Ebola and Moving People: Understanding the Role of Embodied Techniques in Funeral Ceremonies to the Chain of Transmission of the Ebola Virus in Sierra Leone Through Movement Analysis

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Abstract

The paper focuses on exploring the potential of documenting the embodied techniques observed in the funeral ceremonies of Sierra Leone and identifying their socio-cultural relevance through movement study. Largely unknown until it was hurled into the limelight during the 2014-2016 Ebola outbreak in West Africa, the funeral ceremonies were announced to have contributed to the spread of the Ebola virus. There was a failure from humanitarian and state actors to realise that understanding and archiving cultural practices, like funerals, can also contribute to stop the chain of infections. The Lack of acknowledgement for anthropological engagement during the onset of the humanitarian assistance resulted in two findings. Firstly, the delay in stopping the aggressive transmission of the virus, and secondly, the realisation that available knowledge about Sierra Leone's funeral ceremonies was quite restricted and mostly constrained within the Ebola outbreak setting. Ethnographic inquiry was extensively utilised in collecting data in Freetown, Port Loko, and Koinadugu. The methods used included observation sessions, secondary data collection, key informant interviews, informal dialogues, and focus group discussions (FGD). The findings revealed that selected ethnic groups: Fulla, Krio, Kuranko, Limba, Madingo, Mende, and Temne shared comparable funeral practices that essentially utilise voluminous physical contact. The movement analysis demonstrated that embodied techniques were not only symbolical and functional but also fatal in the spread of the Ebola virus. This paper investigates their regular and collective performance in funeral ceremonies, explicated beliefs and negotiation dexterities during critical events such as the Ebola outbreak

Keywords: embodied techniques, funeral, Ebola, transmission, Sierra Leone

Introduction

There is a contentious debate regarding anthropological engagement's visibility in the humanitarian field, as it is not treated continuously with the same sense of urgency as other aspects of aid. More so for such

engagements that employed creative mediums involving intangible cultural heritage (UNESCO, n.d.) as evaluation tools for re-designing programs.

Themes like humanitarian aid partnered with anthropological engagement were not entirely new. Emma O'Driscoll (2009: 13), while citing Nolan, stated that "the poor success rates of development initiatives had been attributed to a lack of awareness of the social and cultural implications inherent to planned change." Previous researches delved into projects that assisted but despite the engagement of culture, it was often reduced to a marginal role. Further, O'Driscoll (Ibid: 16), validated the "continuing doubt over whether or not it ha[d] a role to play" and quoted Edelman and Haugerud (O'Driscoll, 2009: 13-14).

The current conundrum led to diving into a theme that highlighted how understanding a community's culture can contribute to more acceptable forms of assistance and the Ebola[11] response became an ideal case study for this. During the 2014-2016 Ebola outbreak in West Africa, it was cited that "trends in West Africa demonstrated that the use of scientific methods alone without a holistic consideration of other contextual factors [wa]s not sufficient to control the disease" (Manguvo & Mafuvadze, 2015). Understanding the logic behind the shortcomings of the scientific lens in combatting the Ebola virus disease or EVD became imperative in the latter part of the humanitarian response. When anthropological researches started exploring the nature of the Ebola outbreak, the role of culture was emphasised in the disease transmission. Cultural practices were instrumental in mapping out how EVD acted on the communities' perceptions of death. These perceptions were translated through adaptive embodied techniques responsible for stabilising the communities' socio-cultural structure.

Background of the Research

Death and Ebola

Scientifically, "Ebola spread through human-to-human transmission via direct contact with bodily fluids of infected people, and with surfaces and materials contaminated with these fluids" (Health & Education Advice & Resource Team, 2014). People remained infectious even after they were declared dead.

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[11] Ebola is a hemorrhagic fever caused by a virus of the Filoviridae family, known as a 'filovirus named after the Ebola River in former Zaire (now Democratic Republic of Congo) in 1976, where the first outbreak was recorded (Venables & Pellechia, 2017, p. 2).

However, in understanding the virus through the cultural lens, one must acknowledge that it was undoubtedly a disease of social intimacy. The Infection spread among those who cared for the sick and the dying, including those who prepared the dead for burial (Richards, 2016). For communities who believed in life after death, "funeral and burial practices [we]re given a lot of significance as they [we]re perceived as crucial steps in transitioning from the world of the living to the spiritual world"[12] (Manguvo & Mafuvadze, 2015). Moreover, deaths, especially the ones connected to diseases, were generally believed as a form of punishment, or even a curse, for wrongdoing.

Such was the case in Sierra Leone. Ebola was believed as "a god-sent disease" (Dietrich 2018)[13]. A similar cultural impression was reaffirmed in a documentary when Victoria, the first EVD survivor of Sierra Leone, was interviewed (BBC 2015). Fairhead (2014) further explained that "the anthropology of the region [wa]s emphatic that disease, however, it manifest[ed], [wa]s usually regarded as a punishment [or] a warning." Such circumstances required specifications to be obeyed following the 'the right way'[14] or else there will be undesirable repercussions.

Community and 'The Right Way'

For the local communities, 'the right way' was necessary. This inclination to preserve cultural practices that had been passed down for generations, suggesting these communities were careful, bordering on protective, about their traditional knowledge. It cannot be concluded if the foreign assistance during the Ebola outbreak played a role in spurring this 'protectiveness' or if it had always been there long before the Ebola outbreak happened. What appeared certain was the presence of the unspoken need to protect the local traditions from outside influences, and the urgent efforts to ensure that their cultural practices did not disappear. Essentially, this clarified one of the major issues during the Ebola outbreak concerning the insistence on touching the

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[12] Manguvo and Mafuvadze citing Hewlett, B.S. and Amonla, R.P.

[13] Luisa Dietrich worked as a Gender Adviser with Oxfam's Global Humanitarian Team from February to June 2015 in Sierra Leone where her deployment's coverage included Freetown, Port Loko, Koinadugu, and Makeni.

[14] During the interview with A.B.C., which turned into an unplanned FGD, the unnamed elders kept mentioning 'the right way' when they were involved in a heated debate with the young translator and amongst each other.

bodies of their dead or loved ones who were sick[15]. Adverse reactions were not only confined within the 'no touching' policy, they also disapproved of how burial teams were handling the bodies of the dead. Actions of the burial teams did not coincide with the expected effects of the local communities, and this disapproval did not go unnoticed. In an FGD with former members of burial teams, they too admitted that there were circumstances when they resorted to inappropriate methods, "sometimes even using force with the aid of the police" (M.G., 2018, June 28. Kabala District, Sierra Leone, Personal interview). Most of them "felt sorry to have had to bury the dead in body bags because this was not the custom." They resorted to such methods not only for their safety but also for the protection of other people.

Manifestations of this were all the more expressed in the local community's decision to revert to their 'traditional' funeral ceremonies, with a few alterations, after WHO lifted the ban at the beginning of 2016. This was revealed in several transcribed interviews that were conducted with participants[16] who came from different ethnic groups. For example, when asked what kind of burials were practiced after the Ebola outbreak, they were quick to respond that local community members went back to 'the right way,' also referred as 'the old ways,' and sometimes 'the normal ways.' Although phrased differently, they all shared the same message – one cannot keep the people from their traditions.

EVD, Humanitarian Aid and the Missing Component

The scientific process established that physical contact between individuals was the fatal component in the EVD transmission. To stop this chain of transmission, all forms of physical contact was abruptly prohibited at the beginning of the humanitarian response. Mobilizers following NERC's SOP[17] were instructed that communities must change their cultural practices, especially the ones that involved burials and looking after the sick, as they were prominent factors to the

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[15] Cited from recorded personal interviews with participants I.F., 2018, July 4 in Port Loko and A.R., 2018, July 6 in Freetown.

[16] The participants being referred to include the director of the Ministry of Tourism and Culture, *mammy queen* (leader of the women's secret society), elders in Lower Sendugu Section, government officials in the Port Loko and Koinadugu District Council, local burial team members, university lecturers in Freetown and Port Loko.

[17] Refers to National Ebola Response Center's Standard Operating Procedure for Social Mobilization and Community Engagement of 2015.

spread of Ebola (Enria, 2017). WHO's[18] guidelines failed to give immediate attention to cultural implications on affected communities. As a result, culturally or religiously unacceptable humanitarian initiatives were rejected. Preparing, washing, and disposing of a dead body during the Ebola outbreak was a dangerous and risky practise but an "epidemiologically safe burial [wa]s unsafe from a social and spiritual perspective. An unwashed body was thrown in the ground or a body bag [wa]s likely to leave in its wake a great deal of social disquiet" (Richards, 2016: 52).

Humanitarian research participants also conferred this major challenge during their deployment in the field. Resistance to initiatives meant that there were opportunities for social contact to continuously transpire in community events. If people were socialising and moving, then Ebola was also moving.

In Sierra Leone's case, community events like "funerals bec[a]me a key source of infection in the region" (Fairhead, 2014). The first confirmed case was a young woman who was admitted to a government hospital in Kenema[19], following a miscarriage on May 24, 2014. Her source of infection was traced to an earlier event involving the funeral of a widely respected traditional healer who was also well-known across the border in Guinea (WHO, n.d.).

Theoretical Framework

Since the research was initiated to understand the logic behind the role of culture in the transmission dynamics of Ebola, it was necessary to start with the scientific lens in structuring the framework. The base model in simulating the EVD infection path was the Epidemiologic Triangle (PAHO-WHO, n.d.). This model was then expanded using CDC's Chain of Infection (CDCa, n.d.).

To understand the cultural lens of the infection, one needed to pay attention to the *mode of transmission*. When no opportunity for a *mode of transmission* happened, the chain of infection would break. However, if opportunities were presented, like social events where community interactions were obligatory, Ebola could enter a susceptible host. 'Susceptible' meant that the virus transmission was dependent on genetic or constitutional factors such as immunity and the ability to resist the infection or limit its pathogenicity (CDCb, n.d.).

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[18] World Health Organization.
[19] Original report stated 'Kailahun.'

To expound this phenomenon, the embedded transmission system in local communities was explored by converging the Epidemiologic Triangle with the Social Learning theory and Birdwhistell's body language and theory of kinesics (1970), with a specific focus on community 'reali[s]ations'[20] that were converted into embodied techniques.

Community 'reali[s]ations' of the funeral ceremonies before the 2014-2016 Ebola outbreak adapted to the evolving social contexts and emerging needs during and after that period. The changes in these 'reali[s]ations' were testimonials to the connection of the funeral ceremonies to the spread, control, and prevention of the Ebola virus. They were tangible components needed in uncovering the community concepts that were not so visible, especially to foreigners.

These 'reali[s]ations' were attached to the transmission system that facilitated the relationships in the communities and the practice of their funeral ceremonies. Such cultural practices provided order within the communities. In most times even, it determined the importance of communication amongst members for happenings, dispositions, or beliefs that they cannot entirely comprehend or verbalise.

The existing transmission system was then enthused by the concept of social learning where Birdwhistell emphasised the "process by which the member of the group ma[de] and maintain[ed] contact with his fellows so that patterned participation [wa]s possible" (1970: 74). To be viable members of social groupings, he noted that living beings recognized and responded to ordered messages which meant that individuals "learn[ed] to behave in appropriate ways which permit the other members of the group to recogni[s]e [or] anticipate his behaviour" (Ibid.).

In short, the Epidemiologic Triangle answered the 'how' of the EVD outbreak but the Social Learning theory and Birdwhistell's body language and theory of kinesics answered the 'why.'

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[20] The term is inspired by the concept on the dimensions of dance introduced by Egil Bakka and Gediminas Karoblis (2010, pp. 172-173) which were identified as 'actual performances' of the dance. In this case, they are the embodied techniques or physical movements exhibited by different parts of the human body during the funeral ceremonies.
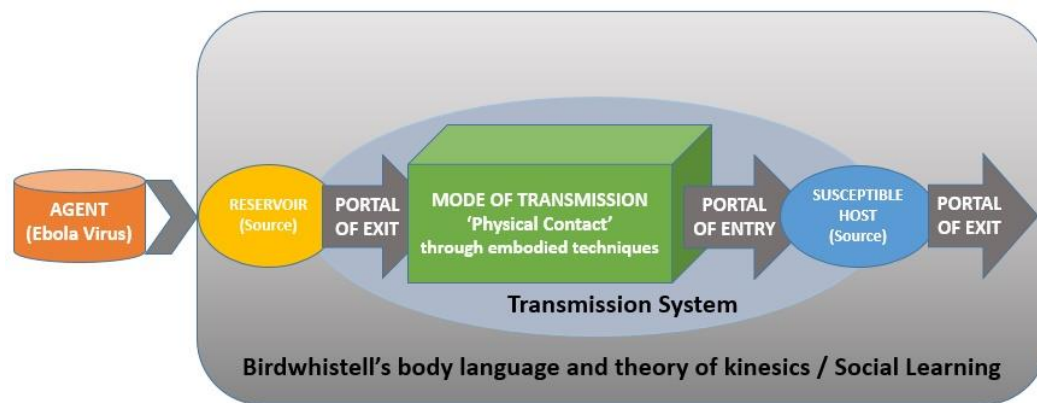
Figure 1: Constructed Framework of the Research

The correlation of the negotiated body movements with socio-cultural needs was reinforced by incorporating Anne Hatchinson-Guest's language of dance movement (2008). By converting the funeral ceremonies into a written form such as a movement notation, it became tangible evidence that was archived and analysed. Hatchinson-Guest's stance on the interpretation of movement as a language in both artistic and communicative sense resonated Birdwhistell's kinesics and its context (2008:xxxiv).

Documentation and archiving were grounded on the understanding that forms of non-verbal communication were directly or indirectly acquired socially and stocked with cultural values. Since human movement was believed to be a manifestation of actions within its cultural context, the best route was to create a score of movement notations that chronicled a sequence of non-random embodied techniques that led to the establishment of the fatal physical contact.

Research Methodology

The research was designed to accomplish four objectives built upon preliminary materials about EVD, excerpts of funeral practices before the Ebola outbreak, and the lessons learned from humanitarian initiatives during the Ebola Outbreak Response. The objectives were to produce a detailed account of the funeral ceremonies in Sierra Leone and to establish the connection of these funeral ceremonies to Ebola, document the observed changes applied during and post-Ebola outbreak, and examine the relationships embedded in the communities' transmission system.

To accomplish the objectives, ethnographic inquiry was extensively utilised in collecting data in the target areas: Freetown, Port Loko, and Koinadugu. The

fields were chosen based on three considerations: number of EVD cases, number of survivors, and the presumed similarity of funeral practices. These were supported by factors like presence of health care clinics, language, and other cultural practices that were viewed to have influenced EVD transmission (Ampilan, A.[21], 2017, December, Untitled, Online Interview).

Research Participants

All activities were principally executed in coordination with other field actors, and research participants were categorised into two groups. The primary sources of information for the funeral ceremonies were the elders of the communities, ages ranged from 65 to 100 years old who were labelled Group A. The other group belonged to a younger age cluster of 25 to 55 years old, marked Group B, who were composed of local community members, government and non-government employees, university lecturers, health and aid workers, as well as members of the Ebola outbreak burial teams. No participant fell under the age range of 56 to 64.

Both groups were asked to discuss the process of handling the body of the dead from the formal announcement of death to the burial. They were also encouraged to engage in a discussion about the Ebola outbreak and its link to their cultural practices, a matter that remained sensitive up to the time that one left the field.

Planning, Data Collection, and Interpretation

Both quantitative and qualitative methods were employed in the research. These included a review of related studies, field observations of funeral events, survey and questionnaire distribution, archive visits or secondary data collection, purposive sampling interviews through key participants, informal dialogues, focus group discussions (FGDs), data review and evaluation.

A descriptive-comparative analysis was utilized once field data was compiled. Information was based on the following materials: tabulated answers to the online survey and questionnaire distributed during the first phase of the research, transcriptions from recorded interviews, informal discussions, and

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[21] Abdullah Ampilan was part of the Ebola Response in Sierra Leone and Liberia during the Ebola outbreak in 2014 to 2015. He was part of the team that provided technical support on social mobilisation, community engagement, hygiene promotion, and NFI distribution in the three research areas. He was also the project manager for a sanitation innovation project post-Ebola.

FGDs, photos and videos of funeral events that were captured either by the researcher and/or translator-guide. The information gathered during the preliminary phase of the research was utilised as a point of comparison for the analysis.

Scope and Limitations

The research was limited to documenting the funeral ceremonies of different groups: *Fulla*, *Krio*, *Kuranko*, *Limba*, *Madingo*, *Mende*, *Temne*, and Sierra Leoneans who did not want to be identified with any ethnic group. They resided in the districts of Freetown, Port Loko, and Koinadugu, respectively. The ethnographic details within such practices were so extensive that one could not discuss every aspect shared by each participant however an expanded version can be viewed in the author's unpublished master thesis (Ramonal, 2019). The objective was to produce the accumulated accounts of the mentioned groups' funeral ceremonies with highlights on their shared and distinctive characteristics. Also, it had to be noted that there were members from the same groups who resided in other districts in Sierra Leone and their description of the funeral ceremonies may not be similar.

All participants were provided with consent forms, and names of the participants were reduced to initials in the text for anonymity. Exceptions were made for referencing those who agreed to have their names mentioned.

Findings and Discussions

The control of the Ebola outbreak was clearly centred on the techniques of the body. The term 'technique' was used because the foci were non-random culturally patterned body movements. Infection was happening because of bodily interactions that were transpiring in social events where community members have a particular way of carrying out tasks and displaying behaviour. Physical contact was happening in these social events, and funeral ceremonies were merely one of them. Therefore, it was essential to document what occurred in such circumstances to trace this 'contact' and contrast it with the safety measures that were imposed.

Accumulated Accounts of Funeral Ceremonies

Given that the participants made it clear that significant distinctions to their funerals were accorded to the religion they practised, categorised as Christian, Muslim, and the African Traditionalist, the accumulated accounts reflected these distinctions. Nonetheless, there were some overlapping facets within the three differences as many community members were simultaneously practising two religions. For example, some Muslims were said to be members of the secret society, an aggregation of individuals observing the African traditional beliefs, and therefore another layer was added to their funerals. Nevertheless, discussions about the African traditional religion or secret society funerals were not explored. The happenings within the funerals of the secret society were only bared to their members and an outsider such as myself was excluded from knowing. Also, the funerals in these secret societies were not the same 'secret' burials that aid and health workers conversed about.

Within the significant distinctions predisposed by religion, there were also the sub-distinctions that were dependent on the 'social status' or seniority of the dead and his or her manner of death. These sub-distinctions also fashioned the type of funeral given to the individual as much as the major distinctions did.

The accumulated accounts of funeral ceremonies of the selected groups were divided into stages based on the commonalities or shared habits in the segments of activities. Conversely, within each stage, notable differences were specified that helped in emphasising the complexity of the funeral ceremonies.

The Six Stages of the Funeral Ceremony

The segments of activities were categorised into six stages: *Announcement of Death*, *Preparation of the Body*, *Wake*, *Procession*, *Final Burial*, and *Post Burial Gathering*. The liberty in formulating the steps was a personal decision. Participants did not assign categories to their funeral activities. During the discussions, many regarded the ceremonies as one big event and did not innately describe them in sequential order, unless guided or prompted with a clarification. Since treating the funerary process as a singular event was too broad, formulating categories set precincts to distinguish trends.

Stage 1: Announcement of Death

This began on the moment the person stopped breathing and was checked by an elder or health worker. All the participants specified that the dead's eyes and mouth should be closed before the body was wrapped in a white sheet. Subsequently, a quick family meeting was set for pre-arrangements and then followed by an initial declaration. Some groups called the meeting an emergency *ijiga*[22].

The initial declaration was not an immediate announcement of the death of the person but more of a report of his or her grave illness for the time being. Both Muslim and Christian participants articulated this distinctive way of relaying death-related news. They explained that it was to avoid another possible tragedy from happening.

The variance for this stage in the funeral event was chiefly determined by the sub-distinctions that were mentioned. These shaped the length of time allotted for delaying the news and the ways of public announcement.

For example, a masked devil dance was prompted by the death of a paramount chief or an important person in the community. When the masked devil appeared, everyone understood that someone important in the community had died and each one had to come out of their homes to witness the dance of the devil or the *Goboi* by the *Mendes* and *Gongoli* by the *Temnes*.

Another important note was the public display of remorse once the official announcement was made. For some groups, the bigger the show of remorse, the better.

Stage 2: Preparation of the Body

This started at the moment when the body was collected from the place where it was brought after the announcement of death.

Depending on the distinctions and the sub-distinctions, the ways differed, but general preparations of the body involved washing, anointing, shaving, combing, cutting of nails, and putting perfume before finally dressing and adorning of accessories or plain shrouding. The main objective was to make the body personable when presented for the last time to other mourners and before the dead's crossover to the afterlife. This was an essential stage for the

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[22] A meeting with the chief or an elder.

participants as it was the last time that they rendered an 'act of service' to their dead loved one. They narrated that this service did not always equate for them to perform the washing of the body themselves. Rendering 'service' also included ensuring that the right people did the task with great care and did so by their religious or cultural conventions. The right people were the elders, but in some cases, family members were also allowed to help.

According to the Muslim participants, they prepared the body of their dead differently from the Christians. However, there was no means of verifying the difference as the Christian participants did not provide specific details about their preparation of the body. The task was delegated to the workers of mortuaries who had included it in their funerary services.

For the Muslims, washing of the body or full *ablution* was obligatory, and the general rule dictated that males washed the male dead, females washed the female dead and these washers were usually composed of 3 to 4 elders. It had to take place in a well-covered space that had been prepared by the bereaved family. Privacy was honored within the washing space and the washers needed to take care that the dead, especially the private organs, were unexposed.

Before the actual ablution was performed, the washers needed to ensure that the bowels and the genitals were cleaned, mainly if faeces or urine was observed. After that, the other parts of the body were washed with warm water and soap from the top (head) to bottom (feet) but starting with the parts that were usually washed in *wudu*[23] and always with the right side first before proceeding to the left. This was done three times, sometimes five or any odd number of times deemed necessary, with the last washing scented with perfume or any type of fragrance. It was essential to do the laundry as narrated in the *Hadith,* a record of traditions and sayings of their Prophet Muhammad, which was a valuable source of moral guidance for Muslims apart from their *Qur'an*.

After this, the body was wrapped with a white cloth or satin called a *kasanki* and then transported to the area where the wake took place.

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[23] 'Wudu' or partial ablution involved the washing of parts of the body such as the hands, mouth, nostrils, nose, arms, head, and feet with water. They are usually done in preparation for formal prayers and before handling or reading the Qur'an as it is required for Muslims to be clean and pure before Allah. In the case of the dead person, a '*wudu'* ha on and for them by a live person.

Stage 3: Wake

Often referred as the death vigil, this covered the whole period when the body was presented to the public for viewing. The length of the watch and the manner of display and mourning depended on the distinctions and sub-distinctions.

The wake was the period when people, even from different ethnic groups or villages, arrived to pay their respects and mourned with the family. When someone died, it was expected that there would be mourners from different parts of the country, so food was prepared, and the bereaved family received assistance from the wider community. The concept of a family unit in the local communities was not just confined within blood or by-marriage relations.

For the Christians, this stage was performed longer than the Muslims, often two days or more. They added that the wake became longer than two days because some family members were residing far and that they needed to wait for them. There were three 'viewings' of the dead, like a memorial service, which may be held in different locations. The first viewing was an open casket held at the funeral home. The display happened for a day, and the body was kept there until it was brought home the next day for the second viewing. However, while the body was kept at the funeral home, a vigil was ongoing at the dead's house which usually started at sundown and lasted until 5 or 6 in the morning on the next day. During the watch, there was dancing, singing, playing of instruments, drinking, and a *mock talk*[24] in honour of the dead's memory.

Like the first, the second viewing was also an open casket, but this time held at the deceased's home. During the second viewing, mourners were allowed to touch or kiss the dead. It was not mandatory to do so, but mourners did this out of respect. This was then followed by the third viewing, which was often held on the same day as the second. The last viewing was always held in a church.

For the Muslims, it was necessary that their dead be buried on the same day of death unless the time when the person died made it impossible for the preparation and announcement to be observed accordingly before 4'o clock in the afternoon. For cases such as the latter, the dead had to be buried on the next day.

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[24] A 'mock talk' was when people participating in the vigil poked fun or joked about the dead, pretending that the dead was still alive.

The wake was held in the dead person's home or a place decided by the family. During this period, Islamic songs were sung, or verses were recited for the dead. A task that was appointed only to the women mourners as the men did not sing and were stationed outside the house to greet the visiting mourners or *cry bearers*, called *hutagasi* by the *Mendes,* as well as to organise the final burial arrangement.

The singing of songs and reciting of verses, with the women mourners seated side-by-side and facing the body of the dead, went on for three or more hours. An elder matriarch led the singing but another elder or a close woman relative of the deceased was usually tasked to stand by to temporarily relieve her. For the Kuranko, other than singing Islamic songs and reciting verses from the Qur'an, they also sung lamentation songs, which they called *baiti*.

Stage 4: Procession

This covered the period between the transport of the dead's body from the place of vigil to the burial plot. The whole stretch of the procession, either done by carrier or walking, finished by both male and female mourners depending on the distinctions and sub-distinctions.

Since the Christians paid for the funeral services of mortuaries, transport of the dead from the church to the cemetery was by vehicle, but the carrying of the casket from the church to the car, and from the vehicle to the grave, was done by male family members. Not all Christian families preferred burying their dead in the grave. Some families reserved plots within their residential compounds.

Unlike the Christians who already performed their last rites inside the church during the third viewing, the Muslims performed final prayers for the dead after the wake. Their dead were first brought to the mosque and then to the cemetery or family plot. Most of the time, mourners walked while the male mourners carried the *magudya*[25] where the dead were placed. During the first leg of the procession, the men and women go to the mosque together. On the second leg, where they proceed to the burial plot, the women in some ethnic groups were obligated to stop midway. Participants from the *Kuranko*, *Madingo*, and *Limba* groups narrated this variance in their procession.

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[25] A wooden plank or box used to carry the dead to the cemetery.

Other ethnic groups allowed the women to continue to the final burial. As an example, some participants explained that there were members of the *Mende* ethnic group whose lineage was traced to the *Mondula* tribe and in this particular group, the male and female belonged to the same *Poro*[26] society and did not make gender distinctions.

Stage 5: Final Burial

This stage started when the body arrived at the prepared grave area, and the last services or prayers were performed for the dead.

The Christians' final burial was less elaborate. Once everyone had gathered around the hole dug for the dead, they would keep the casket above the ground while the last prayers were being offered. After the deceased was lowered, the head patriarch or eldest son threw the first dirt on the lowered casket, and then the rest of the mourners followed suit.

As for the Muslims, there were two sequential preparations before the final burial. Firstly, it was essential to know who died and secondly; it had to be distinguished how the person died. Once these were confirmed, then the diggers prepared the gravesite. It was also part of the burial arrangement that the mourners be asked if the dead was indebted to anyone. It was important that his or her debts were settled.

Decisions on where the dead were going to be buried and what kind of grave was going to be prepared depending on a set of criteria. For example, paramount chiefs were customarily buried in a place known only to family members or to high-ranking members of the community, especially if the chief was a member of the secret society, which was often the case.

For the *Limbas*, graves of 'major stakeholders' in the community (type 1) were dug differently than the others' - those of the standard or ordinary community members (type 2) and those of people with 'different circumstances' like a man who had leprosy or an impregnated woman (type 3). All these graves were fitted in advance with an internal structure of the board and 'sticks'

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[26] Secret society of the Koh and Siwaa Mende ethnic group, also referred as *Wundi* by the Pah Mende, that observed traditional rites in the 'bush'; they are divided into two groups – the *Bondo* for men, the *Sande* for women but some *Poro* societies do not make distinctions between men and women and so their members can be both.

because the body should not touch the ground. Afterwards, the hole was covered again with sticks, followed by 'special' leaves, and lastly with soil.

Stage 6: Post Burial Gathering

This stage commenced after the final burial when all the mourners went back to the house where the wake was held to continue sympathising with the bereaved family. Requirements before entering the house differed per community. For those who took part in the final burial of a Muslim, they were expected to wash their hands and feet using the water buckets placed outside of the house. Usually there was more than one bucket prepared to accommodate the number of men who took part in the final burial.

Once inside, food and drinks were shared. This stage formally finished at the end of the day when mourners went home to their respective houses, which then marked the beginning of the mourning period.

Mourning periods were not considered officially part of the funeral ceremonies. However, these were events that also involved post burial gatherings of family members for the dead, sometimes with community leaders. All participants observed a 3rd, 7th, 40th, and/or 100th mourning period.

Understanding the Role of Contact: Establishment and Levels

In the six stages, physical contact was the critical component in the socio-cultural framework of the communities. This gyrated around the importance of social responsibilities of each member, repercussions of disobeying the community rules, the importance of religion, the role that elders play, and the continuity of events where one community practice was linked to another. These explained the enormity of properly observing cultural practices like funeral ceremonies.

Physical contact in funeral ceremonies, be it touching the dead, things that belonged to the deceased, the bereaved, or other mourners, were actions that solidified them as one unit. As a community, it was an avenue of communicating deeply held beliefs and standards that did not need to be verbalised since the embodied techniques represented what were already understood within their communities. Physical contact was collectively understood as a way of relating to the pain caused by death.

However, these kinds of physical contact were also the mode of transmission of Ebola. Ebola was not airborne and can only be transferred by

physical contact with body fluids of those infected by the virus. EVD was channelled through the 'family care and support' custom that was deeply embedded in the socio-cultural structure of the communities. Because it was automatic for family members to care for their sick and their dead, the virus was able to create an infection pathway through cultural practices like the funeral ceremonies.

Before the enforced 'safe burials' and behaviour modifications, many community members risked infection through the patterned body movements that they had been inherently exhibiting long before the outbreak happened. Washing the dead body, transporting the deceased, touching or kissing the dead to say goodbye, dressing the dead, and holding hands or hugging fellow mourners were a few examples. EVD navigated around these connections in funeral ceremonies by sourcing from the local communities' understanding and treatment of illness and death. It also latched on to the invisible thread that linked the 'dead' to the 'living'.

Although most physical contacts had a potential risk of exposure, it was also identified that not all had the same level of vulnerability. While creating the analysis database, it was observed that there were three levels of contact based on the concept of 'which had contact with which' wherein the dead person's body was assumed as the primary carrier of the Ebola virus. The three levels were identified as *Primary*, *Secondary*, and *Tertiary*.

Primarily referred to a live person's contact with the dead body. *Secondary* referred to an infected live person's connection with another live person. *Tertiary* referred to a live person's contact with an object that was infected by either the dead body or the infected person/s.

Documentation and Interpretation

After generating the detailed account of the funeral ceremonies, it was identified that the stage that rendered the highest vulnerability of exposure to the Ebola virus was Stage 2, the *Preparation of the Body*. Local community members were susceptible to a high risk of infection, and all three levels of contact were observed in this particular stage. To explain this finding, a movement study was carried out through an appointed person of reference to ensure consistency of analysis. In this case, the elder assigned as the 'lead' in the

group that was chosen to perform the *Preparation of the Body* was the person of reference.

During the *Preparation of the Body*, the *Primary* level of contact was observed when the elder directly touched the dead person's body while washing it with water, cloth, and soap. The *Secondary* level of communication was observed when the same elder felt the other members in the group or whenever he needed assistance such as turning the body or lifting the upper body to a sitting position. The *Tertiary* level of contact was observed when the washbasin filled with water and the cloth that the elder was using for washing the body was passed on to another member of the group or this other member had contact with the water in the washbasin.

With the purpose of documenting the embodied techniques of the level that posed the highest risk, concentration was placed on the *Primary* level of contact. An excerpt that actualised this was observed in Stage 2 and a movement notation utilising Hatchinson-Guest's approach to movement study (Hatchinson-Guest & Kolff, 2002) was created to illustrate this. The interpretation was then expounded by examining the movements' relationship to the social environment and how such links reveal both the purpose and result of the actions. All orientations were solely based on the 'lead' elder's embodied experience.

Movement Notation

The selected segments were part of the obligatory 'ghusl' or Islamic washing performed on and for the dead that was categorised under Stage 2, *Preparation of the Body*. This movement notation only explored an excerpt of a ceremony that happened in a Muslim funeral, but this choice did not suggest that Islamic rites spread EVD to a greater extent.

The selection was a product of a quantitative generation based on the available data collected from the field. It was elaborated using movement notation diagrams, labelled by numbers 1 to 8, to illustrate the specific movements that contributed to EVD's chain of transmission. It was necessary to represent these segments, supported by socio-cultural accounts because of the dearth of the scientific lens, which relied on the neglect of these aspects during the onset of the humanitarian response.

Excerpt from the Ghusl[27]

Inside the washing space, the dead person was laid on an elevated platform, as it was crucial that the body was not touching the ground, and his private parts were shrouded with a white sheet. Three elders were tasked to do the washing of the body. The one who did the main washing was the 'lead' while the two other elders assisted the 'lead' when instructed. The parts that were washed in *wudu* or partial ablution were cleaned first.

In this excerpt, all significant activities happened in the centre of the space. It started with the 'lead elder' standing on the right side of the dead person, while the two other elders have stationed one to two meters away on opposite sides from where the feet of the deceased person ended. A washbasin filled with warm water, small piece of white cloth, and a bar of soap had been placed beside the dead person, which was also within arm's reach of the lead elder's right side.

As indicated in 1, no contact had been established yet, and therefore, the EVD was hypothetically confined in the dead person (DP).
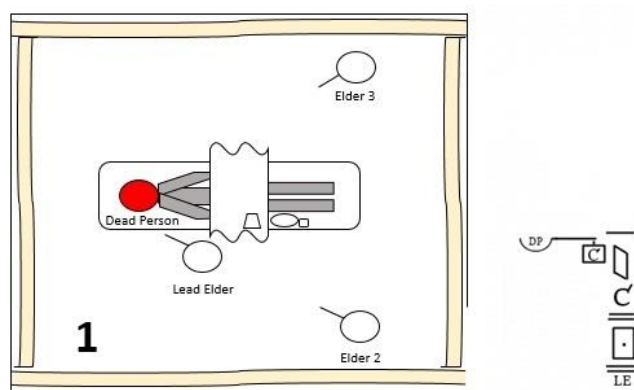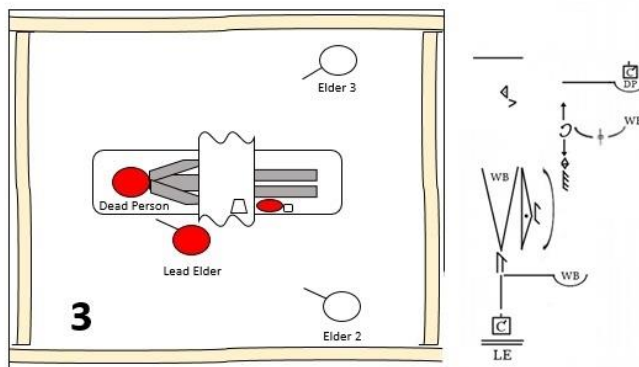

Movement Notation 1 – No Contact

Since it was mandatory to use the right hand for washing, the left hand of the 'lead elder' (LE) was mostly used for support as indicated in 2. The left hand was holding the crown of the DP's head to stabilise it. At this point, the LE had established *Primary* contact with DP with his left hand, and this was maintained until 8.

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[27] 'Ghusl' is a form of body purification that is practiced by Muslims but not just specifically performed for the dead. It is an important ritual observed before or after performing certain Islamic acts.
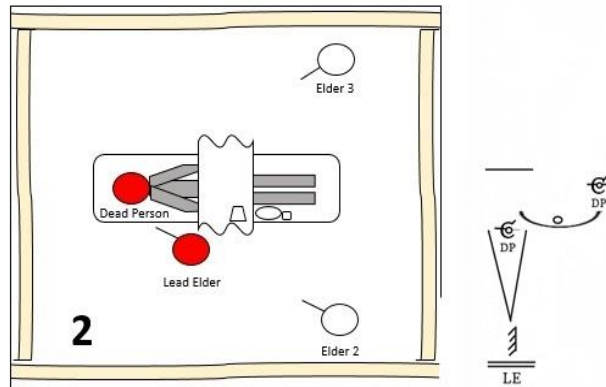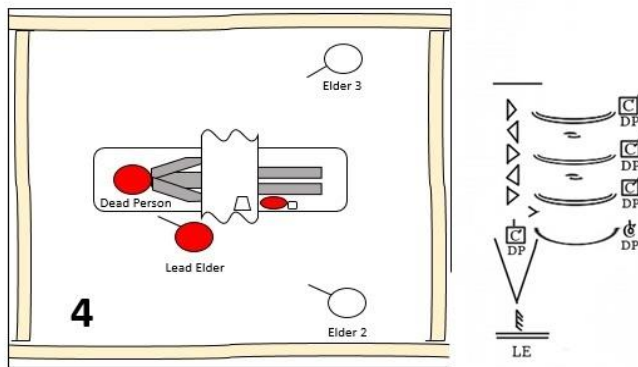
Movement Notation 2 – Primary Level of Contact

The right hand, conversely, scooped the warm water from the washbasin (WB) as indicated in 3. LE then poured the scooped water onto the face of DP. Here, LE maintained *Primary* contact through the left hand which was strengthened by the right hand's contact with DP's face. At this point, a 'possible' medium of transmission was introduced when realise was established by LE to the WB.
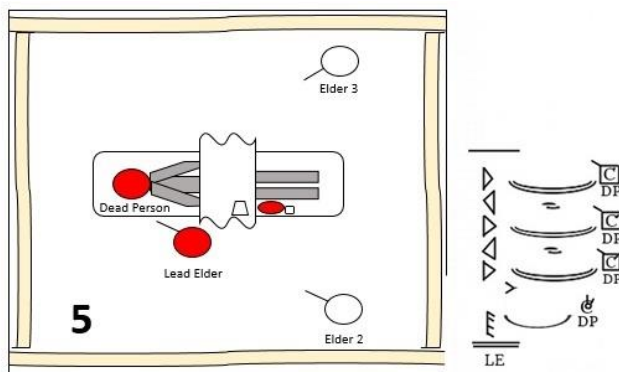

Movement Notation 3 – Primary and Tertiary Levels of Contact

In 4, LE wiped first the right side of DP's face. He did this three times, and the direction of his wiping was downwards, from the forehead of DP to chin. Again, LE retained *Primary* contact through the left hand and right hand's contact with DP's face. WB's state remained the same onto 5.
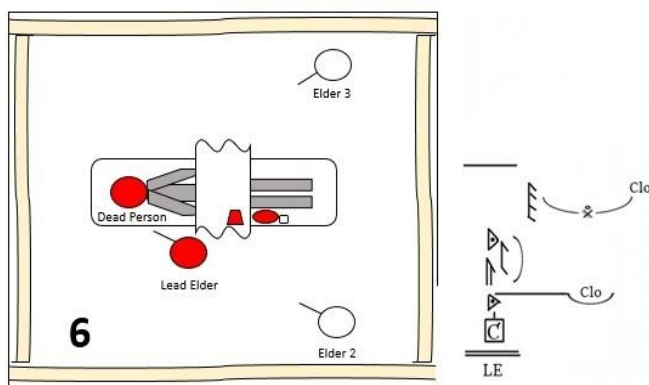
Movement Notation 4 – Primary and Tertiary Levels of Contact

In 5, LE repeated the same technique, but this time worked on the left side of DP's face. Again, LE sustained *Primary* contact through the left hand and right hand's contact with DP's face.
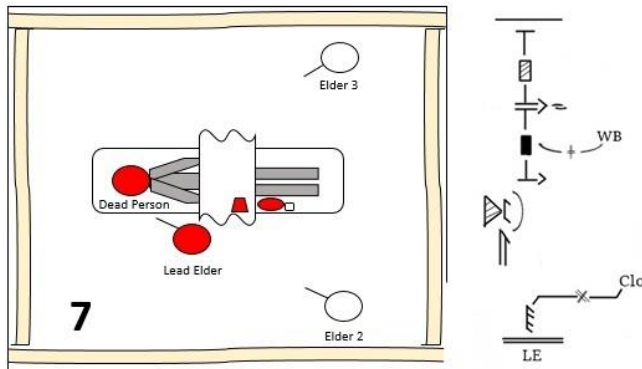

Movement Notation 5 – Primary and Tertiary Levels of Contact

After wiping DP's face, LE reached for the small white cloth (Clo) as shown in 6. Like in previous segments, LE maintained *Primary* contact through his left hand but now introduced another 'possible' medium of transmission, in addition to WB, when contact was established by LE to the Clo.
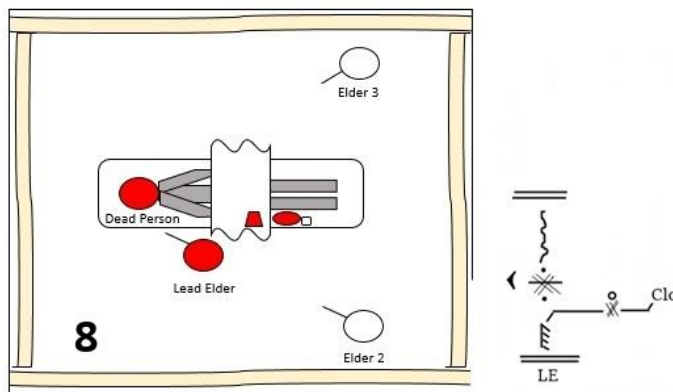

Movement Notation 6 – Primary and Tertiary Levels of Contact

In 7, LE dipped the Clo in WB filled with water, *Primary* contact was maintained through his left hand, but the 'possible' mediums of transmission through WB and Clo were reinforced.

Movement Notation 7 – Primary and Tertiary Levels of Contact

LE then squeezed the water out of the Clo as indicated in 8 before proceeding to the next part (not included in this notation score) where he released his left hand's support of the DP's head to assist wrapping the wet Cloth around his right index finger, in preparation for cleaning the inside part of DP's mouth.

Movement Notation 8 – Primary and Tertiary Levels of Contact

Notation Analysis

The movement notations of the excerpt from the *Ghusl* (performed for the dead) illustrated how the lead elder (LE) related with the dead person and the objects nearby, as instituted in the socio-cultural frame of the community. Merging the excerpt to the research framework, an EVD infection pathway was illustrated which incorporated both scientific and cultural lenses.
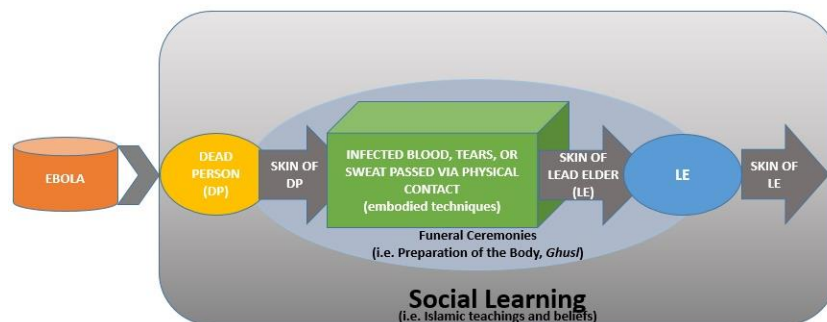
Figure 2: Ghusl within the Research Framework

Figure 2 showed that EVD resided in its first source, the *reservoir*, which was the dead person (DP) laying on the elevated platform. It had to be noted that Ebola was not mobile on its own and there were several agencies involved that contributed to its ambulatory state. It left the *reservoir* through a *portal of exit*, which in this example was the skin of the dead person. There were other portals of exit during the *ghusl* such as the eyes, nose, or mouth, but for this particular excerpt of the *ghusl*, the skin had the highest probability for spreading the infection. It then channelled through different mediums by way of the body fluids that the dead person excreted before he died. These included but were not limited to, blood, tears, or sweat. Since the virus can be transmitted through objects that were contaminated with body fluids of the infected person, the cloth (Clo) and the washbasin (WB) that was used by the lead elder were also noted as possible mediums of infection.

Through the *ghusl*, a delegated segment during the preparation of the body of a dead Muslim, EVD entered the *susceptible host*, the lead elder, who then became the new carrier. During the course of the whole *ghusl* and the tasks after that, the lead elder, directly and indirectly, transmitted the Ebola virus to other individuals who participated in community gatherings related to the death of the dead person through physical contact.

Every segmented action was functionally directed with a motivation of completing the task that the lead elder was assigned to head. The said task was specifically assigned to him and other selected elders to ensure that the body was prepared by the Islamic rites of washing the dead. These rites were guided by the *Hadith*[28] (Anon., n.d.)*.*

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[28] 'In regard to the washing of his daughter, 'The Messenger of Allah (PBUH) told them to start from the right side with those whose parts of the body over which ablution is performed' (Hadith, Sahih Bukhari)'Umm 'Atiyya reported: The Apostle of Allah, Prophet Muhammad (PBUH) came to us when

The *Hadith* affirmed that the *ghusl* was mandatory. It had to be done correctly by those who understood the reasons behind its execution. For the Muslim communities, it was their responsibility to perform the Islamic rites for their dead brothers and sisters. If it was not done accurately then social disquiet was going to be triggered. Much like how WHO triggered resistance when it mandated that "burials should be made safe" (Fairhead, 2016) without comprehensively discussing the suggested 'safe burials[29]' and their impact on local communities.

To prevent EVD from further spreading, aid workers addressed the epidemic by developing scientific protocols on the safe management of the burial of individuals who died from suspected and confirmed Ebola. These protocols had requirements that alienated the families of the dead and excluded the community's socio-cultural role from being played. 'Safe burials' mandated that trained teams, taught by foreign aid and health workers, were tasked to prepare the body, wrap the body in plastic bags, and transport the body to the gravesite. It was relayed that contact during the handling of a dead body was kept to a minimum and done with protective gear. Direct physical contact was prohibited. Families were only allowed to observe from a distance, but the trained teams carried out interment.

Based on the above inclusions, the protocols did not sit well with the social personalities of the communities; hence the social acceptance of 'safe burials' was unviable. The whole process removed all patterned body movements and behaviours embedded in the local communities' transmission system that held their deeply set beliefs. In short, it separated embodied techniques from their socio-cultural purpose.

Realising that it was counterproductive to advise against the local funeral ceremonies, humanitarian and state actors acknowledged the existing resentment of the communities towards the suggested 'safe burials' and started localising the funerals. The localisation involved community elders, religious leaders, as well as family members of the dead being part of the burial process.

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we were bathing his daughter, and he told us: Wash her with water and (with leaves of) the lote tree, three or five times, or more than that if you think fit, and put camphor or something like camphor in the last washing' (Hadith, Sahih Muslim, Volume: Kitab Al-Salat).

[29] 'Safe burials' were imposed funeral ceremonies of international aid bodies, in coordination with Sierra Leone's government during the initial stages of humanitarian aid to stop the chain of transmission of EVD.

(N.M., 2018, July 2, Port Loko, Sierra Leone, PL District Council FGD). A point that cannot be neglected as Sierra Leone had the highest total infection count but also had the lowest death rate (Richards, 2016: 21) that was significantly impelled by strong local leaders who collaborated with influential community members. Local participation allowed safe techniques and socio-cultural meanings to converge. This practice was followed by proper observance of grave upkeep, eventually leading to the revised 'safe and dignified burials' protocol.

Conclusion

The documentation of the funeral ceremonies practised by selected ethnic groups in the areas of Freetown, Port Loko, and Koinadugu led to analysing an excerpt in one of the stages where the highest infection susceptibility was observed and notated. The analysis generated two results. One, it created documentation of a concrete infection pathway of EVD through the established physical contacts; and two, it highlighted the socio-cultural influences of the embodied techniques where EVD was channelling via the same physical contacts.

These involved fundamental body movements that all pose risks of infection were observed in different stages. Examples included kissing or touching the dead, wrapping of the dead with a *kasanki*, touching other mourners, carrying the dead to the gravesite, comforting the bereaved, washing your hands in the communal water buckets set outside the dead's house, amongst others. None of these was random. They were all patterned acts that were expected of the community members, therefore, part of a social obligation.

It was crucial to consider that communities have learned and engaged in patterned participation long before EVD spread through the country. Cultural practices like funeral ceremonies were not causes but 'generative' mediums that were lengthily exploited because funerals presented physical opportunities that allowed Ebola to maintain its ambulatory state and also because the communities' social values were deeply ascribed to physical interactions.

While analysing the embodied techniques, the investigation of the communities' transmission system revealed the 'why' to the already established 'how' of EVD's movement. This transmission system was adaptive and allowed change in behaviour models, thereby creating re-evaluated forms of patterned

participation whenever necessary. The communities' transmission system proved that different embodied techniques could be negotiated through collective action in response to an emerging need, hence making cultural practices like funeral ceremonies organic.

Documentation of funeral ceremonies augmented the correlation of socio-cultural values to the embodied techniques. It also highlighted the distinct reality in such communities that there was no need to separate these integrated techniques from their socio-cultural purpose. Understanding the socio-cultural values meant that anthropological engagement played a significant role in the re-evaluation of humanitarian initiatives. Approaches that were developed in the latter part of the Ebola Response negotiated safer methods that modified behaviours only after the cultural aspect was acknowledged. Such practices demonstrated that anthropological engagement, with ICH as a valuation tool, can be equally capable in contributing to practical and socio-culturally sustainable recommendations in humanitarian aid.

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