended beyond caregiving and kinship relations. In churches and in taxis in some communities, for example, people no longer crowded onto seats and benches, but tried to distance themselves from others. Strategies of separation were especially notable in medical materials and spaces where concerns around touch and contact were amplified. Medical domains were an important focus of governmental response in ways which extended well beyond the boundaries of emergency treatment centres, including through domestic quarantine (Desclaux, Diop & Doyon 2017; Pellecchia, Crestani, Decroo, Van den Bergh & Al-Kourdi 2015). We recognize that there were diverse social contexts in which people developed new strategies for interacting (less) with others. Nonetheless, in the sections that follow, we use medical interventions as a lens through which to understand the wider implications of practices of separation during the epidemic.

We present two primary empirical examples. We begin by describing the ways that healthcare workers in peripheral health facilities sought to reconfigure the practice of touch in medical care, particularly through the use of new kinds of biomedical materials and objects. These workers were on the 'frontlines' (McMahon *et al.* 2016) of the epidemic, providing routine care in small health facilities where any patient who presented themselves at a health facility may have been sick with Ebola. Our second example describes Ebola Treatment Units: the specialist treatment and containment facilities which became the pre-eminent example of separation as a tool of epidemic management. People imagined the virus as a mobile, invisible enemy that could be anywhere and described it as being unlike traumas that they had experienced before, for example during the civil war. We explore how the new threat of Ebola and novel forms of treatment that emerged to manage it were experienced from the perspectives of health workers, patient survivors, and members of communities who lived near them. Throughout our analysis, we describe how fears of infection animated different practices of separation.

The ethnographic data we present in this article are suggestive of the following non-exhaustive typology of forms of separation that emerged as responses to Ebola. First, some forms of separation and detachment were mediated by the use of new material objects.3 These objects included gloves, masks, goggles or face shields, gowns, plastic shoe covers, body bags, and chlorine sprayers.<sup>4</sup> A second category of separations involved the reconfiguration of interpersonal relations. 'Whether you are a tall or short man, a black or white man, you don't just come near and I don't go close to you, that has stopped', explained one man. At times, family members became distant from one another: 'Even if it is your sister whom you have not seen for a long time, that does not mean you should hug yourselves or shake hands or take her child from her, another woman emphasized. Interpersonal separations sometimes involved a complete rupture or severance of relations. Many Ebola response workers described being rejected by their partners and families, in some cases not reconciling these relationships once the epidemic was over (Cooper 2015). Healthcare practitioners described using distance as an instrument for managing the risks they felt in their relations with colleagues and patients and also to protect their families from themselves, when they believed there was a risk they might have been exposed to the Ebola patient or virus. In this sense, separation offered a means to sustain relationships with family members and colleagues.

A third form of *separation was mediated by reorganizations of space*. The use of quarantine, the installation of triage spaces in clinics and hospitals, and the introduction of specialist treatment centres were the most dramatic instances of this. In Connaught,

the large national hospital in Freetown, a senior manager described setting up tents for triage in the front of the hospital, an unpopular and desperate measure to separate patients who were vomiting and having diarrhoea as they waited for beds in the already overcrowded hospital. By the end of the epidemic, such tents were commonplace.

Not getting close to others, avoiding shaking hands or sitting together, were subtler but nonetheless equally striking shifts in the everyday choreography of interpersonal space and interaction, constituting an aesthetics of relating to others that was 'partially connected' (Strathern 2004) to emergent forms of medical control and interaction. For example, it was common to see plastic buckets with soap and chlorine in supermarkets, hotels, and offices in Monrovia and Freetown that were similar to those installed at the entrance of triage spaces in health centres, hospitals, and Ebola Treatment Units. Some health workers and wealthier people installed hand-washing stations in their own homes. In some villages, communities purchased infrared thermometers and set up road blocks where they could supervise travellers. Meanwhile, health workers replicated aspects of the new material organizations of their work environment at home in an effort to protect their loved ones, for example by changing sleeping and eating arrangements. A Disease Surveillance Officer who was responsible for collecting blood samples in Bo, Sierra Leone, described spending months minimizing contact with his family. He instigated a self-imposed quarantine each time he took a blood sample from a suspected Ebola patient, isolating himself in a separate room:

I would be [living in my own room] for twenty-one days. But before twenty-one days had passed I would collect another [blood] sample, so in the first six months [of the epidemic] I was not having anything to do with my family. I was alone because I didn't know what might have happened.

### Intimacy, detachment, and disease

Recent work on the place of separation and detachment in social relations has argued that much contemporary anthropology is characterized by an attraction to studying proximity and intimacy; relations that are 'there', rather than those that are 'not there'. Arguably, anthropologists have been captivated by a 'fetish of connectivity'; drawn to the study of entanglements and intimate relations, and a 'fondness for connections and closeness' (Pedersen 2013: 198). However, despite the prominence of attention to close relations in anthropology, there are some important examples of considerations of distant, taboo, and difficult relations, particularly in the field of kinship (e.g. Radcliffe-Brown 1940; Simpson 1994; 1998). For example, Janet Carsten (2013) has described kinship as a domain in which we can see the 'thinning' and rupture of relations, as well as their 'thickening' and closeness. Separation and reintegration are also prominent themes in the study of initiation and ritual (Turner 1969), including in West Africa (e.g. Jedrej 1976; Richards 2016: 140). More recently, a concern with counteracting a fetish of connection and critically interrogating the category of the relation as a foundational concept for anthropology has led to a growing interest in exploring other kinds of distance that structure relations (or 'non-relations'), for example through the lens of 'detachment' (Candea 2010; Candea, Cook, Trundle & Yarrow 2015) and forms of 'engaged separation' (Stasch 2009). Many of these authors take forward ideas rooted in Marilyn Strathern's work, and her insistence on exploring the ways that practices of separating, division, and 'cutting' are part of what makes different connections possible (e.g. Strathern 1988; 1996). Where these ideas have been taken up in African studies, it has often been to explore the relations between theoretical concepts developed in different regional traditions and how these have influenced each other (e.g. Lambek & Strathern 1988; Myhre 2013). We do not seek to 'apply' Melanesian theory to our ethnographic material (Englund & Yarrow 2013). Rather, the ethnographic and theoretical orientation of this article is informed by our indebtedness to the work of Strathern and those who have taken up her ideas. In particular, these ideas have shaped our exploration of the way people renegotiated forms of closeness and distance in their relationships during the Ebola epidemic; as well as the implications of these transformations of relating for our own anthropological knowledge practices.

Whilst closeness and connections are fetishized in some parts of our discipline, in the anthropology and history of medicine there is a long-standing interest in the use of different forms of separation to control disease. This literature includes a spatial and material focus that is largely absent in the recent literature on detachment (although see Pedersen 2013; Yarrow & Jones 2014). Medical anthropology often has a tendency to see separation as an artefact of medical control, rather than as unfolding, practised mode of relating to other things and people. Nonetheless, this literature offers insights, including into how previous experiences of medical interventions shaped responses to Ebola. In West Africa, for example, there is a long history of the use of separation within local responses to disease (Hayden 2008) and through public health controls to manage diseases such as cholera, smallpox, malaria, and sleeping sickness (including through enforced quarantine). This historical legacy pre-dates the kinds of temporary and patchy interventions experienced during Ebola (Beisel 2014; Lachenal 2015; Redfield 2015) and people often recalled the past - particularly the civil war - when describing their experiences of this epidemic. Moreover, although colonial sanitation programmes were never easily enforced and were often undermined through the movements of people, these historical measures continue to have ramifications in people's contemporary experience of public health and disease control interventions (Wilkinson & Fairhead 2017).

Our analysis of the rapid introduction of new kinds of barriers and separations during the 2013-16 Ebola epidemic takes these varied insights as a point of departure. We draw upon approaches to the study of separation and detachment in anthropology to explore interpersonal strategies that were employed as tools to disentangle and reshape relations during the epidemic. We do not take separation as an inverse of closeness, but understand both distance and closeness to be central to modes of relating. We therefore explore how the epidemic changed the kinds of labour or effort that were required to bring both distance and closeness into being. We place this analysis alongside a focus on material and physical modes of separation within medical regimes. By combining these approaches, our account shows that the new kinds of separation introduced at this time were not simply an artefact of governmental coercion. Separation required ongoing effort across multiple domains of life that reconfigured how closeness and distance were practised within relations. Separation was often cruel and painful, but, importantly, could also provide opportunities for creating new kinds of closeness. The following sections explore these processes ethnographically.

### Touch and trust: separations in medical practice

Medical practitioners working in small health facilities during the Ebola epidemic learnt novel procedures for caring for patients. They monitored bodies in new ways and resituated the practice of touch within therapeutic encounters. There were three main components of infection control in health facilities:<sup>5</sup> (1) screening patients for suspect case definition; (2) isolation of patients with suspected or confirmed Ebola virus

disease; and (3) protection of health workers against infection using personal protective equipment (PPE). Material objects which had previously been rarely employed (often because they were in short supply), or which were totally novel and unfamiliar, became central to this changed organization of medicine, alongside new medical spaces and activities. These transformations extended well beyond the rapidly constructed specialist treatment centres and the work of newly employed Ebola support staff such as contact tracers, ambulance drivers, and burial teams. A wide range of other objects became ubiquitous within and outside of medical settings, including infrared thermometers, chlorinated water, gloves, goggles, screening booths, hand-washing stations, and plastic body bags. All required changes in everyday practice and the incorporation of new forms of knowledge. One nurse commented, 'Some things that we use I had never heard of, like quarantine, I did not know what was quarantine, triage, I never knew what was triage, then PPE, I did not know what was PPE'.

Health workers in primary healthcare facilities stopped touching patients, which had previously been central to an often limited repertoire of diagnostic and caring practices. Many emphasized that since Ebola they 'stayed far off' from patients; others described how before Ebola they 'checked patients with bare hands'. Before the epidemic, clinical staff measured the temperature of a patient's body with the back of their palm, used their hands to palpate the abdomen of a pregnant woman or a sick child, or pulled down an eye-lid to check for anaemia, drawing on touch as part of a limited range of embodied, clinical techniques that made biomedical knowledge practicable in the settings where they worked (cf. Mol & Law 1994). Even during vaginal delivery, nurses explained, 'before Ebola we would not wear gloves, we would just touch patients'. Sometimes, care continued without the use of touch. In the health consultations Brown observed at the peak of the epidemic in Bo district, Sierra Leone, health workers stood at a distance from patients, asking interrogative questions whilst avoiding any kind of physical contact. One clinical officer demonstrated how he disinfected his stethoscope with chlorinated water after using it, and showed how he had reorganized his treatment room, positioning a consultation chair at 90 degrees to his desk, rather than facing it, so that if a patient sat down and vomited, the vomitus would not travel towards him. But he was frightened. Only two weeks before, a patient with Ebola had walked into the health centre he managed. One of his nurses had been put into quarantine and the whole facility had been disinfected. Moreover, when carrying out routine care, it was not so easy to disinfect everything. What was the clinical officer to do, for example, about the cloth strap on the blood pressure machine, which could not easily be wiped down with diluted bleach? For such reasons, some other kinds of care stopped altogether. Many health workers were too frightened to deliver pregnant women during the epidemic, a particularly risky activity in terms of coming into contact with bodily fluids (Delamou, Hammonds, Caluwaerts, Utz & Delvaux 2014).6

Meanwhile, patients also kept their distance from health workers. While most private hospitals and some NGO-run facilities were shut during the epidemic, public hospitals largely remained open. Nevertheless, patients often stayed away. The director of a large government hospital recalled the peak of the epidemic: 'Just imagine, a big hospital like this that could sometimes get up to 300 patients had only three patients in the entire wards with the exception of the [Ebola] isolation unit. He described how patients feared medical centres and health workers: 'We had cases where patients were escaping from the wards because according to them they don't want to be killed by the medical workers'.

# Personal protective equipment

The PPE used by health workers and other Ebola response workers became the visible materialization of infection control in the Ebola epidemic. Health workers were glad to have access to these new material objects, which they described as making them 'brave', even though wearing PPE was hot and uncomfortable. One nurse described it as 'suffocating'. Some recalled the beginning of the epidemic when chlorine, gloves, and aprons were in short supply and were glad that they were 'not suffering for anything anymore'. Another nurse commented, 'We have started to adapt to it and it is good because it is a protection'. In the early part of the epidemic, equipment arrived but people lacked knowledge of how to use it: for example, wearing the materials for periods of time considered dangerous by international agencies. As the epidemic progressed, the training and knowledge that health workers gained in terms of how to use equipment safely amplified the embodied, sensory, and affective experience of the material qualities of safety equipment that helped workers to feel safe (cf. Pink, Morgan & Dainty 2014).

These medical objects were powerfully multi-valent. Safety was only one of many associations that gloves, thermometers, and protective equipment had for those who encountered them. Staff at health facilities frequently commented that patients stopped coming for services once they started using items such as gloves and aprons in routine encounters. One nurse explained, 'When they see me they become afraid, then I will tell them not to be afraid it is because of the outbreak ... I am the same person you know before, nothing will happen to you.' Frequently, fear of these new and unfamiliar objects morphed into rumours about how Ebola might be spread, underlining people's sense of vulnerability in the face of these strange things (Bolten 2014; Fairhead 2016; Leach 2015: 821-2). One ambulance driver described the trauma of being personally associated with Ebola through his work:

People were pointing fingers at me saying that we were the ones working at the Ebola Isolation Unit and that we were the ones killing people for money ... I even stopped using the government ambulance ... because whenever they see the ambulance they start saying that Jonas, 8 that is me, I am ... looking for Ebola people to take them to the hospital to kill them.

Medical objects used during the outbreak thereby had a curious pharmacopic quality. Although they offered protection, they were also associated with risk and malevolent intention (a kind of poison). And, indeed, health workers were often most at risk as they used and disposed of gloves and other objects. A famous doctor at Connaught hospital had died early in the epidemic as he rushed to help patients without knowing the procedures for using protective equipment safely. Contaminated medical objects were a significant mode of transmission in health facilities. Yet at the same time, gloves, aprons, and other protective garments could provide ways of coping, caring, and reconnecting, becoming a kind of care or remedy. One frontline nurse described using a plastic cover that she would wrap around herself and wear so that her daughter could hug her when she went home after work.

The capacity of medical objects to hold together a dense intensity of different meanings simultaneously is striking (Berg & Bowker 1997; Whyte, van der Geest & Hardon 2002). During the Ebola outbreak, a sense of crisis and fear amplified this density of meanings. Medical objects created great ambivalence, inspiring both trust and mistrust. For health workers, these objects provided the possibility of providing care and remaining safe in situations where they 'believed no one'. For others, gloves,

thermometers, and protective clothing became symbols not only of the containment of the epidemic, but also of its spread and severity, inspiring fear as much as reassurance. These objects were thus key to the reordering of closeness and distance within relations, revealing how distance was experienced not only as a pushing apart but also as a prerequisite to closeness.

## The Ebola Treatment Unit

The proliferation of medical objects during the epidemic took place within a changed medical infrastructure. Specialist isolation centres called Ebola Isolation Units, then Ebola Treatment Units (ETUs) or Ebola Treatment Centers (ETCs), were central to the emergency response (Redfield 2008; WHO 2014), as they had been in previous filovirus epidemics (Boumandouki, Formenty, Alain, Campbell & Allarangar 2005; Milleliri, Tévi-Benisson, Baize, Leroy & Georges-Courbot 2004; Park & Umlauf 2014; Redfield 2015; Roddy et al. 2007). Initially intended to be temporary or semi-temporary structures (Redfield 2008), some lasted for more than a year. Following the principle that they should be built close to the epicentre of the epidemic, some ETUs were placed within existing hospital buildings or specialist health facilities. In Guéckédou, Guinea, the ETU was set up in the old 'Trypanosomiase' centre; and the ETU in Conakry, Guinea, was set up in an existing Centre de Treatment de Cholera. The design of isolation facilities was modified during the outbreak (Sanchez Carrera 2015). Particularly after August 2014,9 many ETUs were purpose-built structures, often housed within long canvas tents. These centres were set up in urban areas, often with the reluctant acceptance of populations neighbouring the ETUs, or, usually less controversially, on the outskirts of large conurbations in sites that were accessible by ambulance.10

Principles of separation and risk of contamination organized the design of ETUs. The productive 'sociality' of buildings revealed through actor-network or material culture analyses of the built environment (e.g. Latour 1993; Miller 2008) was deliberately thrown into reverse or controlled in order to create separations, rather than connections, in these buildings. There was a separation between low-risk areas such as visitors' zones or triage and high-risk areas such as patients' areas, waste management sites, and the morgue. Movement inside the ETU was strictly along one-directional routes from lower to higher risk zones. The layout of the buildings facilitated this, including through architectural features such as floors which sloped gently downwards so that bodily fluids and spillages would flow away from low-risk areas, and the use of construction materials for floors that eliminated any splash-back when swept with a broom. ETUs also separated individuals according to their exposure, symptoms, and diagnosis (into 'suspected', 'probable', and 'confirmed' cases) and separated those inside from their families and other healthy people. ETUs separated the dead from the living in new ways, and created new kinds of separations between those who worked in them and those who lived outside. However, separations were not always clear-cut. Whilst waiting in the 'suspect' areas of Ebola treatment wards, or being transported by ambulance, people who might later test positive and negative for Ebola were sometimes transported and kept together. ETU staff reported that several measures were taken to keep individuals apart from each other in 'suspect' areas. Nevertheless, some survivors remain convinced that they contracted Ebola on the 'suspect' wards. On the 'confirmed' wards, however, patients often became close to one another, including as caregivers for each other, because medical staff could not spend long in the ward.



Figure 1. Aerial photograph of Moyamba ETU. Reproduced with permission. (Credit: The Royal Engineers.)

In all three countries, people described the traumatic experience of witnessing people dying as they waited to be admitted or while inside the ETU. Medical staff with whom we worked also reported the horrific experiences inside. One worker described her experience in an ETU in Monrovia as like 'a scene from a horror film' with blood, chlorine, and faeces on the floor; where some patients died trying to escape from the dreadful scenario inside.11 Gomez-Temesio and Le Marcis (2017) describe how forms of separation employed in the specialist units they studied in Guinea created a number of problematic intimacies which would be avoided or regulated in normal life. In West African hospitals, women and men are usually admitted in different wards. When a patient dies, the body is moved to the morgue. Inside ETUs, however, women and men were admitted in the same ward. Sometimes people were forced to view the naked bodies of the opposite sex. Dead bodies were left in the wards until the teams could come inside, creating forms of proximity that were traumatic, even taboo (Saiz Bermejo 2016).

From the beginning of the crisis, and in previous epidemics, ETUs were an object of fear (Guimard et al. 1999; Hewlett & Hewlett 2008; Jeffs et al. 2007). Those who had family members or neighbours admitted and those who lived in areas neighbouring the ETUs associated them with disappearance and death. Stories circulated about patients not receiving food or water; patients not receiving proper care because health workers were too afraid of contamination to provide it; and patients being left alone to die. Sometimes these stories morphed into complex rumours: for instance, that patients were killed through a yellow tablet that was prescribed when one entered the ETU; that Ebola was a man-made disease to make money; and that ETUs were still under construction despite a decrease in Ebola cases because the World Health Organization wanted a certain number of people to die.

As a technology of separation, these buildings engendered a far more difficult and problematic set of effects than those of the medical objects described above. Sometimes the army or the police took people to the treatment centres by force, making them feel like criminals. Patients and families were terrified of being left alone in ETUs, not only because they feared they might die, but also because they knew they would be alone, without the strength gained from the presence of family and friends who usually stay in hospital to care for patients. People worried that loneliness would kill them, 'There is no love at the ETU, this is why people do not want to go to the ETU', some claimed.

Around Monrovia, people gossiped that staff working in the ETU were afraid of becoming sick and therefore did not treat corpses with respect, and were asking sick persons to care for themselves, for example by leaving bottles of water next to them but not helping them to drink. Such rumours were not entirely ungrounded. In the early part of the epidemic, there was clinical controversy around the MSF policy of not allowing staff to give intravenous fluids to Ebola patients, despite widespread consensus that intravenous rehydration fluids saved lives and could be administered without significant risk to health workers. 12 One NGO reportedly advised its ETU staff not to touch patients, even when wearing PPE.

The trauma of separation of patients from relatives was exacerbated by a lack of communication between ETU staff and relatives of people admitted to the ETU, particularly in the period when there were high levels of admissions. Poor co-ordination between agencies responsible for different parts of the referral to ETUs, admission, and quarantine responses exacerbated this. 'Lessons learned' by response staff in previous epidemics had emphasized the importance of having clear and open dialogue with family members of patients and with people from affected communities (Hewlett & Hewlett 2008; Jeffs et al. 2007; Roddy et al. 2007). These insights were all too frequently forgotten. In all three countries, there were stories of family members not being told to which ETU their loved ones had been taken; not receiving news about whether loved ones were improving or sickening; and sometimes not even being told that relatives had died or where they were buried (Le Marcis 2015).13 In Monrovia, a system for communication between people admitted to the ETU and their relatives was not established until late in November 2015, eight months into the epidemic.

At certain points of the epidemic, treatment centres were completely overwhelmed. MSF described making the 'horrendous decision' of having to prioritize which Ebola patients to admit to an ETU in Monrovia during the height of the crisis, leaving others dying outside in the street (MSF 2015; Sprecher 2017).<sup>14</sup> One Sierra Leonean health worker who had survived Ebola described his admission to an ETU during the peak of the epidemic in Kenema as a 'hell on earth ... The whole place stank of vomit and faeces and the nurses sometimes had to climb over piles of dead bodies to reach patients'. Others mentioned the fact that the materials used to build the ETU tents made the atmosphere unbearably hot, and claimed people were dying from heat rather than Ebola. The tarpaulins used in construction of the tents and the intense heat inside recalled earlier disturbing experiences during the war in refugee camps. Even later in the epidemic, when admissions had reduced and capacity to care was improved, fear of ETUs remained, exacerbated by the traumatic resonances of visual and physical separation – a sense that nobody was able to see what is going on behind closed doors and a fear of malevolent activity being enacted behind the visible façade of the treatment unit (cf. Raabe et al. 2009).

### Working in the ETU

Health workers who volunteered to work in ETUs talked of their fear of contracting the virus and spoke movingly of their duty to serve patients. These people were enormously stigmatized. ETU workers described how other health professionals avoided them at work, calling them 'Ebola nurses'. Many were evicted by their landlords. Some found themselves forced to sleep at the hospital. Others were rejected by their families. In one extreme case, a health worker described how his wife had moved into a separate room in their house, and although she still fed him, he described it as 'very sorryful', explaining, 'It was just like feeding dogs'. She wore two pairs of gloves when preparing his food and used a long stick to push food and water towards him as he sat at a distance from other family members. After he ate, she drew the dishes towards her and, wearing gloves, placed them into a pot of boiling water to disinfect them. 'Even our friends ran away from us, we had no friends', commented another worker. Another described people in his community avoiding him. 'If I even greet them they don't answer', he told us, 'The children in the community were calling me Mr Ebola and my house Ebola Centre, it was not easy'.

A further fear among health workers was that they might inadvertently infect their own family members. Many health workers separated themselves from their family. One ambulance driver described how his colleague 'started complaining of body pains, headache, and fever. He decided to abandon everybody, including myself. Even when I tried to go close to him, he would stop me from coming to him'. Although we heard many examples of family members and friends rejecting relatives working in the Ebola response, they also often provided support and encouragement. The wife of one ETU worker trained herself as an ETU 'buddy' and came into the hospital every day to observe her husband during the donning and doffing procedure as he dressed and later removed protective equipment. This is one of the riskiest parts of providing care in an ETU, carried out in front of a mirror or under the gaze of a fellow health worker. His wife reasoned that nobody else loved him the way she did, or would be so careful to make sure he didn't make a mistake. There were many other examples of support and encouragement. Some patients who had recovered from Ebola volunteered to stay in the ETU to look after infected children, despite the death surrounding them; others brought sick orphans to the ETU and volunteered to be re-hospitalized in order to take care of them.

What people feared most about ETUs was death and its aftermath. Those neighbouring the ETU in Monrovia described it as 'evil', because 'if you go to the ETU you never return back'. In Monrovia, dead bodies from ETUs were cremated following presidential order, against expert advice. <sup>15</sup> Cremation is not safer than burials following WHO standards <sup>16</sup> and was abhorred by most of the population (Abramowitz *et al.* 2015). The decision to order cremation of all dead bodies caused a breakdown of trust in the authorities. Cremation created a separation from the dead that was traumatic for people who viewed burials as 'a cure for [the grief of the] living', and as a way of preparing the dead to join the ancestors. Cremation was mentioned as a significant deterrent for going to the ETU: 'If you go to the ETU, you do not have grief, you do not have a place for remembering. People don't come to visit you'.

In the areas of Monrovia where Marí Sáez conducted her work, most cemeteries are in open spaces with no clear spatial separation between the living and dead. Cemeteries often border the beach where people rest, relax, or sell fish. Graves are a continuation of the houses into the seashore. Proximity to graves helps people to remember, feel close

to, and communicate with their loved ones. People in Liberia celebrate 'Decoration Day, a public holiday set aside to clean, paint, and decorate graves and to spend the day with lost relatives. Celebrating 'Decoration Day' is not possible for families who lost relatives to Ebola, who were cremated, because the ashes were not given back to the family. Without a grave, people have no place of remembrance for the dead; the relation is cut, and there remains an absence which is problematic. In this way, the cremation policy introduced multiple forms of separation, including causing conflict among family members about whether to call for the Ebola ambulance or organize the burial secretly themselves, and because relatives were left without a material link to reconnect with those who died.

### Trust in crisis

Our ethnographic material points to transformations in understandings about the ways in which closeness and distance signalled safety or danger in relating with others. Anthropology teaches us that closeness and separations are equally part of social relations and require ongoing work and attention to achieve them. During the epidemic, both health infrastructures and interpersonal relations needed new forms of distance and modalities for keeping things apart, as much as they were forced to modify practices that held them together. These modes of distancing and proximity needed to be made explicit in a changing context. Perhaps all forms of care require a negotiation between separation and closeness, but the critical, terrifying context of Ebola in West Africa revealed the challenge of achieving this particularly starkly. Connections with others were problematic, not only to avoid contamination, but also because the Ebola response undermined some existing ways of distancing that were practised in social relations, such as when women and men were treated in the same ward in the ETU.

Concepts of trust lay at the heart of these reorderings of relations, and separation and distance was often cited as a strategy for coping with the difficulty of trusting others. This was true for all parties in therapeutic interactions. As one nurse described, 'Nobody [in the health facility] will [touch the babies in the antenatal clinic] ... because we cannot believe no one, even ourselves, and we the nurse do not go to the patient because they too do not trust us either. A health worker at Connaught hospital in Freetown similarly described a sense of 'mutual mistrust' between staff and patients during the epidemic. Health workers also described the distance that they kept from their own colleagues through the language of trust. Distance was thus not only a technical mode of infection control, but also a way of dealing with the impossibility of fully trusting co-workers. They saw their colleagues at work, but they could not know what their colleagues were doing when they were out of sight:

Even among my colleagues, the culture of handshake greetings is not there. Even when we are together there is distance between us ... I will say I am well protected but I don't know for my colleagues. I don't know how they are at home. So when we come here everyone is by him- or herself.

Understandings of trust are a helpful entry point for making sense of how people developed and interpreted different forms of separation during the epidemic. Ethnographic work from the region suggests that issues of trust are particularly pertinent in West Africa, where trust is linked with intimacy (Jackson 2012) and where a powerful 'hermeneutics of suspicion' (Ferme 2001: 7)17 underpins a sense that surface appearances are underpinned by concealed, often malevolent, forces (e.g. Ferme 2001; Shaw 1997). Others have written about sentiments of 'generalized mistrust' during the Ebola pandemic (Anoko 2014) permeating relations with state authorities, exacerbated by long-standing structural relations of political inequality, economic extraction, and exploitation (Leach 2015; Menzel 2015; Tibbels 2015; Wilkinson & Leach 2015).

In contexts where there was intense fear of 'the underneath of things' (Ferme 2001), and where the material objects of epidemic response often concealed faces, bodies, and sites of care, visibility became very powerful for engendering trust as it helped alleviate disquiet about hidden malevolence. In conversations about ETUs in Guinea and in Liberia, people referred to the importance of the principle 'seeing is believing' as an approach for creating relations of trust. People wanted to see their relatives in the treatment centres, they wanted to see the corpse, and they wanted to see the graves of their loved ones. Seeing in this context was viewed as a way of ensuring the proper behaviour of government and expatriate workers. For many families, it was sufficient for only one person to see these things. This mirrored expectations of what should happen when relatives died far away from home outside of epidemic contexts. On such occasions, one person would travel to be with the sick person and take charge of narrating the disease process, the medications received, and documenting the final moments of the person's life, when important information is sometimes disclosed, sometimes taking pictures to provide testimony to those living abroad or far away. Through such narrations, other relatives would have access to the details of the disease, death, and burial. Requests from people to see bodies when they were placed in body bags can be seen as attempts to have access to a space (the ETU) and to practices (like manipulating infectious bodies) from which relatives had been excluded.

Philosophers have underlined the centrality of vulnerability to trust, arguing that modes of trust are underpinned by different forms of vulnerability, and that trust is thereby shaped by the various ways in which we expect people not to take advantage of this vulnerability (e.g. Baier 1986). This means that trust is risky, but also that we only stand to gain the benefits of trusting others if we are willing to take some risks. It also means that trust must be renegotiated in specific social contexts, particularly when understandings of vulnerability and risk are in flux. During the epidemic, the intersection between trust, risk, and vulnerability was visibly and materially present in the use of medical objects and ETUs. These medical objects and spaces helped some health workers to put their minds at rest, making them 'brave', while at the same time revealing tensions around vulnerability and possible betrayal. Fear existed within the therapeutic encounter because people were afraid of risky forms of contact. Therapeutic relations also caused fear at the symbolic level. As objects from 'outside' that were unfamiliar and accompanied by an influx of people and resources from outside West Africa, medical tools and objects also came to symbolize distrust and fear more broadly, materializing histories of poor relations between national governments and their citizens as well as a global politics of extraction and inequality (cf. Wilkinson & Leach 2015).

### Material and interpersonal detachments

Comparative work on epidemics shows us that under conditions termed to be a 'crisis', definitions of what constitutes ethical (or reasonable) care can be dramatically redrawn. Quarantine practices often produce tensions between public health interventions, ethics of care, and individual autonomy (Calain & Poncin 2015). The challenge of choreographing forms of intimate support with the demands of care for individuals and larger collectives is partly what makes epidemics so traumatic (cf. Law 2010).

Such challenges were revealed through the different dimensions of separation that were employed during the Ebola outbreak. Some forms of separation were forced upon people, including house quarantine and admission to the ETU; others were deliberately chosen. Some kinds of people - such as expatriate health workers (and even anthropologists) - were separated in different ways from others who were at risk from Ebola, sent to specialist small treatment centres, evacuated to their home countries, or asked to go through quarantine or daily temperature checking before meeting friends and family back in their home countries. In such instances, separation implied not only a setting apart but also a selection or hierarchy (Gomez-Temesio & Le Marcis 2017). Practices of separation therefore sometimes intensified previous experiences of abuse from those in power, and a sense of inequity emerging from policies that appeared to value human life differentially. And yet deliberate separation or detachment also provided a means of transforming, but retaining, meaningful and conflicting forms of social connection.

Recent work in social anthropology underlines the fact that achieving distance in social relations can be difficult; detachment is contingent, situated, and precarious and must be part of deliberate ongoing efforts (Candea et al. 2015). In an epidemic situation, where the failure to achieve appropriate distance or separation can be a matter of life and death, the value of detachment - and its precariousness - is even more starkly revealed, but so too is the interplay of distance and closeness within relationships and the importance of human capacity to creatively shift and reconfigure the balance between the two. This was the experience of the health workers in Sierra Leone, who talked about the challenge of maintaining adequate levels of distrust in the face of 'humanitarian feeling' that drew people to care, touch, and be close in ways that were viewed as a risky. Stories were told about people who 'contracted the virus through friendship'; putting an arm around a weak and exhausted patient, or helping them to go to the toilet. And yet, through 'humanitarian feeling', health workers also found ways to care for and support one another without endangering themselves.

Creating detachments and new ways of separating things is a key dimension of many kinds of governmental intervention, particularly at moments of crisis. When we study disease control measures as anthropologists, our tendency is often to focus on the effects of the boundaries and classifications produced by governmental interventions. Yet separations created by quarantine and disease control are produced, reinterpreted, animated, and enlivened through social practice, in private as well as public relationships. In the West African epidemic, relations with others became sites where closeness and connection were explicitly problematic, but where these modes of relating were remade rather than ignored or rejected out of hand. Often, there was a recognition of the need for negotiating appropriate forms of distance and control as a prerequisite for connection, but the inverse was also true: closeness needed to be enacted and negotiated as a prerequisite for appropriate separations. The negotiation of shifting forms of closeness and detachment may well be a characteristic of all social relations, but the challenge of doing so was heightened in the Ebola outbreak, experienced as a deeply troubled social space where people did their best to navigate a complex set of fears with their prioritizations to care for and support others.

Separations of the kind we have described are therefore not ruptures or sequential passages of the kind that Turner (1969), for example, imagined. For many people who were directly or indirectly affected by the outbreak, and particularly for Ebola survivors suffering from medical sequelae, stigma, and the fear that they might infect

sexual partners with the virus, mean there has been no return to 'normality' after Ebola. It would be equally incorrect to assume that 'normal life' was ever constituted predominately by closeness, trust, and intimacy. Closeness can be dangerous, which is why it allows the envious close relative, friend, or neighbour to attack through witchcraft (Geschiere 2013). Closeness and separation are equally features of periods of both 'crisis' and 'normality'. What is at stake are strategies for doing relations with others in uncertain, changing worlds. Our ethnography has shown that separation and closeness are not different *kinds* of relations, but can contain aspects of each other; that separations and distance can enable certain kinds of closeness; and that both distance and closeness are actively augmented at certain moments.

However, a key dimension of social distancing is that separations and other reorganizations of sociality often reference or recall normative forms of closeness and proximity (e.g. Simpson 1994). Techniques of separation employed by health workers similarly referenced closeness as a normative relation of care, with its affective and practised components. As one nurse said, 'I used to touch people with my bare hands, especially the ones who were fond of me' (emphasis added). During the Ebola outbreak, a central challenge for those who were worried about Ebola, whether as health workers, friends, or community or family members, was how to remain close and care for others without contact. People were concerned with how to remove intimacy and touch from close relations; in short, how to maintain the oxymoronic intimacy implied in the term 'social distance'. Whilst people sometimes chose self-interest over friendship, community, and even family relationships, and cut themselves off even at times from close kin, most people wanted to introduce forms of separation that provided protection, but which allowed them to stay 'inside' existing close relations - embedded within their social world. As with recent interpretations of immunology (Esposito 2011; Napier 2012), and kinship (Carsten 2013; Stasch 2009), people often seemed to be seeking the incorporation of difference and distancing into their social worlds through forms of creative assimilation, alongside expressions of closeness, rather than seeking well-being through the outright rejection or expulsion of dangerous others. It is for this reason that the experience of ETU was often so traumatic. In these places, people too often felt like they were not only separated physically, but fundamentally cut off and isolated, placed 'outside' of social and moral worlds.

Our ethnography reveals modes of separation – where people negotiated new ways of relating to others - as sites of heightened, not reduced, sociability, where material objects, spaces, and social interactions took on increasingly dense, intense, and at times traumatic registers. The implications for epidemic response, care, and quarantine are important: that new separations will require and enable new forms of closeness, and that effective disease control is likely to be as concerned with providing spaces for reconfigured forms of closeness as it is with separating people to keep them safe. It will no doubt have struck readers of this article that many of these insights are as relevant to the multifarious ways that people have experienced and responded to the COVID-19 pandemic as they are to the Ebola epidemic that struck West Africa. They show that anthropology also has a role to play in responding to that pandemic, not only by providing 'ethnographic insights' into the contexts where epidemic response is taking place, but also by using anthropological theory to help make sense of the varied ways in which people are responding to a crisis that is forcing them to reconfigure how they live with, relate to, love, and care for others. Perhaps our own anthropological analysis will inspire public health policy-makers and practitioners to imagine new ways

to incorporate publics and their concerns within epidemic response. The challenge as we see it is to support processes of division, closeness, and distinction within ongoing acts of relating and attempts to reorder worlds.

Both authors would like to thank the people who agreed to talk and share their concerns with them in the different countries. Both of us would also like to thank the International Rescue Committee for the opportunity to conduct collaborative work that has informed this research. Some of this work was funded by the Research for Health in Humanitarian Crises (R2HC) programme, managed by ELRHA (SCUK accountable grant number 13488). The R2HC programme aims to improve health outcomes by strengthening the evidence base for public health interventions in humanitarian crises. Visit http://www.elrha.org/work/ r2hc for more information. The £8 million R2HC programme is funded equally by the Wellcome Trust and the UK Department for International Development, with Enhancing Learning and Research for Humanitarian Assistance (ELRHA) overseeing the programme's execution and management. The funder had no role in study design, data collection, analysis, interpretation, or writing. Hannah Brown would like to thank her collaborators on this award, especially Rashid Ansumana, Lara Ho, and Ruwan Ratnayake. The article also draws on research that was funded by the ESRC grant ES/L010690/1. We would also like to thank Matthias Borchert and Ann Kelly, who have been long-term collaborators in thinking and research work that informs this article. Ethical clearances were obtained from the Sierra Leone Ethics and Scientific Review Committee and the Durham University Institutional Review Board.

- <sup>1</sup> Including blood, vomit, sweat, breast milk, semen, and other bodily fluids. See also https://www.cdc.gov/ vhf/ebola/transmission/ (accessed 6 November 2020).
  - <sup>2</sup> https://en.wikipedia.org/wiki/Basic\_reproduction\_number (accessed 6 November 2020).
- <sup>3</sup> Whilst some of these objects were familiar from earlier cholera epidemics (e.g. gloves, sprayers, bodybags), these tended to be used in isolated settings. In Ebola, their use became widespread. Other things like ambulances were previously very rare in these countries, and became ubiquitous during the outbreak.
- <sup>4</sup> For example, see the various checklists for response supplies in the MSF Ebola preparedness and management briefing: https://www.medbox.org/ebola-outbreak-preparedness-management/preview?q=baert (accessed 20 January 2017; no longer available online).
- <sup>5</sup> Other components include: avoidance of invasive therapies (e.g. injections); enhanced sharps and waste management; and enhanced disinfection (frequent hand-washing, generous use of disinfectant).
- $^6$  https://www.msf.org/sierra-leone-msf-suspends-emergency-paediatric-and-maternal-services-gondama (accessed 6 November 2020).
- <sup>7</sup> The opening and closure of health facilities was different in each of the three countries, and at different points in the epidemic.
  - <sup>8</sup> A pseudonym.
- <sup>9</sup> When MSF (2015) declared they were unable to cope with the Ebola cases in the three most affected
- <sup>10</sup> For example, at Kenema in Sierra Leone, there were disturbances described as 'riots' at the government hospital with residents complaining about the location of the ETU within the existing Lassa fever ward of the government hospital, located in the centre of the city. A new ETU was built about 14 km out of town in bushland. Similarly, ETUs at Koya and Nongo in Guinea suffered attacks from the population and a new ETU at Koya was set up in the middle of the bush.
- <sup>11</sup> See 'Ebola: My last day in the isolation zone': https://www.msf-me.org/article/ebola-my-last-dayisolation-zone (accessed 19 November 2020).
- <sup>12</sup> There is no conclusive clinical evidence for this but many support the use of intensive rehydration therapy (see, e.g., McNeill 2015).
- <sup>13</sup> See also: 'Finding my father's grave': https://www.youtube.com/watch?v=EOB7jqZRiLM (accessed 9 November 2020).
- <sup>14</sup> See also: 'In the shadow of Ebola' (2014), dir. Gregg Mitman and Sarita Siegel, 25 mins: https://vimeo. com/118531179 (accessed 9 November 2020).
- 15 http://www.emansion.gov.lr/2press.php?news\_id=3045&related=7&pg=sp (accessed 9 November 2020). This was partly a practical consideration made when the South Asian community in Liberia offered its crematorium facility to the response.
- $^{16}\ https://apps.who.int/iris/bitstream/handle/10665/137379/WHO\_EVD\_GUIDANCE\_Burials\_14.2\_eng.$ pdf;jsessionid=2BEA0119DE83AEBEFA85D42A1F23A51F?sequence=1 (accessed 9 November 2020).
  - <sup>17</sup> The term originally comes from the philosopher Paul Ricoeur.

### **REFERENCES**

- ABRAMOWITZ, S.A., S.L. McKune, K.L. Bardoshi, M. Fallah, J. Monger, K. Tehoungue & P.A. Omidian 2015. Community-centered responses to Ebola in urban Liberia: the view from below. *PLOS Neglected Tropical Diseases* 9, e0003706 (available online: <a href="https://doi.org/10.1371/journal.pntd.0003767">https://doi.org/10.1371/journal.pntd.0003767</a>, accessed 9 November 2020).
- Anoko, J.N. 2014. Communication with rebellious communities during an outbreak of Ebola virus disease in Guinea: an anthropological approach (available on-line: <a href="http://www.ebola-anthropology.net/case\_studies/communication-with-rebellious-communities-during-an-outbreak-of-ebola-virus-disease-in-guinea-an-anthropological-approach/">http://www.ebola-anthropology.net/case\_studies/communication-with-rebellious-communities-during-an-outbreak-of-ebola-virus-disease-in-guinea-an-anthropological-approach/</a>, accessed 9 November 2020).
- BAIER, A. 1986. Trust and antitrust. Ethics 9, 231-60.
- BEISEL, U. 2014. On gloves, rubber and the spatio-temporal logics of global health. *Somatosphere*, 6 October (available online: <a href="http://somatosphere.net/2014/10/rubber-gloves-global-health.html">http://somatosphere.net/2014/10/rubber-gloves-global-health.html</a>, accessed 9 November 2020).
- Berg, M. & G. Bowker 1997. The multiple bodies of the medical record: toward a sociology of an artifact. Sociological Quarterly 38, 513-37.
- BOLTEN, C. 2014. Articulating the invisible: Ebola beyond witchcraft in Sierra Leone. 7 October (available online: , accessed 9 November 2020).
- BOUMANDOUKI, P., P. FORMENTY, E. ALAIN, P. CAMPBELL & Y. ALLARANGAR 2005. Prise en charge des malades et des défunts lors de lépidémie de fièvre hémorragique due au virus Ebola d'octobre à décembre 2003 au Congo. Bulletin de la Société de pathologie exotique 98, 218-23.
- CALAIN, P. & M. PONCIN 2015. Reaching out to Ebola victims: coercion, persuasion or an appeal for self-sacrifice? Social Science & Medicine 147, 126-33.
- Candea, M. 2010. 'I fell in love with Carlos the meerkat': engagement and detachment in human-animal relations. *American Ethnologist* 37, 241-58.
- ——, J. COOK, C. Trundle & T. Yarrow (eds) 2015. Detachment: essays on the limits of relational thinking. Manchester: University Press.
- CARSTEN, J. 2013. What kinship does and how. HAU: Journal of Ethnographic Theory 3, 245-51.
- COOPER, H. 2015. They helped erase Ebola in Liberia. Now Liberia is erasing them. *The New York Times*, 9 December (available online: http://www.nytimes.com/2015/12/10/world/africa/they-helped-erase-ebola-in-liberia-now-liberia-is-erasing-them.html?\_r=0, accessed 6 November 2020).
- DELAMOU, A., R.M. HAMMONDS, S. CALUWAERTS, B. UTZ & T. DELVAUX 2014. Ebola in Africa: beyond epidemics, reproductive health in crisis. *The Lancet* 384, 2105.
- Desclaux, A., M. Diop & S. Doyon 2017. Fear and containment: contact follow-up perceptions and social effects in Senegal and Guinea. In *The politics of fear: Médecins Sans Frontières and the West African Ebola epidemic* (eds) M. Hofman & S. Au, 209-34. Oxford: University Press.
- ENGLUND, H. & T. YARROW 2013. The place of theory. Social Analysis 57, 132-49.
- ESPOSITO, R. 2011. Immunitas: the protection and negation of life. Cambridge: Polity.
- FAIRHEAD, J. 2016. Understanding social resistance to the Ebola response in the forest region of the Republic of Guinea: an anthropological perspective. *African Studies Review* **59**: **3**, 7-31.
- FERME, M. 2001. The underneath of things: violence, history and the everyday in Sierra Leone. Berkeley: University of California Press.
- FISCHER, R., S. JUDSON, K. MAZGOWICZ, et al. 2015. Ebola virus stability on surfaces and in fluids in simulated outbreak environments. *Emerging Infectious Disease* 21, 1243-6.
- Geschiere, P. 2013. Witchcraft, intimacy, and trust: Africa in comparison. Chicago: University Press.
- GOMEZ-TEMESIO, V. & F. LE MARCIS 2017. La mise en camp de la Guinée: Ebola et l'expérience postcoloniale. L'Homme 222, 57-90.
- GUIMARD, Y., M.A. BWAKA, R. COLEBUNDERS, et al. 1999. Organization of patient care during the Ebola hemorrhagic fever epidemic in Kikwit, Democratic Republic of the Congo, 1995. *The Journal of Infectious Diseases* 179, S268-73.
- HAYDEN, C.E. 2008. Of medicine and statecraft: smallpox and early colonial vaccination in French West Africa (Senegal-Guinea). Ph.D. dissertation, Northwestern University (available online: <a href="https://arch.library.northwestern.edu/concern/generic\_works/9306sz445">https://arch.library.northwestern.edu/concern/generic\_works/9306sz445</a>, accessed 9 November 2020).
- HETHERINGTON, K. & R. MUNRO (eds) 1997. *Ideas of difference: social spaces and the labour of division*. Oxford: Blackwell/The Sociological Review.
- Hewlett, B.S. & R. Amola 2003. Cultural contexts of Ebola in Northern Uganda. *Emerging Infectious Diseases* 9, 1242-8.

Journal of the Royal Anthropological Institute (N.S.) o, 1-21

© 2020 The Authors. *Journal of the Royal Anthropological Institute* published by John Wiley & Sons Ltd on behalf of Royal Anthropological Institute

- & B.L. HEWLETT 2008. Ebola, culture, and politics: the anthropology of an emerging disease. Belmont, Calif: Thomson Wadsworth.
- JACKSON, M. 2012. Lifeworlds: essays in existential anthropology. Chicago: University Press.
- JEDREJ, M.C. 1976. Structural aspects of a West African secret society. Journal of Anthropological Research 32,
- JEFFS, B., P. RODDY, D. WEATHERILL, et al. 2007. The Médecins Sans Frontières intervention in the Marburg hemorrhagic fever epidemic, Uige, Angola, 2005: I. Lessons learned in the hospital. Journal of Infectious Disease 196: S2, S154-61.
- JUDSON, S., J. PRESCOTT & V. MUNSTER 2015. Understanding Ebola virus transmission. Viruses 7, 511-21.
- LACHENAL, G. 2015. Outbreak of unknown origin in the Tripoint Zone. Limn 5 (available online: https://limn. it/articles/outbreak-of-unknown-origin-in-the-tripoint-zone/, accessed 9 November 2020).
- LAMBEK, M. & A. STRATHERN (eds) 1988. Bodies and persons: comparative perspectives from Africa and Melanesia. Cambridge: University Press.
- LATOUR, B. 1993. We have never been modern (trans. C. Porter). New York: Harvester Wheatsheaf.
- Law, J. 2010. Care and killing: tensions in veterinary practice. In Care in practice: on tinkering in clinics, homes and farms (eds) A. Mol, I. Moser & J. Pols, 57-72. Bielefeld: Transcript Verlag.
- LE MARCIS, F. 2015. 'Traiter les corps comme des fagots': production social de l'indifférence en contexte Ebola (Guinée). Anthropologie et Santé 11 (available online: https://journals.openedition.org/anthropologiesante/ 1907, accessed 9 November 2020).
- LEACH, M. 2015. The Ebola Crisis and post-2015 development. Journal of International Development 27, 816-
- LIPTON, J. 2017. 'Black' and 'white' death: burials in a time of Ebola in Freetown, Sierra Leone. Journal of the Royal Anthropological Institute (N.S.) 23, 801-19.
- McMahon, S.A., L.S. Ho, H. Brown, L. MILLER, R. Ansumana & C.E. Kennedy 2016. Healthcare providers on the frontlines: a qualitative investigation of the social and emotional impact of delivering health services during Sierra Leone's Ebola epidemic. Health Policy Plan 31,1232-9.
- McNeill, D.G., Jr 2015. Ebola doctors are divided on IV therapy in Africa. The New York Times, 1 January (available online: https://www.nytimes.com/2015/01/02/health/ebola-doctors-are-divided-on-ivtherapy-in-africa.html?\_r=0, accessed 9 November 2020).
- MENZEL, A. 2015. Foreign investment, large-scale land deals, and uncertain 'development' in Sierra Leone: impacts, conflicts, and security concerns. CCS Working Papers 18 (available online: http://archiv.ub.unimarburg.de/es/2019/0013/pdf/ccs-wp-18.pdf, accessed 9 November 2020).
- MILLELIRI, J.-M., C. TÉVI-BENISSON, S. BAIZE, E. LEROY & M.C. GEORGES-COURBOT 2004. Les épidémies de fièvre hémorraghique due au virus Ebola au Gabon (1994-2002): aspects épidémiologiques et réflexions sur les mesures de controle. Bulletin de la Société de pathologie exotique **97**, 199-205.
- MILLER, D. 2008. The comfort of things. Cambridge: Polity.
- Mol, A. & J. Law 1994. Networks and fluids: anaemia and social topology. Social Studies of Science 24, 641-71. MSF 2015. Pushed to the limit and beyond: a year into the largest ever Ebola outbreak. 23 March (available online: https://www.msf.org/ebola-pushed-limit-and-beyond, accessed 9 November 2020).
- Myhre, K.C. 2013. Introduction. Social Analysis 57, 1-24.
- Napier, A.D. 2012. Nonself help: how immunology might reframe the Enlightenment. Cultural Anthropology 27, 122-37.
- PARK, S.-J. & R. UMLAUF 2014. Caring as existential insecurity: quarantine, care, and human insecurity in the Ebola crisis. Somatosphere, 24 November (available online: http://somatosphere.net/2014/caring-asexistential-insecurity.html/, accessed 9 November 2020).
- PEDERSEN, M.A. 2013. The fetish of connectivity. In Objects and materials: a Routledge companion (eds) P. Harvey, E.C. Casella, H. Knox, C. McLean, E.B. Silva, N. Thoburn & K. Woodward, 197-207. Abingdon, Oxon: Routledge.
- Pellecchia, U., R. Crestani, T. Decroo, R. Van den Bergh & Y. Al-Kourdi 2015. Social consequences of Ebola containment measures in Libera. PLoS ONE 10: 12, e0143036 (available online: https://doi.org/ 10.1371/journal.pone.0143036, accessed 9 November 2020).
- PINK, S., J. MORGAN & A. DAINTY 2014. The safe hand: gels, water, gloves and the materiality of tactile knowing. Journal of Material Culture 19, 425-42.
- Raabe, V.N., I.M. Mutyabu, P. Roddy, J.J. Lutwama, W. Geissler & M. Borchert 2009. Infection control during filoviral hemorrhagic fever outbreaks: preferences of community members and health workers in Masindi, Uganda. Transactions of the Royal Society of Tropical Medicine and Hygiene 104, 48-50.

- RADCLIFFE-Brown, A.R. 1940. On joking relationships. Africa: Journal of the International African Institute 13, 195-210.
- REDFIELD, P. 2008. Vital mobility and the humanitarian kit. In Biosecurity interventions: global health and security in question (eds) A. Lakoff & S.J. Collier, 147-71. New York: Columbia University
- 2015. Medical vulnerability, or where there is no kit. Limn 5 (available online: https://limn.it/articles/ medical-vulnerability-or-where-there-is-no-kit/, accessed 9 November 2020).
- RICHARDS, P. 2016. Ebola: how a people's science helped end an epidemic. London: Zed Books.
- RODDY, P., D. WEATHERILL, B. JEFFS, et al. 2007. The Médecins Sans Frontières intervention in the Marburg hemorrhagic fever epidemic, Uige, Angola, 2005: II. Lessons learned in the community. Journal of Infectious Disease 196: S2, S162-7.
- SAHLINS, M.D. 2011. What kinship is (part one). Journal of the Royal Anthropological Institute (N.S.) 17, 2-10
- SAIZ BERMEJO, H. 2016. Gender evaluation of the Doctors of the World and Medicos del Mundo Ebola response in Moyamba Ebola Treatment Center project, Moyamba district, Sierra Leone. Madrid: Medicos del Mundo.
- SANCHEZ CARRERA, V. 2015. Ebola review. Ebola Treatment Centers: design and construction. Part I. Evaluation outcomes. Stockholm: Stockholm Evaluation Unit and MSF.
- SHAW, R. 1997. The production of witchcraft/witchcraft as production: memory, modernity, and the slave trade in Sierra Leone. American Ethnologist 24, 856-76.
- SIMPSON, B. 1994. Bringing the 'unclear' family into focus: divorce and re-marriage in contemporary Britain. Man (N.S.) 29, 831-51.
- 1998. Changing families: an ethnographic approach to divorce and separation. London: Berg.
- Sprecher, A. 2017. Finding an answer to Ebola's greatest challege. In The politics of fear: Médecins Sans Frontières and the West African Ebola epidemic (eds) M. Hofman & S. Au, 187-201. Oxford: University
- STASCH, R. 2009. Society of others: kinship and mourning in a West Papuan place. Berkeley: University of California Press.
- STRATHERN, M. 1988. The gender of the gift: problems with women and problems with society in Melanesia. Berkeley: University of California Press.
- 1996. Cutting the network. *Journal of the Royal Anthropological Institute* (N.S.) **2**, 517-35.
- 2004. Partial connections. Oxford: AltaMira.
- Tibbels, N. 2015. Trust in health system and barriers to healthcare utilization in Sierra Leone. Baltimore, Md: JHSPH Center for Communication Programs.
- TURNER, V. 1969. The ritual process: structure and anti-structure. New Brunswick, N.J.: Aldine Transaction. WHO 2014. Package and approaches in areas of intense transmission of Ebola virus. Geneva: WHO.
- WHYTE, S.R., S. VAN DER GEEST & A. HARDON 2002. Social lives of medicines. Cambridge: University Press.
- WILKINSON, A. & J. FAIRHEAD 2017. Comparison of social resistance to Ebola response in Sierra Leone and Guinea suggests explanations lie in political configurations not culture. Critical Public Health 27, 14-27.
- & M. LEACH 2015. Briefing: Ebola myths, realities, and structural violence. African Affairs 114, 136-48.
- YARROW, T. & S. JONES 2014. 'Stone is stone': engagement and detachment in the craft of conservation masonry. Journal of the Royal Anthropological Institute (N.S.) 20, 256-75.

### Quand Ebola isole: confiance, crise et « distanciation sociale » en Afrique de l'Ouest

Résumé

L'épidémie d'Ebola en Afrique de l'Ouest a impliqué l'introduction de nouvelles formes de séparation sociale et physique visant à limiter la propagation de la maladie. Afin d'éviter les contacts avec les malades potentiels, les modes de vie ont dû s'adapter. Les pouvoirs publics ont instauré une série de mesures, allant des arrêtés aux campagnes de santé publique, en passant par le recours aux centres de soins spécialisés et à l'armée. Ces événements ont transformé les rapports sociaux et bouleversé les possibilités de confiance dans les relations intimes, gouvernementales et thérapeutiques. En s'appuyant sur un travail de terrain réalisé en Sierra Leone, au Liberia et en Guinée, cet article explore ces formes de séparation et de distanciation sociale d'un point de vue ethnographique, avec une attention particulière pour les objets matériels, le toucher et les espaces de séparation. Il contribue ainsi aux débats sur la construction de la confiance et de la distance dans les relations sociales, et les moyens par lesquels la séparation peut ouvrir la voie à certaines formes de

proximité. L'analyse des autrices propose des perspectives à ceux qui cherchent à comprendre l'impact de l'actuelle pandémie de Covid-19 sur les manières de se lier aux autres et de s'en préoccuper.

Hannah Brown is Associate Professor of Anthropology at Durham University. Her research explores relations of care within institutions and interpersonal relationships, with a particular focus on healthcare, development, and responses to epidemics in Kenya and Sierra Leone. More recently, she has become interested in exploring these issues through their more-than-human dimensions.

Department of Anthropology, Durham University, Dawson Building, South Road, Durham DH1 3LE, UK. hannah.brown@durham.ac.uk

Almudena Marí Sáez is a researcher at the Centre for International Health Protection at the Robert Koch Institute. Her research explores emergent diseases, Lassa fever, and Ebola virus disease, particularly two aspects: human-animal interactions and outbreak response infrastructure. She is also interested in analysing these aspects (human-animal interactions and outbreak response) vis-à-vis public health interventions.

Centre for International Health Protection (ZIG), Robert Koch Institute, Nordufer 20, Berlin 13353, Germany. mari-saeza@rki.de