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& TROPICAL
MEDICINE



**Examining the origin, nature, and effect of military
support to Sierra Leone's Ebola response**

SAMUEL TIMOTHY BOLAND

**Thesis submitted in accordance with the requirements for the
degree of**

Doctor of Philosophy

**of the
University of London**

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Department of Global Health and Development

Faculty of Public Health and Policy

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

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Research group affiliation(s): None to report

I, Samuel Timothy Boland, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Figure 1: A member of the British Armed Forces celebrates the lifting of the last village-wide quarantine in Sierra Leone's Ebola response (Source: author)

I really enjoyed my time there. It was just so interesting, and I feel privileged in a way. To have been part of the whole, you know? I really admired the Sierra Leonean people... It was amazing to be there on the day when most of those houses got released from quarantine, because you can suddenly communicate with this person that you've only interacted with across this piece of rope that everyone was waiting to cut down. And then, when the rope was finally cut, and all the ladies started dancing and drumming... you know, it was amazing. On tour in Afghanistan, it was so different. We didn't go to Afghanistan to kill people—well, maybe you kill the bad people—but the ultimate aim was to go there and make it better for people. But in Sierra Leone, there was none of that, there was no other motive. Our organisation had a clean slate. You know, you didn't think that anyone was out to hurt you. You were literally there only to help people, and it was really satisfying (British Armed Forces respondent).

Abstract

The 2013–2016 West Africa Ebola Epidemic is the largest outbreak of Ebola Virus Disease (Ebola) to date. By mid-2014, cases were escalating rapidly, and response actors in Sierra Leone were overwhelmed. Consequently, the British government announced Operation Gritrock, a bespoke military mission to support the country’s Ebola response alongside the national army. This study examined the origin, nature, and effect of this militarised support and the civil-military relationships that transpired. 110 in-depth interviews were conducted between 2017 and 2018. Perspectives were sought from a range of civilian and military Ebola Response Workers (ERWs) at the chiefdom, district, national, and international levels. Interviews were complemented by analysis of 21 key policy and operational documents not in the public domain obtained through the Freedom of Information Act of 2000. Analysis drew on neo-Durkheimian theory of organisations combined with inductive thematic exploration. Across respondent groupings, the militaries’ intervention was perceived to represent valuable and life-saving assistance, including for the establishment, operation, and leadership of the hierarchically organised National and District Ebola Response Centres. However, it was also found to result in various harms, including the marginalisation of some public institutions and local groups that were insufficiently included in the formal response. In turn, Sierra Leone was left somewhat vulnerable to future crises. This concurrent positive and negative effect—a paradox this thesis terms the ‘political economy of expedience’—is one in which all civilian and military ERWs were implicated. However, the militarised response also provides lessons for how hierarchical spaces need not be exclusionary ones. Indeed, this thesis ultimately finds that when organised with ‘conflict attenuation’ in mind, hierarchy and decentralisation—and therein, localisation and inclusivity—can be co-dependent and synergistic principles that, if applied robustly, could serve to mitigate the political economy of expedience paradox during future public health emergency responses.

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Glossary of key terms, acronyms, and abbreviations

Abidjan Peace Accord	Attempt to end the Sierra Leone Civil War (1999) (see also: Lomé Peace Accord)
Adversarial mode	A combative and vulnerable social organisation (see also: Douglasian Theory)
AFP	Armed Forces of the Philippines
AFRC	Armed Forces Revolutionary Council (Sierra Leone Civil War armed group)
AFRICOM	Africa Command (United States)
AGI	Africa Governance Initiative (now defunct) (see also: TBI)
Anomaly	Event that disrupts a social organisation (see also: Douglasian Theory; Social organisation)
APC	All People's Congress (Sierra Leone)
Assemblage	A system of unstable relational components (See also: Assemblage Theory)
Assemblage Theory	Ontological framework for analysing social complexity
ATI	Royal Air Force Air Transportable Isolator (see also: DAIT)
AU	African Union
BBC	British Broadcasting Corporation
Blair Doctrine	British Prime Minister Tony Blair's interventionist policies (See also: Tony Blair)
BMATT	British Military Advisory Training Team (Sierra Leone) (see also: IMATT; ISAT; STTT)
BMJ	British Medical Journal
C2	Command and control
CAFOD	Catholic Agency for Overseas Development
CASS	Social Science Analytics Cell (see also: IOA)
C-CMC	Civilian-led civil-military coordination (see also: CIMIC; CMC; CMCoord)
CDC	Centers for Disease Control and Prevention (United States)
CDF	Civil Defence Force (Sierra Leone Civil War armed group)
CDS	Chief of Defence Staff
CEBS	Community Event-Based Surveillance (Sierra Leone)
CEO	Chief Executive Officer (see also: NERC; Paolo Conteh)
Charles Taylor	Liberian politician and warlord who advanced the Sierra Leone Civil War
Chatham House	The Royal Institute for International Affairs
Chiefdom	Sub-district administrative zone (Sierra Leone) (see also: Paramount Chief)
CHW	Community Health Worker
CIMIC	Civil-Military Coordination (see also: C-CMC; CMC; CMCoord)
CJIATF	Civilian Joint Inter-Agency Task Force in Sierra Leone (United Kingdom) (see also: JIATF)
Classical response actors	Actors that typically respond to humanitarian and public health emergencies
CMC	Civil-military coordination (see also: C-CMC; CMCoord)
CM	Case Management
CMA	Civil-military alignment of interest
CMCoord	Civil-military coordination (see also: C-CMC; CIMIC; CMC)
CMCS	Civil-Military Coordination Section (part of UN OCHA) (see also: UN OCHA)
CMHE	Civil-military healthcare engagement

CMI	Civil-military interaction
CMO	Civil-military operations
CMO	Chief Medical Officer
CM-PRN	Civil-Military Pandemic Response Network
CMR	Civil-military relations
CMRel	Civil-military relationships
COBR	Cabinet Office Briefing Rooms (United Kingdom)
COCIM	Civil-military cooperation (Canada)
Co-dependence	Conflict attenuating factor (see also: Conflict attenuation; Douglasian Theory)
COMAHS	University of Sierra Leone College of Medical and Health Sciences
Command Team	District Ebola Response Centre leadership team (Sierra Leone) (see also: DC; DERC)
Complex emergency	Humanitarian crisis characterised by conflict and violence
Conflict attenuation	Hierarchical factors mitigating inter-group conflict (see also: Douglasian Theory)
Constructivist Grounded Theory	Primarily inductive qualitative research methodology
CPP	Communist Party of the Philippines
CSF	COVID-19 Support Force (United Kingdom)
CSO	Civil society organisation
DAIT	Royal Air Force Deployable Air Isolator Team (United Kingdom) (see also: ATI)
David Cameron	British Prime Minister during the Ebola Epidemic (2010–2016)
DC	District [Ebola Response] Coordinator (Sierra Leone) (see also: Command Team; DERC)
DComd	Deputy Commander (United Kingdom)
DDR	Disarmament, Demobilisation, and Reintegration
DE	Defence engagement (see also: DHE)
DEOC	District Emergency Operations Centre (Sierra Leone) (see also: PHEOC)
DERC	District Ebola Response Centre (Sierra Leone) (see also: Command Team; DC; NERC)
DEST	District Ebola Support Team in Sierra Leone (United Kingdom)
De-territorialisation	The process of de-territorialising (see also: Assemblage Theory; Territorialisation)
DfID	Department for International Development (United Kingdom) (see also: FCDO)
DHE	Defence Healthcare Engagement
DHMT	District Health Management Team (Sierra Leone)
DISEC	District Security Committee (Sierra Leone)
DMO	District Medical Officer
DoD	Department of Defense (United States)
Douglasian Theory	The collective neo-Durkheimian theories of Mary Douglas (see also: Mary Douglas)
DRC	Democratic Republic of the Congo
DSO	District Surveillance Officer
Dstl	Defence Science and Technology Laboratory (United Kingdom)
Dunantist approach Principles)	Humanitarianism grounded in the Humanitarian Principles (see also: Humanitarian Principles)
Ebola	Ebola Virus Disease (see also: VHF)

ECHO	European Civil Protection and Humanitarian Aid Operations
ECOMOG	Economic Community of West African States Monitoring Group
EO	Executive Outcomes (Sierra Leone Civil War armed group)
EOC	Emergency Operations Centre (see also: PHEOC)
Ernest Bai Koroma	President of Sierra Leone during the Ebola epidemic (2007–2018)
ERC	Ebola Response Consortium (Sierra Leone)
ERW	Ebola Response Worker
ETC	Ebola Treatment Centre
EU	European Union
Exclusive hierarchical coordination	Restricted hierarchy (see also: Inclusive hierarchical coordination)
FAO	Food and Agriculture Organisation
FCDO	Foreign, Commonwealth & Development Office (United Kingdom) (see also: DfID; FCO)
FCO	Foreign & Commonwealth Office (United Kingdom) (now defunct) (see also: FCDO)
FGD	Focus Group Discussion
FMA	Foreign Military Assets
FOB	Forward Operating Base
FOI	Freedom of Information (see also: FOIA)
FOIA	Freedom of Information Act (2000) (United Kingdom) (see also: FOI)
Force protection	Protection of military forces
Geneva Conventions	Rules that apply in times of armed conflict to protect non-combatants
GHE	Global Health Engagement (United States)
GHS	Global Health Security
GHSA	Global Health Security Agenda
GloHSA	Global Health Security Alliance
GOAL	GOAL Global
GOARN	Global Outbreak Alert and Response Network (see also: WHO)
GoSL	Government of Sierra Leone
HC	Humanitarian Coordinator (United Nations) (see also: RC)
HCID	High Consequence Infectious Diseases
HCW	Healthcare Worker
Hd DfID	Head of the Department for International Development in Sierra Leone (United Kingdom)
Henry Dunant	Co-founder of the Red Cross and generally considered the founder of humanitarianism
CSO	Health Emergencies Programme (see also: World Health Organisation)
HHI	Harvard Humanitarian Initiative
HIV	Human Immunodeficiency Virus
HMG	Her Majesty's Government (United Kingdom)
HN	Host Nation
HQ	Headquarters
HRH	Human Resources for Health
HRW	Human Rights Watch

Humanitarian Principles	The guiding principles for humanitarian action
Humanity	One of the four Humanitarian Principles (see also: Humanitarian Principles)
Hut Tax War	Armed resistance to a tax imposed by British colonialists (1898) (Sierra Leone)
Hybridity	Conflict attenuating factor (see also: Conflict attenuation; Douglassian Theory)
IASC	Inter-Agency Standing Committee
IASC Reference Paper	Civil-military guidance for complex emergencies (see also: Complex emergency)
IATF-EID	Inter-Agency Technical Working Group for the Management of Emerging Infectious Diseases
ICRC	International Committee of the Red Cross
ID	Unique identifier
IDP	Internally Displaced Person(s)
IDRL	International Humanitarian Disaster Relief Law (see also: IDRL)
IDRL Guidelines	Guidelines for international disaster relief and recovery assistance (see also: IDRL)
IFRC	International Federation of the Red Cross and Red Crescent Societies
IGO	Intergovernmental Organisation
IHA	International Healthcare Actors
IHL	International Humanitarian Law
IHR	International Health Regulations
IMATT	International Military Advisory Training Team (Sierra Leone) (see also: BMATT; ISAT; STTT)
IMF	International Monetary Fund
Impartiality	One of the four Humanitarian Principles (see also: Humanitarian Principles)
IMS	Incident Management System
Inclusive hierarchical coordination	Embracive hierarchy (see also: Exclusive hierarchical coordination)
Independence	One of the four Humanitarian Principles (see also: Humanitarian Principles)
INGO	International Non-Governmental Organisation (see also: NGO)
International Commission	Team credited with discovering Ebola in DRC in 1976
IO	International Organisation
IOA	Integrated Outbreak Analytics (see also: CASS)
IOS	Interruption of Studies
IPC	Infection Prevention and Control
IPI	Indigenous Populations and Institutions
IRB	Internal Review Board
IRC	International Rescue Committee
ISAT	International Security Advisory Team (Sierra Leone) (see also: BMATT; IMATT; STTT)
IV	Intravenous
JEE	Joint External Evaluation
JIATF	Joint Inter-Agency Task Force in Sierra Leone (United Kingdom) (see also: CJIATF)
JOC	Joint Operations Centre
Kamajor	Sierra Leone Civil War armed group
Kambia	Sierra Leonean district
KCAP	Kambia Community Action Plan (see also: Kambia)

KGH	Kambia Government Hospital (Sierra Leone) (see also: Kambia)
KII	Key Informant Interview
Kinetic	Context or environment characterised by conflict and violence
Krio	Ethnic group and language (Sierra Leone)
KSLP	King's Sierra Leone Partnership
KTTU	Kerry Town Treatment Unit (Sierra Leone)
Last resort	Use of military humanitarian support as a last resort (see also: Principle of last resort)
Levels of war	Clausewitz's three distinguished levels of war (strategic, operational, & tactical)
Lomé Peace Accord	Attempt to end the Sierra Leone Civil War (1999) (see also: Abidjan Peace Accord)
LRF	Local resilience forums (United Kingdom)
LSE	London School of Economics and Political Science
LSHTM	London School of Hygiene & Tropical Medicine
MACA	Military Aid to Civil Authorities (see also: MACP)
MACP	Military Aid to Civil Power (see also: MACA)
Mary Douglas	Neo-Durkheimian theorist (see also: Douglasian Theory)
MCD	Meets Case Definition
MCDA	Use of military assets during complex emergencies guidelines (see also: Complex emergency)
Mende	Ethnic group (Sierra Leone)
Militarisation	The process of making something militarised (see also: militarised; securitisation)
Militarised	Military-oriented organisation or characterisation (see also: militarisation; securitised)
Min AF	Minister of State for the Armed Forces (United Kingdom)
MoD	Ministry of Defence (United Kingdom & Sierra Leone)
MoHS	Ministry of Health and Sanitation (Sierra Leone)
MONUSCO	United Nations peacekeeping mission in the Democratic Republic of the Congo
MoSW	Ministry of Social Welfare, Gender, and Children's Affairs (Sierra Leone)
MRP	Military Reintegration Plan
MSF	Médecins Sans Frontières
National Ebola Task Force	Preliminary group responding to the Ebola outbreak (Sierra Leone)
NATO	North Atlantic Treaty Organization
NDRRMC	Secretariat of the National Disaster Risk Reduction and Management Council (Philippines)
NERC	National Ebola Response Centre (Sierra Leone) (see also: DERC)
Neutral zones	Conflict attenuating factor (see also: Conflict attenuation; Douglasian Theory)
Neutrality	One of the four Humanitarian Principles (see also: Humanitarian Principles)
NGO	Non-Governmental Organisation (see also: INGO)
NHS	National Health Service (United Kingdom)
NSAG	Non-State Armed Group
NTP	COVID-19 National Task Force (Philippines)
NWC	U.S. Naval War College (United States)
OGD	Other government departments (United Kingdom)
ONP	Operation Northern Push (Sierra Leone) (see also: Operation Northern Push)

ONS	Office of National Security (Sierra Leone)
Operation Barras	British Armed Forces operation in the Sierra Leone Civil War (2000)
Operation Gritrock	British Armed Forces' Ebola response operation in Sierra Leone (2014–2015)
Operation No Living Thing	Revolutionary United Front operation in the Sierra Leone Civil War (1999)
Operation Northern Push	Initiative to contain Ebola in Sierra Leone's northern provinces (2015)
Operation Palliser	British Armed Forces operation in the Sierra Leone Civil War (2000)
Operation Pay Yourself	Revolutionary United Front operation in the Sierra Leone Civil War (1997)
Operation Octopus	Sierra Leone military's Ebola response operation in Sierra Leone (2014–2016)
Operation United Assistance	US Armed Forces' Ebola response operations in Liberia (2014–2015)
Ops Dir	Operations Directorate (United Kingdom)
Oslo Guidelines	Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief
Paolo Conteh	National Ebola Response Centre Chief Executive Officer (Sierra Leone) (see also: NERC)
Paramount Chief	Tribal authority (Sierra Leone) (see also: Chiefdom)
PCC	Party Central Committee (China)
PHE	Public Health England (United Kingdom)
PHEIC	Public Health Emergency of International Concern
PHEOC	Public Health Emergency Operations Centre (Sierra Leone) (see also: DEOC)
PHS	Public Health Service (United States)
PHU	Peripheral Health Unit
PI	Principal Investigator
PIH	Partners in Health
Pillar system	Internal organisation of District Ebola Response Centre activities (see also: DERC)
PJHQ	Permanent Joint Headquarters (United Kingdom)
PLA	People's Liberation Army (China) (see also: PLA-JLSF)
PLA-JLSF	People's Liberation Army Joint Logistics Support Force (China) (see also: PLA)
PM	Prime Minister (United Kingdom)
PNP	Philippine National Police (Philippines)
Political economy of expedience	Paradox of life-saving assistance that produces structural harms
Port Loko District	Sierra Leonean district
PPE	Personal Protective Equipment
Presidential Task Force on Ebola	Preliminary group responding to the Ebola outbreak (Sierra Leone)
Principle of do least harm	Notion that humanitarian activity should make pragmatic tradeoffs
Principle of do no harm	Notion that humanitarian activity should avoid exposing additional risks
Principle of last resort	Use of military humanitarian support as a last resort (see also: Last resort)
PRM	State Department Bureau of Population, Refugees, and Migration (United States)
Protectorate	Colonial-era geographic area encompassing most rural areas (Sierra Leone)
PSC	Private Security Company
Quotidian ritual interaction	Day-to-day activity and interaction (see also: Douglasian Theory)
R2P	Responsibility to Protect
RAF	Royal Air Force (United Kingdom)

RC	Resident Coordinator (United Nations) (see also: HC)
Recaptives	Emancipated slaves who were brought to Freetown in the 19 th century
Recce	Reconnaissance
Resilience-based approach	Humanitarianism focused on building local capacity
Re-territorialisation	The process of re-territorialising (see also: Assemblage Theory; Territorialisation)
Risk appetite	Willingness to engage in risky behaviours or activity
RFA	Royal Fleet Auxiliary (United Kingdom)
RFA Argus	Royal Fleet Auxiliary Argus (United Kingdom)
RKI	Robert Koch Institute (Germany)
RSLAF	Republic of Sierra Leone Armed Forces
RST	Rapid Support Team
RUF	Revolutionary United Front (Sierra Leone Civil War armed group)
Rule-bound niche	Conflict attenuating factor (see also: Conflict attenuation; Douglassian Theory)
SAP	Structural Adjustment Programme
SARS	Severe Acute Respiratory Syndrome
SARS-CoV-2	The virus that causes COVID-19
S/CRS	Office for the Coordinator for Reconstruction and Stabilisation (United States)
Securitisation	The process of making something securitised (see also: militarisation; securitised)
Securitised	Security-oriented organisation or characterisation (see also: securitisation; militarised)
Semi-exclusive hierarchical coordination	Blended hierarchy (see also: Exclusive hierarchical coordination)
Sheik Umar Khan	National Ebola response lead prior to death from the virus (Sierra Leone)
Show of force	Evidencing military force capabilities in an intimidating way (see also: Show of resource)
Show of resource	Evidencing resource capabilities in an intimidating way (see also: Show of resource)
Siaka Stevens	Leader of Sierra Leone (1967–1985)
Sierra Leone Civil War	Prolonged civil war (1991–2002) (Sierra Leone)
Sierra Leone Special Court	International tribunal for Sierra Leone Civil War war criminals
SILSEP	Security Sector Reform Programme (Sierra Leone)
SLA	Sierra Leone Army (now defunct) (see also: RSLAF)
SLP	Sierra Leone Police
SLPP	Sierra Leone People's Party
SMAC	Social Mobilisation Action Consortium (Sierra Leone)
Sobel	Soldier by day, rebel by night
Social organisation	Elementary forms of social organisation (see also: Douglassian Theory)
SOP	Standard Operating Procedure
SoS	Secretary of State (United Kingdom)
SRSG	Special Representative to the Secretary General (United Nations)
SSHAP	Social Science in Humanitarian Action Platform
SSR	Security Sector Reform
STB	Samuel Timothy Boland (PhD candidate)
STTT	Short Term Training Team (Sierra Leone) (see also: BMATT; IMATT; ISAT)

SU	Stabilisation Unit (United Kingdom)
Syndemic constellation of elements	Structural factors underlying disease states
Systems hardware	Human, financial, technological, and structural resources (see also: Systems software)
Systems software	Ideas, interests, relationships, power, values, and norms (see also: Systems hardware)
TBI	Tony Blair Institute for Global Change (formerly the Africa Governance Initiative) (see also: AGI)
Temne	Ethnic group (Sierra Leone)
Territorialisation	The coded and stratified bodies of an assemblage (see also: Assemblage Theory)
Thought style	Way of thinking (see also: Douglassian Theory)
TOC	Tactical Operations Centre
Tony Blair	British Prime Minister (1997–2007) (See also: Blair Doctrine)
Triple nexus	The intersection of humanitarian, development, and peace contexts or actors
Truth and Reconciliation Commission	Truth commission (Sierra Leone) (see also: Lomé Peace Accord)
TU	Task Unit
UCL	University College London
UK	United Kingdom
UK-PHRST	United Kingdom Public Health Rapid Support Team
UN	United Nations
UNAMSIL	United Nations Mission in Sierra Leone
UN CMC	United Nations civil-military coordination (see also: UN CMCoord)
UN CMCoord	United Nations civil-military coordination (see also: UN-CMC)
UNCT	United Nations Country Team
UNHCR	United Nations High Commissioner for Refugees
Unholy Alliance	United Kingdom-supported alliance of Sierra Leone Civil War armed groups
UNICEF	United Nations Children’s Fund
UNJHRO	United Nations Joint Human Rights Office
UNMEER	United Nations Mission for Ebola Emergency Response
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNSC	United Nations Security Council
US	United States of America
USG	Federal Government of the United States of America
VHF	Viral Haemorrhagic Fever (see also: Ebola Virus Disease)
WASH	Water, Sanitation, and Hygiene
Western Area Urban District	Sierra Leonean district (comprising of the national capital Freetown)
WFP	World Food Programme
WHE	World Health Organisation Health Emergencies Programme (see also: WHO)
WHO	World Health Organisation (see also: GOARN; WHE)
Winning hearts and minds	Military strategy to attain positive relationships with local populations
Wilsonian approach Humanity)	Humanitarianism privileging the Humanitarian Principle of humanity (see also: Humanity)
WTO	World Trade Organisation

Chapter 1 | Introduction and overview of the thesis

This chapter introduces the thesis—organised as a series of research papers—with a focus on framing the debate and research gap that it examines. Accordingly, key background information about the case study is first provided. This is followed by an overview of the research rationale, aim, objectives, and questions. Thereafter, a brief description of the methods and theoretical framework that underpins the thesis is provided. This chapter concludes with a description of the structure of the thesis and overviews its constituent chapters.

Background

The 2013–2016 West Africa Ebola Epidemic was and remains the largest recorded outbreak of Ebola Virus Disease (Ebola): across ten affected countries, more than 28,000 people are known to have been infected, of whom more than 11,000 are known to have died.¹ Whether measured by the total number of cases, deaths, countries affected, or cost of containment, the epidemic was larger than all other Ebola outbreaks—prior or since—combined.

The outbreak most likely started in December, 2013 in a small Guinean village called Meliandou, near the country's porous border with both Liberia and Sierra Leone.² There, it is thought that a young boy named Emile encountered Ebola-infected bats, and that through this interaction, the virus crossed the zoonotic barrier: Emile became infected with Ebola, and later died.² From him, his older sister Philomene and pregnant mother Sia also contracted and died from the virus—but not before passing it onto other family members and local healthcare workers (HCWs) who carried the disease to neighbouring villages.^{2,3}

While the outbreak continued to propagate thereafter, it went unnoticed by national and international health authorities for some time. In fact, poor disease surveillance systems in the affected region meant the outbreak was not officially investigated until mid-March, 2014. The investigation was triggered by the concerning number of HCWs who were dying after experiencing symptoms that were consistent with a Viral Haemorrhagic Fever (VHF) infection. The World Health Organisation (WHO) was notified and samples were tested, which confirmed the presence of the Ebola virus. Accordingly, on March 23rd, the Ebola outbreak that was to become the 2013–2016 West Africa Ebola Epidemic was officially declared.² At least four Guinean districts were already affected.²

Despite the unfolding crisis in the spring of 2014, relatively few national and international health actors mounted a vigorous response at the time. This is perhaps unsurprising, as no prior Ebola outbreak is known to have resulted in more than several hundred cases, nor known to have crossed an international border. Further, in the affected region of West Africa, other health problems present a more significant burden of disease each year than the cumulative sum of all Ebola cases and deaths that have ever been recorded.⁴

For this and other reasons,^{5–8} initial containment efforts were not sufficient to prevent the outbreak from spreading further,^{5–7} both within and beyond Guinea: in April, Ebola was confirmed in Liberia; by May, it had spread to Sierra Leone; and by July, Ebola had reached the capital cities of all three countries.¹ The United States (US) Centers for Disease Control and Prevention (CDC) was soon to release one epidemiological model suggesting that upwards of 1.4 million people could become infected with Ebola within months without a robust international response.⁹ With bodies literally piling up in the streets,¹⁰ each affected country declared a State of Emergency,¹ and on August 8th, the WHO declared a Public Health Emergency of International Concern (PHEIC).

One of the few international health actors (pro)actively responding in Sierra Leone at this time was Médecins Sans Frontières (MSF), an organisation known for its strict interpretation of and adherence to the Humanitarian Principles of humanity, neutrality, independence, and impartiality. However, on September 2nd—facing a rapidly deteriorating situation and escalating public health crisis—the organisation’s International President released an unprecedented statement, saying that it would take

...military mobilisation by wealthy countries with biohazard experience, not just international aid, to stop the disease... The military are the only body that can be deployed in the numbers needed now and that can organise things fast.¹¹

In fact, unbeknownst to the general public, the United Kingdom (UK) Ministry of Defence (MoD) and Department for International Development (DfID) had already conducted an inter-agency ‘recce’ in Sierra Leone just two weeks prior in order to evaluate how the UK government (HMG) might support the Sierra Leonean government (GoSL) in the Ebola response.^{12,a} This recce included consideration for how the UK MoD could work alongside the Republic of Sierra Leone Armed Forces (RSLAF) which had been recently called on by then-President Ernest Bai Koroma to support Ebola response logistics as well as the enforcement of public health measures (organised under a bespoke military mission, Operation Octopus).^{12,14}

HMG plans developed quickly: in mid-September, they announced the Joint Inter-Agency Task Force (JIATF), an inter-agency civil-military body for coordinating DfID, Foreign & Commonwealth Office (FCO), and UK MoD contributions to the Ebola response in Sierra Leone.¹⁵ The latter’s component was

^a The depth of HMG-GoSL collaboration in the Ebola response was foreseeable. This is because the British Armed Forces played a defining role in ending the 1991–2002 Sierra Leone Civil War. Furthermore, following the war, DfID and the UK MoD worked together in what is considered by some to be the definitive example of security sector reform (SSR), wherein—alongside GoSL—HMG completely transformed Sierra Leone’s security sector and professionalised its armed forces.¹³ Therefore, when Operation Gritrock was announced, HMG already had positive political access and relationships in the country, and entertained popular support amongst key decision makers and much of the general public. Furthermore, DfID and the UK MoD had considerable experience collaborating in the country, and the UK MoD had a deep knowledge of and pre-existing relationships with RSLAF. Indeed, post-civil war, the UK MoD still had several military advisors permanently stationed in the country as part of the International Security Advisory Team (ISAT) who were able to begin supporting some Ebola response efforts as early as June, 2014. This HMG-GoSL history is described at greater length in Chapter 2 (pages 28–38) and Appendix C-1 (pages 245–245).

organised under a complementary military mission, Operation Gritrock, with the first tranche of personnel arriving in Sierra Leone as early as September 22nd.¹² Support from the British Armed Forces included the construction of several Ebola Treatment Centres (ETCs) by the Corps of Royal Engineers, including one dedicated to providing care for Ebola Response Workers (ERWs) that might contract the virus.^{15,16} Congruously, attention was also given to other interventions that might encourage the deployment of more expatriate ERWs, including the guarantee of Ebola medical evacuation through the Royal Air Force (RAF) Deployable Air Isolator Team (DAIT) and non-Ebola medical care through the Royal Auxiliary Fleet (RFA) Argus casualty receiving ship that was sailed to Freetown.^{16,17}

However, Ebola response contributions by the British Armed Forces and RSLAF were not limited to logistics, public health enforcement, or the backstopping of healthcare and medical evacuation services for (primarily expatriate) ERWs: a core component was support to command and control (C2) of the overall response.

In October, 2014, President Koroma announced that the Sierra Leone Ministry of Health and Sanitation (MoHS) would no longer lead the country's Ebola response. Instead, he handed then-Minister of Defence Paolo Conteh responsibility for a new coordinating body called the National Ebola Response Centre (NERC) and a constituent network of subordinate District Ebola Response Centres (DERCs) throughout the country.^{12,15} The NERC and DERCs—designed, established, and staffed with the help of the British Armed Forces and RSLAF—are where almost all day-to-day activities of the Ebola response were coordinated after this transition of authority away from the MoHS. Therein and thereafter, the two militaries contributed to (and often led) almost every aspect of the Ebola response in Sierra Leone.

Because almost all day-to-day Ebola response activities were coordinated out of the new civil-military NERC and DERCs, the specific effect of this militarised intervention on disease containment cannot be easily isolated from the numerous interventions of civilian organisations. In other words, it is difficult to establish what interventions were or were not at least partially the result of militarised support to C2. Regardless of how one apports success in containing the outbreak, within several months of the NERC and DERC structures being put in place, cases of Ebola dropped precipitously, and by the summer of 2015, only a few clusters of the epidemic remained uncontained. In November, 2015, transmission of Ebola in Sierra Leone had dropped to almost nil, and Operation Gritrock was stood down.^b More than 1,500 British Armed Forces personnel had deployed to the country over the prior fourteen months (for reference, a much larger number than HMG civilians).¹⁸ In January, 2016, the NERC, DERCs, and JIATF were also stood down, with Ebola response authority being returned to the MoHS.¹⁵ On February 4th, Sierra Leone recorded its last case of Ebola, and on March 17th, the country

^b This timing aligned with when most people expected Sierra Leone to be declared free of Ebola (that is, 42 days—or two 21-day incubation periods—after the last case had been detected). However, a new case of Ebola was identified and confirmed on that day, extending the outbreak by some months. Nevertheless, Operation Gritrock closed as scheduled.

was declared Ebola-free. Finally, on June 9th, 2016, the 2013–2016 West Africa Ebola Epidemic was declared officially over.^{1,c}

Research rationale and aim

While militaries often respond to natural disasters and provide humanitarian-type assistance within their own borders, the deployment of international military support to a protracted public health emergency in a non-‘kinetic’ (i.e., conflict-affected) context was unusual. This is doubly true for the extent and depth of civil-military interaction (CMI) and cooperation within the NERC and DERCS, which were structured to be inherently civil-military spaces from which almost all day-to-day Ebola response activities were coordinated (as above).

In light of the unfolding crisis in the late summer and early autumn 2014, many perceived the militaries’ intervention to be a necessary ‘last resort’ (this was evident, for example, in the aforementioned statement by MSF’s International President).^{15,16,20,21} To some scholars and humanitarian practitioners, however, such a substantial and conspicuous military intervention during peacetime in response to a public health emergency is cause for concern (especially in a country that had recently experienced the truly brutal 1991–2002 Sierra Leone Civil War).^{22–29} Relatedly, others have criticised the use of militaries in this way as a case of the inappropriate ‘securitisation’ or ‘militarisation’ of civilian domains that should be guided by the Humanitarian Principles, as well as for the ways it risks usurping civilian leadership; causing unnecessary alarm or confusion amongst plausibly traumatised populations; and perpetrating—or at least threatening the possibility of—human rights abuses and other forms of violence at the hands of armed actors that are foisted onto vulnerable communities in the name of public health.^{22,23,30–33} Further, other scholars have argued that civilian response and military actors are organised in sufficiently different ways that there are inherent and perhaps insurmountable challenges to their ability to effectively and productively cooperate in response to humanitarian crises and public health emergencies.^{34–36}

Whether and how the deployment of the British Armed Forces and RSLAF to Sierra Leone’s Ebola response was either constructive or deleterious—and, more generally, the prospective future role of militaries in public health emergency response—is therefore highly contested. However, to date, little systematic research has collected and examined the perspectives of key Ebola response stakeholders—defined here as civilian and military ERWs working in the formally sanctioned Ebola response at the sub-district, district, national, and international levels—in order to shed data-driven light on the debate.^d This

^c There is some suggestion that a subsequent but limited outbreak of Ebola in 2021 in Guinea may have emerged from a survivor of the 2013–2016 West Africa Ebola Epidemic.¹⁹

^d As discussed later (Chapter 2, Box 1, page 36), there was a significant informal response to the Ebola response.³⁷ The perspectives of Ebola-affected communities and these local, organic responses are not robustly or systematically considered in this thesis, which is an important limitation. This and other limitations are discussed further in the thesis’ discussion chapter (Chapter 9, pages 214–236).

is an important gap in the evidence base, particularly due to the use of the Sierra Leone case as justification for the continued use of the British Armed Forces in similar future contexts.^{12,16,20,38–40}

Based on the gap in evidence which was identified, the overall aim of this study was to examine the origin, nature, and effect of military support to public health emergency response, focusing on the example of the 2013–2016 West Africa Ebola Epidemic in Sierra Leone and the perceptions of civilian and military ERWs. There were four research objectives and a number of associated research questions (as detailed in Chapter 4, Table 1, pages 67–68).

Methods and framework

To meet the thesis' research aim, objectives, and questions, a large number of semi-structured qualitative interviews (n=110) were conducted with key civilian and military stakeholders as defined above.

Interviews—which were audio recorded—were collected between 2017 and 2018 (methods are described at length in Chapter 4, pages 66–94). A guide was used that drew on *a priori* themes from a civil-military typology that was developed (Appendix A-4 and A-5, pages 340–350 and pages 351–362, respectively); civil-military guiding documents that were reviewed (Appendix A-6, pages 363–372); and a Royal Institute of International Affairs (Chatham House) roundtable meeting that was held (Appendix A-7, pages 373–384). The guide was also supplemented with new themes as they arose during the interviews (i.e., in an inductive manner). This conformed with Constructivist Grounded Theory, a relativist approach that is primarily inductive, but does allow some basis for non-inductive elements such as drawing on themes from the literature where useful. A conceptual lens—the 'syndemic constellation of elements'—was also used to ensure holistic consideration was given to the diverse social, environmental, economic, political, and historical factors that might have influenced the origin, nature, and effect of military support to Sierra Leone's Ebola response. Qualitative interviews were transcribed (and de-identified), and then analysed in NVivo using a code frame that was designed around the final form of the iteratively developed interview guide. As with the guide, the code frame was augmented as new themes arose during the coding process. After coding was completed, the code frame was then reviewed, and nodes (dis)aggregated where appropriate. Interviews were complemented by the collection and rapid appraisal of a number of documents not in the public domain, notably 21 'official sensitive' documents that were obtained through Freedom of Information (FOI) requests from DfID and the UK MoD under the FOI Act of 2000 (FOIA).

Thereafter, a four-step analytic method was used. First, neoliberal theory and critiques of it were used to further elucidate the key contextual factors that were raised through the syndemic constellation of elements. Structured frameworks were subsequently used to type the coded data. Then, theories of power and interaction—namely the neo-Durkheimian scholarship of Mary Douglas, collectively referred to in this thesis as Douglasian Theory—was drawn upon. Douglasian Theory was selected for its focus on the study and effect of hierarchical organisations and the interaction between their actors, which is especially

applicable to examining military organisations and militarised organising spaces such as Sierra Leone’s NERC and DERCS. Thus, Douglasian Theory was first used to examine the CMI and civil-military relationships (CMRel) of ERWs and was then used to consider the effects of the civil-military organising spaces within which these CMI and CMRel were manifested (i.e., the NERC and DERCS). Finally, analysis returned to neoliberal theory and critiques of it in order to disentangle some of the findings’ broader implications. There are several research limitations, including some that may result from the methods used, which are detailed in the discussion chapter (Chapter 9, pages 214–236).

Ethics approval was sought from and granted by both the London School of Hygiene & Tropical Medicine (LSHTM) (reference #14424) and the MoHS (no protocol number or reference provided; approved 28 August 2017 and re-approved 15 February 2018). Funding for this thesis was primarily provided by HMG’s Marshall Aid Commemoration Commission and the US Government’s (USG’s) Harry S. Truman Scholarship Foundation. Field research was supported by LSHTM’s Doctoral Project Travelling Scholarship as well as the University College London’s (UCL’s) Chadwick Trust. All research was conducted according to best practices for ethical research and there is no conflict of interest to declare.

Structure of the thesis and outline of its chapters

Background and methodology (chapters 2–5)

This thesis begins with a chapter detailing the relevant history and context of the case study (Chapter 2, pages 28–38). Thereafter, the relevant literature is reviewed, and a statement of the problem and research gap provided (Chapter 3, pages 39–65). This is followed by a description of the thesis’ methodology (Chapter 4, pages 66–94), including methods of data collection, organisation, and analysis; and ethics, risks, and risk mitigation. A chapter considering reflexivity is then presented (Chapter 5, pages 95–110).

Findings (chapters 6–8)

Following the methodology chapter, the thesis’ findings are presented (chapters 6–8). The three chapters are distinct but are also intended to be understood as an *œuvre* (Figure 1, page 27). As of March, 2022, each is being revised for submission to a peer-reviewed academic journal.

The first chapter (Chapter 6, pages 111–144) is titled *Public health’s bitter pill: examining military intervention in Sierra Leone’s Ebola epidemic and proposing the ‘political economy of expedience’ paradox*. The chapter first identifies and examines how militaries became involved in Sierra Leone’s Ebola response. It then examines the ways that military support to the response was considered to be very valuable by a number of key civilian and military ERWs. However, the chapter also identifies and describes ways that the perceived need for the military support in Sierra Leone was, in some ways, historically derived as a product of the country’s history and political economy. Further, however valuable it may have been, the military support is also

found to partially contribute to (i.e., further) this political economy. Therein, the chapter sets up the thesis' foundational dilemma: how can this vicious and exclusionary cycle (a paradox the thesis terms the 'political economy of expedience') be interrupted, without disregarding the valuable contributions that were made by the intervening militaries?

The second chapter (Chapter 7, pages 145–175) is titled *Enmity and Empathy between civilian and military responders in Sierra Leone's National and District Response Centres*. The chapter first describes how many people see humanitarian and military actors as ideologically opposed. However (as the chapter then describes), in their contemporary forms, humanitarian and military actors may actually be somewhat similar in the political economy of their production and the hierarchical manifestation of their organisation. Accordingly, the chapter examines how the seemingly diverse civilian and military ERWs in Sierra Leone were, at first, somewhat combative, but were later able to effectively cooperate. The chapter then examines how civilian ERWs (and the overall architecture of public health emergency response) also contributed to the political economy of expedience paradox. Therein, the chapter returns to the paradox, but in a broadened way (i.e., as one in which civilian ERWs and the broader approach of public health emergency response are also implicated alongside the intervening militaries). The (now-adapted) foundational dilemma remains: how can the paradox's harmful effects be interrupted without disregarding the invaluable contributions that were made by the intervening and collaborative civilian and military ERWs?

The third chapter (Chapter 8, pages 176–213) is titled *Beyond the ethical imperative: examining the militarised hierarchy of Sierra Leone's Ebola response and implications for inclusive and efficient decision making during public health emergencies*. The chapter first examines the particular hierarchical ordering of Sierra Leone's NERC and DERCs. Specifically, it examines the ways that, through this hierarchical ordering, these centres attenuated conflict between the civilian and military ERWs involved in the response. The chapter then uses an extension of this argument to try and address the thesis' foundational dilemma, arguing that the hierarchical nature of Sierra Leone's NERC and DERCs helped to facilitate the safe and effective localisation and decentralisation of response activities and daily decision making (albeit in limited ways and to relatively elite actors). The chapter argues how this might nevertheless evidence plausible strategies for the inclusion of marginalised actors during public health emergency responses in a way that is not only more ethical but also more efficient than what was seen in the Sierra Leone case. In other words and ultimately, the chapter argues that hierarchy and localisation should go hand-in-hand during future responses to public health emergencies, as this would serve to interrupt the political economy of expedience paradox and thus resolve the thesis' foundational dilemma.

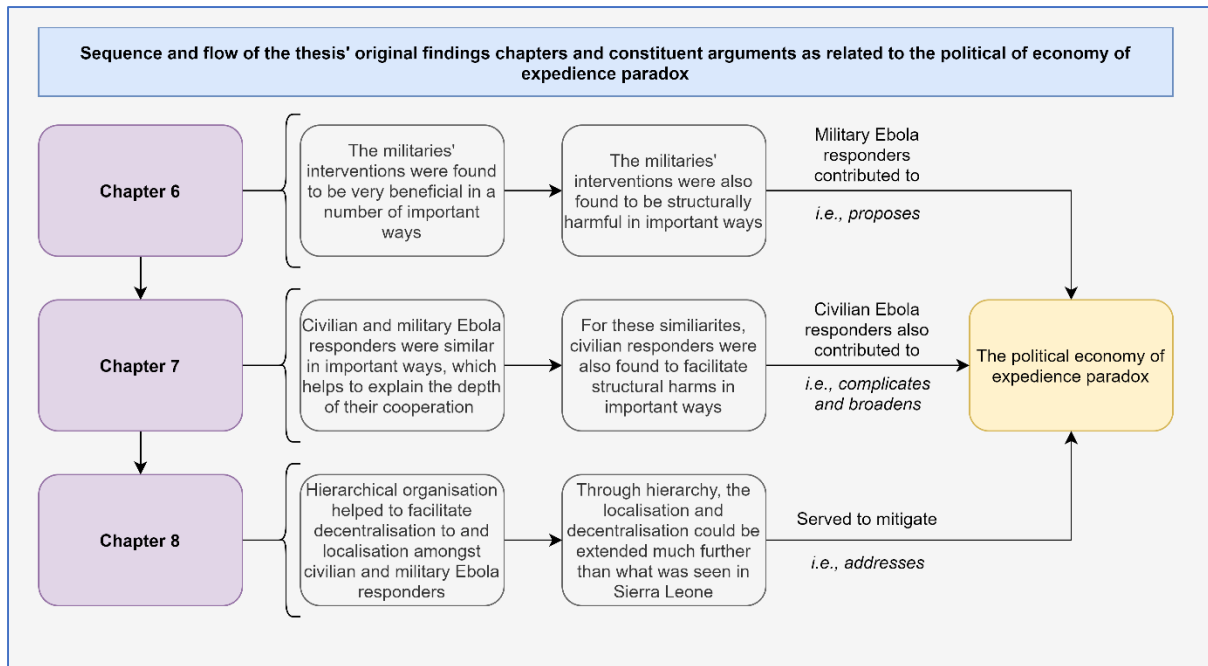


Figure 1: Sequence and flow of the thesis' original findings chapters and constituent arguments

Discussion, references, and appendices (Chapter 9–Appendix C-2)

The research findings are followed by a discussion chapter (Chapter 9, pages 214–236) which examines the key findings and cross-cutting themes, discusses the thesis' use of theory, and concludes the thesis. The chapter also gives recommendations for policy and research and discusses various limitations.

Finally, references (pages 237–300) and appendices (pages 301–471) are included. The latter includes other relevant and published peer-reviewed academic journal articles (co-)authored by the PhD candidate (STB) (Appendices A-1–A-7, pages 303–384); other in draft, in review, or in press peer-reviewed academic journal articles (co-)authored by STB (or, where they are still in development, their abstracts) (Appendices B-1–B-2, pages 385–406); a summary of other relevant but not peer-reviewed publications (co-)authored by STB (e.g., blog posts, policy reports, *et cetera*) (Appendix B-3, pages 407–413); an extended chapter on the relevant history and context of the case study (i.e., an extended version of the thesis' background chapter, Appendix C-1, pages 414–445); and an extended chapter dedicated to reflexive considerations (i.e., an extended version of the thesis' reflexive chapter, Appendix C-2, pages 446–471).

Chapter 2 | Relevant history and context of the case study

The purpose of this chapter is to provide further background necessary for contextualising the thesis’ aim, objectives, questions, and findings. A particular focus is given to elucidating historical factors from both before and during the 2013–2016 West Africa Ebola Epidemic that are relevant to contextualising Sierra Leonean relationships with, and perspectives on, national and local governance, armed actors, and the United Kingdom (UK). The chapter concludes by summarising the relevant history and context of the case study. Note, the historical context described in this chapter is an abridged version of a longer chapter that can be found in the thesis’ appendix (Appendix C-1, pages 414–445).

Prior to the 2013–2016 West Africa Ebola Epidemic

Pre-1991–2002 Sierra Leone Civil War

As a colony of the British Empire (in 1821, the Sierra Leone Colony was officially incorporated into British West Africa), Sierra Leone was both a territory from where slaves were taken, and also one where ‘recaptives’—enslaved Africans on Portuguese and Spanish slave ships that were intercepted in the Atlantic by the British Navy—were repatriated to the continent.^{41,42} The distinction between the arriving settlers, recaptives, and other local Africans who moved to the capital city of Freetown “blurred”, and from this “motley collection” emerged a cohesive Krio identity.⁴¹ Importantly, this group held status and political power that indigenous Sierra Leoneans did not, even being granted British citizenship in 1853.⁴¹ Accordingly, Krios held a “vocal allegiance” to Britain,⁴¹ and saw themselves as socially superior to indigenous Sierra Leoneans.⁴¹

Despite this allegiance, the British colonial administration had only partial control and limited resources with which to govern.⁴¹ Therefore, they decided to encourage the “gradual reifying” of chieftaincy structures,⁴¹ which included efforts to “solidify and politicise” ethnic identities.⁴¹ Indirect rule was thus made possible through the “strengthen[ing of] tribal patriotism”.⁴¹ Chiefly traditions and structures were reinforced far beyond their historical precedent or were even “invented”,⁴³ forming many of the governance structures that exist to this day.^{41,43–45} The modern state’s “patron-client system with the state as the ultimate patron, the chiefs as middlemen, and the people as clients was... born” through this process.^{41,a} Accordingly, today, Sierra Leone has two parallel and interweaving political structures. One is democratically elected. The other—the chieftaincy structure—is a hereditary vestige of the British colonial administration’s efforts to control the hinterland. Both systems interweave to govern the people of Sierra Leone and the country is therefore simultaneously “a version of democracy” while also being

^a Paramount Chiefs’ contemporary system of governance is not, therefore, uncomplicated, static, or fully indigenous. Chiefs were central to the way that the pre- and post-colonial government exercised power,⁴¹ even if they have also, at times, been central to “democratising the countryside and decentralising the state”.⁴¹ Further, the demarcation of chiefdoms encouraged landlord-stranger dynamics and systems of dependence to develop.^{46–48} Taken together, therefore, Sierra Leonean value systems are wholly “bound up” in the chiefs’ roles.⁴¹

one that is “underpinned by fragile institutions and firmly entrenched patronage, chieftaincy, and ethno-regionalism”.⁴¹

Sierra Leone’s independence in 1961 was “deceptively quiet” and “amounted to a rather conservative version of change”.⁴¹ However, in the decade leading up to independence, chiefly patronage politics were even further reinforced.⁴¹ This “supplant[ed] narrow elitist Krio politics” of Freetown that had “some sense of citizenship, liberal democracy, and the rule of law”, and so “disconnections and divides in the body politic were considerable”.⁴¹ In Sierra Leone’s northwest—the thesis’ area of study—this resulted in a “marked breakdown in reciprocity [and] abuse of the chiefs’ considerable local power”.⁴¹ Unrest proliferated. Therefore, while the lead up to independence was relatively peaceful between Britain and Sierra Leone, Sierra Leonean power brokers—especially Paramount Chiefs—further reinforced their position in society, including through the use of violence.⁴¹ This required that chiefs maintain—at least nominally—a positive relationship with the British colonial administration, so that the latter would not dismantle their governance structures prior to independence. Therein, the relationships between both Krios and Paramount Chiefs with Britain are not only historically intertwined but are also plausibly quite positive, as through their historical relationship with the British colonial administration, both have entertained a degree of privilege and power that exists to this day.

The 1991–2002 Sierra Leone Civil War

Many factors led to the 1991–2002 Sierra Leone Civil War, ranging from the move to authoritarian one-party rule in 1978; increasingly rampant corruption, mismanagement, and cronyism within the Sierra Leonean government (GoSL); and the deconstruction of state institutions and services (including state bankruptcy resulting in the inability to pay civil servants).^{13,41,49–52} In short, citizens were systematically deprived of basic access to healthcare, employment, and education services.^{41,53,54} This “long history of social exclusion and predatory politics” is despite Sierra Leone’s extraordinary mineral wealth:⁵⁵ in addition to valuable commodities such as iron ore and gold, alluvial diamonds—which require no significant infrastructure to extract—were discovered in Kono District in 1930.^{41,55,56} The implications of this discovery for Sierra Leone “were to reverberate through [its] subsequent... history”,⁴¹ especially because—while access to the diamond trade was initially somewhat controlled—by the end of the 1980s, almost all of Sierra Leone’s diamonds were being smuggled out of the country.⁵⁷

This confluence of factors—rampant corruption, authoritarian rule, the collapse of public services, systemic poverty, and profoundly lucrative illicit trade in easily extracted diamonds—resulted in both significant and widespread demand for political change, as well as an opportunity to realise significant profits if certain territories could be controlled.^{49,58} Sierra Leone’s newly formed Revolutionary United Front (RUF)—a non-state armed group (NSAG) with connections to Charles Taylor—seized the opportunity presented by this precarious situation: often by threat of violence, many internally displaced

persons (IDPs) and refugees were coerced into diamond mining (including children as young as ten).^{41,49,57,59}

The 1991–2002 Sierra Leone Civil War began on March 23rd, 1991 when the RUF attempted to overthrow GoSL.⁴⁹ While they did not succeed in taking Freetown, the government’s response to the rebellion was mismanaged and ineffective, and the RUF took and retained control of a significant portion of the country.^{41,49}

Control over the countryside and capital city vacillated, and despite various peace agreements and the deployment of United Nations (UN) peacekeepers as part of the UN Mission in Sierra Leone (UNAMSIL), the conflict lasted for eleven years. Over this time, the war displaced over two million people and resulted in the deaths of between 50,000 and 300,000 people.^{41,49,60} Even relative to many other armed conflicts, the 1991–2002 Sierra Leone Civil War was horrific in its nature. Numerous human rights violations, war crimes, and crimes against humanity occurred, including the use of child soldiers and the widespread utilisation of rape, sexual slavery, mutilation, and mass killings of civilians as weapons of war.^{49,60,61} Rebel operations had names such as ‘Operation No Living Thing’ and ‘Operation Pay Yourself’.⁶² Governmental forces in the Sierra Leone Army (SLA) were also brutal and indiscriminate: like the RUF, they ransacked villages for personal profit and committed numerous other atrocities.^{41,49} Tellingly, SLA troops became known by civilian populations as ‘sobels’—soldiers by day, rebels by night. Over time, the RUF and SLA became hard to distinguish.¹³ A third armed group, the Kamajors, developed as a grassroots community defence militia which was formalised into the Civil Defence Force (CDF), but over time they too became involved in war crimes and other atrocities.^{13,49,63} Ultimately,^{50,52,53,58,64} all sides of the conflict “systematically perpetrated violence” against the country’s civilian population.⁵³

The conflict did not abate until the intervention of the British Armed Forces in May, 2000. At this time, the RUF advanced once again on Freetown and threatened to take control of the important highway linking the city to the international airport.^{13,65} Fearing this threatened their ability to evacuate British citizens from the capital (and only several months after then-British Prime Minister Tony Blair’s infamous Chicago speech setting out what would become known as the Blair Doctrine advocating interventionism in foreign policy),⁶⁶ the British government (HMG) decided to intervene militarily. Under Operation Palliser, 1,200 British troops were tasked with securing the airport and re-establishing control of the highway linking it to Freetown.⁶⁵ Coincidentally, the day before British troops arrived in-country, the RUF attacked a number of UNAMSIL bases in Sierra Leone and abducted several hundred UN peacekeepers.^{13,58} Therefore, while en route to the country, the British Armed Forces’ mission mandate “shifted dramatically” from securing the airport and important highway to “taking a key role in securing peace”.⁶⁷ Notably, this included direct command and control (C2) of the ‘Unholy Alliance’—a mix of combatants from UN peacekeeping troops, the SLA, and various NSAGs—which quickly began operations against the RUF.¹³

Within six weeks, Freetown had been secured, the RUF had been routed, and almost all hostilities in the country had ceased.¹³ Isolated violence continued to occur, but the 1991–2002 Sierra Leone Civil War quickly drew to a close. On January 18th, 2002, the 1991–2002 Sierra Leone Civil War was declared officially over.

Post-1991–2002 Sierra Leone Civil War

Towards the end of the war, the British Armed Forces established the Short Term [military] Training Team (STTT) to support Sierra Leonean troops fighting the RUF. This was later reformed into an organisation called the British Military Advisory Training Team (BMATT),¹³ which “integrat[ed]... hard security, public administration and civil service reform” in a way that “broke new ground in terms of cooperation” between the Department for International Development (DfID), Foreign & Commonwealth Office (FCO), and UK Ministry of Defence (MoD).¹³ BMATT was, in essence, a cross-HMG effort to build entirely new state institutions.¹³ Note, BMATT later became the International Military Advisory Training Team (IMATT), and then later the International Security & Advisory Team (ISAT).¹³ For the sake of consistency, in this thesis, this programme is referred to as ISAT.

By early 2001, ISAT consisted of 65 British Armed Forces personnel filling key positions in the GoSL MoD, as well as battlefield commands within the national army.¹³ As the 1991–2002 Sierra Leone Civil War drew to a close, a Military Reintegration Plan (MRP) was designed to reintegrate ex-combatants taking part in a Disarmament, Demobilisation, and Reintegration (DDR) process. Soldiers from all factions—including rebel forces—were trained, professionalised, and consolidated into the new Republic of Sierra Leone Armed Forces (RSLAF).¹³ This included a complete overhaul of the military structurally; quite literally rebuilding the GoSL MoD; and a significant increase in RSLAF’s size and available resources.¹³

This post-war HMG initiative was a “testing ground for new peacebuilding experiments that emphasised the role of development for maintaining peace”.²⁴ Taken together, the breadth of HMG’s various interventions is difficult to overstate—it

...reached deep into internal and external security institutions, altered command structures, provided top-to-bottom training, and established staffing policies, procedures, and behaviour. It created agencies to coordinate security information from the community level up to the President... [Britain’s interventions were therefore] not merely security sector reform, but a complete transformation of the objectives of security provision, the mission, management, and coordination of security.¹³

In short, the national military was essentially disbanded and completely rebuilt by the British, with purposeful efforts to reintegrate previously factional groups into a cohesive, trained, resourced, and professionalised army modelled after Britain’s. This process was done in conjunction with restructuring and rebuilding military-adjacent institutions like the police (SLP) and the judiciary, and a further emphasis

on rebuilding trust between the Sierra Leonean public and the armed forces.^b Ultimately, this “transformation” of Sierra Leone’s security system was considered so successful that the country “is frequently seen as *the* example” (emphasis in original) of security sector reform (SSR).¹³

However, while the national army was transformed in this way, the country’s health system was left in disrepair (during the 1991–2002 Sierra Leone Civil War, clinics and hospitals throughout the country were damaged or destroyed, and numerous healthcare workers (HCWs) fled the country or were killed).^{68,69}

The 2013–2016 West Africa Ebola Epidemic

Origin of the epidemic and early escalation

Ebola Virus Disease (Ebola)—a viral haemorrhagic fever (VHF) and one of the world’s deadliest viruses, with a case fatality rate of up to 90%—is a zoonotic virus that was first discovered in 1976 by a team of scientists in the Democratic Republic of the Congo (DRC).⁷⁰

The 23 Ebola outbreaks prior to the 2013–2016 West Africa Ebola Epidemic resulted in a total of 1,580 known fatalities.⁷⁰ Each of these outbreaks occurred on the African subcontinent, and did not present significant risk to the Global North. As is the case with many tropical diseases, international interest in and research on the virus were therefore very limited, including efforts to develop vaccines or therapeutics.⁴

The 2013–2016 West Africa Ebola Epidemic is believed to have started in December, 2013 in a small Guinean village called Meliandou, possibly when a young boy named Emile came into contact with an Ebola-infected bat while playing outdoors.² While the outbreak would escalate into a significant epidemic, at first, it was “misclassified based on historical precedent of epidemics that were controlled through humanitarian medicine”.⁷¹ It was not even officially investigated and confirmed until March, 2014, at which point it had already reached much of Guinea and probably Sierra Leone and Liberia as well (Table 1). These three first-affected countries were to become the outbreak’s epicentre.⁷² However, due to the misclassification as above, little was done by the international community at the time to contain the outbreak in Sierra Leone beyond the establishment of one field hospital in the country’s east by Médecins Sans Frontières (MSF).⁷³

Date	Event
March 2014	Ebola is confirmed in four Guinean districts and suspected cases are reported in both Liberia and Sierra Leone, ¹ and the National Ebola Task Force, led by the Minister of Health, is established. ¹⁵
April 2014	Ebola is confirmed in Liberia. ¹
May 2014	Ebola is confirmed in Conakry and in Sierra Leone, where it rapidly proliferates. ¹

^b Britain’s military reform intervention included community outreach initiatives. Following this, there was a “significant positive change” in people’s perception of the army.¹³

June 2014	Ebola is confirmed in Monrovia. There are now more confirmed cases of Ebola in Sierra Leone than in Liberia and Guinea combined. ¹
July 2014	Ebola is confirmed in Freetown and President Koroma announces a national state of emergency, ¹⁵ authority is transferred from the National Ebola Task Force to the GoSL Ebola Operations Centre (EOC) (though it is still led by the Minister of Health), and to complement the GoSL EOC, President Koroma establishes the Presidential Task Force on Ebola. ¹⁵
August 2014	The United States (US) Centers for Disease Control and Prevention (CDC) Emergency Operations Center (EOC) moves to Level 1 Activation, ¹ the World Health Organisation (WHO) declares a Public Health Emergency of International Concern (PHEIC), ⁷⁴ and (controversial) epidemiological modelling projects upwards of 1.4 million cases of Ebola by January, 2015 in the absence of further intervention. ⁹ The GoSL EOC is re-shuffled at the direction of the President. ¹⁵ Leadership is subsequently put in the joint hands of the CMO, the WHO, and a new GoSL 'EOC Operations Coordinator'. ¹⁵
September 2014	The UN Security Council (UNSC) calls the epidemic a global “threat to peace and security”, ⁷¹ and MSF calls for military intervention, ¹¹ the UN establishes the UN Mission for Emergency Ebola Response (UNMEER) for regional coordination, and HMG establishes the Joint Inter-Agency Task Force (JIATF), led by a DfID civilian, to coordinate HMG’s support to the Sierra Leone Ebola response. ¹⁵ The first British Armed Forces personnel arrive in-country. ¹⁵
October 2014	Authority is transferred from the GoSL EOC to a new National Ebola Response Centre (NERC), led by the country’s ex-Minister of Defence Paolo Conteh. ¹⁵
November, 2015	The epidemic is largely contained and Operation Gritrock is stood down. ¹⁵
January 2016	Authority is transferred from the NERC to a new GoSL Public Health EOC (PHEOC), led by the Office of National Security (ONS) and the Ministry of Health and Sanitation (MoHS). ¹⁵
June, 2016	The 2013–2016 West Africa Ebola Epidemic is declared officially over. ¹

Table 1: A timeline of the Ebola outbreak in Sierra Leone including its national coordination structures and escalation in early 2014

While there was a lack of sufficient intervention by the international community at the time, there were domestic attempts to contain the epidemic. In March, 2014 in Sierra Leone, a National Ebola Task Force was established to coordinate these efforts.¹⁵ The group, led by the Minister of Health, was responsible for overseeing and coordinating Ebola response activities in the country. In early July, 2014, authority was transitioned to a new GoSL EOC, though the Minister of Health remained in charge (Table 1 also summarises the various transitions of Ebola response authority in Sierra Leone).¹⁵ However, President Koroma was dissatisfied with the GoSL EOC’s leadership and capabilities, and in late July, he established a separate Presidential Task Force on Ebola to help oversee it.¹⁵

It was widely perceived that coordination of the Ebola response—at least GoSL’s response under the stewardship of the MoHS—was failing.¹⁵ When the President visited the GoSL EOC on July 31st and August 9th, for example, he found it almost empty, despite the outbreak’s recent escalation and new cases in Freetown.¹⁵ He was “very upset”,¹⁵ and so in late August, President Koroma reconstituted the GoSL EOC and installed new leadership:²¹ the Minister of Health’s leadership was replaced with the joint leadership of the MoHS’ Chief Medical Officer (CMO), WHO, and GoSL EOC Operations Coordinator

(a new role).¹⁵ However, despite these changes, the GoSL EOC was still perceived to be ineffective at coordinating the response to the escalating crisis.¹⁵

This was reinforced in Sierra Leone when, in late July, 2014, the first case of Ebola was confirmed in Freetown. On July 30th, to try and prevent further spread of Ebola from the hinterland to the capital, President Ernest Bai Koroma invoked the country's Military Aid to Civil Authorities (MACA) policy.^{84,c} 750 RSLAF troops were deployed to the country's epicentre (the Kenema and Kailahun districts) to place them in a military-enforced quarantine, organised under a new military mission, Operation Octopus.^{37,76,d} In the face of a collapsing health system, the following day President Koroma declared a national public health emergency.¹⁵ This intervention and declaration were 'too little too late', and the crisis escalated further (Table 1, pages 32–33).

Militarised intervention

On September 2nd, 2014, then-International President of MSF, Dr. Joanne Liu, "admitted defeat and said that it would take military mobilisation by wealthy countries with biohazard expertise, not just international aid, to stop the disease".¹¹ Accordingly, Dr. Liu issued a public statement: "the military are the only body that can be deployed in the numbers needed now and that can organise things fast".¹¹ Echoing this sentiment was London School of Hygiene & Tropical Medicine's (LSHTM's) then-director Peter Piot who called for a "quasi military intervention", and the European Civil Protection and Humanitarian Aid Operations (ECHO) which was "pushing for military medical intervention".¹¹

Perhaps unbeknownst to these individuals and organisations at the time, the British Armed Forces was not only already supporting Sierra Leone's Ebola response through their pre-existing in-country ISAT team (pages 31–32), but was already actively planning to deploy at least some new resources in response to the Ebola outbreak: on August 21st, an Advance Party from DfID and the UK MoD did a 'recce' to Sierra Leone, and on August 28th, DfID formally requested that the UK MoD take over the build of an Ebola Treatment Centre (ETC) that would later be known as the Kerry Town Treatment Unit (KTTU).¹²

^c MACA is a formal policy in Sierra Leone that was introduced as part of the post-civil war SSR supported by the UK (see Chapter 2, pages 31–32. See also Appendix C-1, pages 245–245).¹⁵ The policy is functionally the same as Britain's MACA policy and allows for members of the armed forces to be deployed domestically under three criteria: 1) the military aid must be a 'last resort'; 2) the civil authority is not able to fulfil the support needed, and it is not deemed worthwhile to develop that capacity in the civil authority; or 3) the civil authority does have the capability, but is not able to deploy it with sufficient speed or agility.⁷⁵ A peer-reviewed academic journal article that partially critiques the concept of last resort during public health emergencies has been included in this thesis (Appendix A-6, pages 245–245). Even when MACA is invoked, members of the armed forces hold no legal power beyond that as citizens of the crisis-affected country (i.e., operations have to fall within and personnel must adhere to both military and civilian law).⁷⁵

^d Later on, district-wide quarantines were also placed on Port Loko, Moyamba, Bombali, and Tonkolili districts.⁷⁷ At one point, approximately 2 million people—about a third of Sierra Leone's population—lived in such district-wide quarantines.⁷⁷

Planning and actioning the British Armed Force’s deployment—to be organised under Operation Gritrock—occurred very quickly (this is examined at greater length in chapters 6–9, and is also detailed further in the extended history and context chapter found in the thesis’ appendix, i.e., Appendix C-1, pages 414–445).

By the end of the October, HMG had deployed hundreds of civilian and military personnel to Sierra Leone from across DfID, the FCO, Public Health England (PHE), the National Health Service (NHS), and the British Armed Forces.^{12,78,79} Taken together, these HMG personnel had already helped develop and staff: one ETC as above (and were in the process of building six more); various Ebola laboratories; and an Ebola medical training facility for national staff.¹² Further, they helped to reinforce essential supply chains, and had backstopped the availability of Ebola and non-Ebola care to (primary expatriate) Ebola Response Workers (ERWs) including through guarantees of aeromedical evacuation. In support of these and other interventions over the course of the outbreak, HMG would spend approximately £500 million; deploy approximately 2,000 personnel (including more than 1,500 from the British Armed Forces); and support the build of ETCs hosting approximately 1,500 Ebola treatment beds.^{78–80}

The NERC and DERCs and the end of the epidemic

In addition to these contributions (and of significant note) is the way in which the intervening militaries were integral to the transformation of the coordination architecture overseeing the response (a process which is examined at length in Chapter 6, pages 111–144).

The proposed new design was a network of command centres which were, “to a large degree, born out of... [the] British assessment [of what was required]”.¹⁵ The proposed centres were inherently civil-military spaces, with civilian and military representation from both HMG and GoSL, in addition to International Non-Governmental Organisations ((I)NGOs), Intergovernmental Organisations (IGOs), and International Organisations (IOs) (their organisation and function is examined at greater length in chapters 6–9).¹⁵ With diplomatic pressure from the FCO and DfID, President Koroma accepted the new model.¹⁵ He appointed his then-Minister of Defence, Paolo Conteh, as the NERC’s Chief Executive Officer (CEO) with immediate effect.¹⁵ On October 17th, all personnel who had been working in the GoSL EOC under MoHS stewardship were told to report to the NERC instead. Before the end of the month, the first of a national network of constituent District Ebola Response Centres (DERCs) had also been opened and reinforced with both British and Sierra Leonean military personnel, shifting responsibility for district-level Ebola response operations away from the country’s District Health Management Teams (DHMTs).^{12,e}

Almost all formal Ebola response activities were coordinated out of the NERC and DERCs, and eventually, these efforts paid off (note, there were numerous informal responses to the Ebola response in

^e The first DERC was opened in Port Loko on October 31st, 2014.

Sierra Leone, which are referenced in Box 1). On July 13th, 2015, Port Loko District—one of the thesis’ field research sites and the epidemic’s Sierra Leonean epicentre for much of 2015—experienced its last case of Ebola.⁸¹ While a new cluster of cases in Kambia District (another field research site site) did arise in late August, it was quickly contained, and on September 7th, the district reached the same milestone that Port Loko District had two months prior.⁸²

Box 1: Informal responses to the Ebola outbreak

This section—indeed, this study—primarily focuses on elucidating the Sierra Leone Ebola response’s formal processes, interventions, and activities, i.e., those which were sanctioned by and generally operated through GoSL and its constituent institutions like the MoHS and DHMTs, and later the NERC and constituent DERCs.

However, informal responses to the emerging crisis were myriad and substantial, particularly at the household and village level. This was especially the case in the outbreak’s early days, when the formal response had not yet been robustly mounted. Some of these informal responses have been documented and described.^{30,37,43,71,83–90}

However, these local resources—and in turn, local actors—were not robustly or systematically incorporated into the formal response (though there was more effort to do so towards the end of the outbreak).²⁴ This is despite any capacities that local groups might have had (or been capable of developing and scaling), and despite cogent arguments that the exclusion of these local resources and local actors was therefore not only ethically questionable but also epidemiologically detrimental.

Arguments that a lack of local capacity justified this exclusion disregard—at least to an extent—these resources, and also disregard consideration of the historical reasons how and why this capacity was (perhaps) lacking. Ultimately, it is indicative of the structural denial of households’ and communities’ capacity, willingness, and desire to be actively participant in response to the crisis they faced.

Reasons for and some implications of this exclusion (including for the deployment of military to the response) are considered later in the thesis (e.g., in Chapter 7, pages 145–175).

By November, there were no known clusters of Ebola remaining in Sierra Leone, and so on November 7th, 2015,⁹¹ Operation Gritrock was stood down. The last British Armed Forces personnel departed the country three days later.⁹² Later, on January 1st, 2016, the NERC and DERCs were decommissioned, with responsibility for residual Ebola response operations handed to the newly created GoSL PHEOC and constituent GoSL District EOCs (DEOCs) under the leadership of the MoHS. The remainder of the UK’s civilian teams left the country at this time.^{92,f} On June 9th, 2016, the 2013–2016 West Africa Ebola Epidemic was declared over.^{1,92,98} In all, 28,652 people are known to have had Ebola across ten countries, of whom 11,325 people are known to have died (including 3,956 in Sierra Leone specifically).¹ Due to limited testing and surveillance, this number likely underrepresents the true number of cases and deaths by a significant margin.⁹⁹

^f On January 14th, 2016, a new case of Ebola was reported in Tonkolili District.⁹³ The case was a student in Port Loko District who had travelled through Kambia District on her way to Bombali District.⁹⁴ The source of her infection is not known, though it is possible the case was sexually transmitted, as is known to be possible for at least six months following an infection with the Ebola virus (it is possible that sexual transmission can occur many years following an infection with Ebola).^{94–96} One contact tested positive on January 20th and was successfully treated for the disease, being discharged from the ETC on February 4th.^{92,97} This was the last known case of Ebola in Sierra Leone’s outbreak. On March 17th, 2016, the WHO once again declared Sierra Leone Ebola-free, this time for good, with only a small number of cases reported in Guinea and Liberia thereafter.¹

Summary of relevant history and context of the case study

A number of historical factors contextualise and influence the origin, nature, and effect of the British Armed Forces' and RSLAF's support to the 2013–2016 West Africa Ebola Epidemic.

Historically, there has been a very strong relationship between Britain and Sierra Leone, and relevant vestiges of the colonial state exist to this day. This includes, for example, the political power and identities—in many ways facilitated by the British colonial administration—of Krios in Freetown and Paramount Chiefs throughout the country (as heightened in the lead-up to decolonisation). These factors may affect and perhaps bias not only the recollections of GoSL officials and Paramount Chiefs when critiquing and examining Britain's role in the Ebola response (as is done later in this thesis), but also the ability of these groups to speak as representatives of Ebola-affected populations given the at-times historically contentious relationship between them.

Further and considerably influencing perceptions of Britain, its military, and Sierra Leone's military is the 1991–2002 Sierra Leone Civil War. Relevant factors—including in the data collection sites specifically—include instances of horrific violence and abuse at the hands of both rebel forces and the then-national army (i.e., the SLA). The war also destroyed a significant amount of the country's health infrastructure, exacerbating a chronic lack of health system resilience and disease outbreak preparedness. However, the effect of 1991–2002 Sierra Leone Civil War on people's perceptions of armed actors is complex, as the British Armed Forces played a central and conspicuous role in stopping the violence and ending the war.

The 1991–2002 Sierra Leone Civil War was also the impetus for the subsequent transformation of Sierra Leone's security sector, including the national army. Through this security sector transformation and the ongoing ISAT programme, the British Armed Forces helped to rebuild Sierra Leone's military in a model that was more-or-less identical to their own. As largely funded by HMG and directed by uniformed members of the British Armed Forces, this transformation not only served to influence and in some ways define RSLAF's Ebola response capabilities, but also to further bolster positive relationships between Britain and the Sierra Leonean public due to the former's sustained presence and support for GoSL.

This also created an unprecedented depth of trust in and political access for HMG, which thus had considerable influence on the origin, nature, and effect of military support to the Ebola outbreak.

Through ISAT, for example, there were already British Armed Forces personnel in Freetown prior to the Ebola outbreak and the deployment of British troops under Operation Gritrock. Further, as individuals with trust and access at the highest levels of GoSL, these personnel played a central role in designing national Ebola response coordination structures. Therefore, the subsequent deployment of British troops under Operation Gritrock was readily accepted by GoSL leadership. Operation Gritrock was also highly compatible with RSLAF's burgeoning Ebola-response roles under Operation Octopus, because their

officer-class soldiers were trained by the British Armed Forces, and also because the two militaries were very similarly structured.

Through the development of the NERC and DERCS as well as their contributions to that process and leadership within the resulting structures, the British Armed Forces and RSLAF—as part of a multi-agency civil-military team—were integral to the response and eventual containment of Ebola in Sierra Leone. Therein, while isolating the effect of the militaries' contribution defies scientific measurement (given the thoroughly civil-military nature of the response and its actors), it was nevertheless highly significant.

In short, there are a number of unique historical factors in Sierra Leone that are highly relevant to the examination of origin, nature, and effect of the British Armed Forces' and RSLAF's contributions during the 2013–2016 West Africa Ebola Epidemic. Effort is made throughout this thesis to appraise and disentangle these diverse factors, and their consideration in this chapter elucidates important opportunities for contextualising the thesis' findings and delineating the scope of their generalisability.

Chapter 3 | Reviewing the relevant discourse

This chapter critically examines the literature on civil-military cooperation during public health emergency responses. Specifically, it examines Accordingly, first, review methods are described, and an overview of the sources of literature across various disciplines that were identified is presented.

Thereafter, key themes and debates in the literature are discussed. This is separated into two overarching sections. The first section summarises literature on types and characteristics of military intervention in health-related humanitarian contexts, existing guidelines governing civil-military cooperation, and core themes being debated by key civilian response and military stakeholders (full analysis of these issues are presented in the thesis' annex. See appendices A-4–A-7, pages 340–384).

The second section then considers the wider literature base, and discusses other key themes and debates related to civil-military cooperation during public health emergency responses. This includes scepticism regarding the role of militaries in public health emergency responses; concerns related to the (in)ability of military and civilian responders (defined in Box 2 and 3, respectively) to productively and effectively work together in response to such crises (including perceived organisational differences); and concerns about localisation in the case of exogenous (and especially military) intervention.

The chapter concludes by giving a statement of the problem, delineating the research gap, and highlighting this thesis' research significance.

Review methods

A literature scoping exercise was conducted in the early spring of 2017 (i.e., as the thesis was being conceptualised) to identify literature relevant to the thesis' research area. While there is no agreed definition of a scoping review,¹⁰⁰ literature scoping—rather than a full and systematic review, which would require too narrow a scope for what is a complex and multidisciplinary issue area—was deemed most appropriate for the thesis. That is, literature scoping allows key concepts, sources of data, and available evidence to be efficiently mapped, especially when an area is complex and un(der)studied (as is the case for this thesis).¹⁰⁰ Here, elements of Daudt *et al.*'s six-step methodological framework were drawn on. The framework was chosen for its particular focus on examining the extent, range, and nature of research, and transitively, its focus on identifying research gaps in the existing literature (the framework is based on Arksey and O'Malley's methodology as further refined by Levac *et al.*).^{100,101}

Web of Science was a principal reference, selected due to its inclusion of biomedical sciences as well as social sciences including health.^a Search strings covered topics that focused on civil-military cooperation; ‘militarisation’ and ‘securitisation’; the localisation and decolonisation of public health; outbreak response; and health systems (including resilience, preparedness, and strengthening). Where literature also included consideration of political economy (defined in Box 1), this was assessed as being especially pertinent (this was most commonly considered within literature on militarisation and securitisation, as well as literature on health systems). Search results were also cross-checked against Google Scholar (with relevant articles not previously identified included for review) in order to ensure comprehensiveness. Health Security Net—a publicly accessible database of more than 2,000 global health security (GHS) resources including academic research, governmental reviews, policy analyses, and hearings—was also searched.¹⁰² The PhD candidate’s (STB’s) attendance and discussions at various conferences and workshops—attended by diverse stakeholders representing different perspectives—over the course of the PhD project served to further expand knowledge of the relevant literature base and the research area’s key themes and debates (particularly those run by Brown University which are described in Appendix C-2, pages 446–471).

Box 1: Defining ‘political economy’

In this thesis, political economy is defined using the Collinson (2003) definition to mean “the interaction of political and economic processes within a society, the distribution of power and wealth between different groups and individuals, and the processes that create, sustain, and transform these relationships over time”.¹⁰³

The relevance of political economy to disease outbreaks (as related to their origin, nature, and the responses to them) is captured by the ‘syndemics’ conceptual framework.^{104,105} Syndemics (i.e., synergistic epidemics) and the related ‘constellation of elements’ describe the social, economic, environmental, and political milieu in which a population is immersed that enhance vulnerability and are epidemiologically deleterious. This concept and its relevance to the thesis is described further in the methodology chapter (Chapter 4, pages 66–94).

Later in the thesis (see Figure 5, Chapter 6, page 142), a new concept termed the ‘political economy of expedience’ is defined and proposed as depicting the mechanism through which the military’s deployment to Sierra Leone’s Ebola Virus Disease (Ebola) response arose from and reinforced a particular political economy.

Once an initial list of relevant literature was identified, titles and abstracts were appraised for their relevance. Furthermore, the bibliography of the most relevant literature was also assessed (using the same criteria), which resulted in the identification of number of additional resources. Over the course of the thesis’ development, this process was routinely repeated (i.e., as new literature came to the attention of STB, bibliographies were reviewed and other relevant literature identified).

While an ongoing process throughout the PhD process (as above), formal searches were re-run in January, 2022 (shortly before the thesis’ submission) in order cross-check for new literature. Mostly as a

^a This was selected in consultation with the London School of Hygiene & Tropical Medicine (LSHTM) librarians. It should be noted that only resources in the English language were considered. Furthermore, it was sometimes only possible to review titles and abstracts, as sometimes identified resources were neither Open Access nor otherwise available through the LSHTM library services. This limitation is discussed in the thesis’ discussion chapter (Chapter 9, pages 214–236).

result of increased interest in the thesis’ research area following the onset of the COVID-19 pandemic, this resulted in a number of additional publications being identified and included for review (including several (co-)authored by STB which are detailed in Appendix B-1–B-3, pages 385–413).

Identified literature on civil-military cooperation in public health emergency responses

Across various disciplines (ranging from anthropology to public health to political science), a wealth of grey and academic literature—totalling 508 sources—was identified relevant to the examination of the origin, nature, and effect of military contributions to the 2013–2016 West Africa Ebola Epidemic (i.e., the thesis’ research aim).

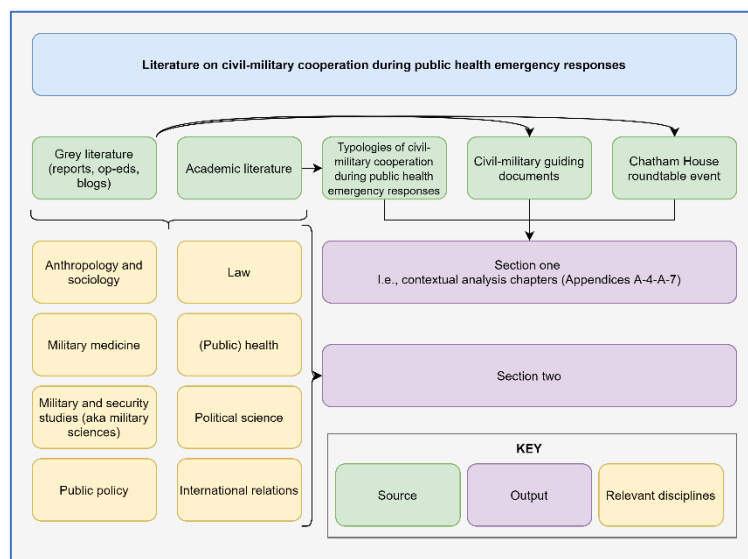


Figure 1: Literature on civil-military cooperation during public health emergency responses (Source: author)

For example, sources included peer-reviewed literature on civil-military cooperation during humanitarian, stabilisation, and reconstruction endeavours (i.e., not specifically related to the 2013–2016 West Africa Ebola Epidemic context, and often focused on ‘kinetic’ contexts and related issues of humanitarian access, deconfliction, *et cetera*);^{8,25,36,106–250} relevant peer-reviewed literature (often published after the thesis’ initial review of the literature and design phase);^{24,39,71,251–299} and a number of grey literature sources including books and book chapters;^{37,300–349} civil-military guiding documents;^{350–373} working papers, reports, and policy papers;^{20,34,35,56,74,79,374–470} several theses;^{471–476} and magazine articles, blogs, and comments on issues ranging from civil-military relations (CMR) in humanitarian contexts, to the strategic political considerations and implications of defence engagement, to military medicine.^{477–514} While there were relatively few peer-reviewed articles directly related to the Sierra Leone case, there was a special Ebola issue of the Journal of the Royal Army Medical Corps (now BMJ Military Health) published in 2016 containing a number of relevant articles.^{15,16,21,84,89,515–534} There is also a (soon-to-be-updated) 2013 Routledge Handbook of Civil-Military Relations⁵³⁵ with various constituent chapters;^{536–563} a 2014 Routledge Handbook of Global Health Security⁵⁶⁴ with various constituent chapters;^{565–574} a 2020 Oxford Handbook of Global Health Politics⁵⁷⁵ with various constituent chapters;^{576–595} and a 2020 report that

reviewed and expanded on the otherwise-limited evidence base on civil-military coordination (CMCoord) during responses to humanitarian crises.⁵⁹⁶ There is also literature focused on related and adjacent issues such as GHS, securitisation, militarisation, disease diplomacy, and global health governance (cited above). These articles, reports, and books—some of which are Ebola specific—were also assessed to be relevant and were thus included for consideration.

Key themes and debates

Key themes and debates are discussed here, as separated into two sections. It should be noted that, as a publication-style thesis, the thesis' findings chapters (i.e., chapters 6–8, pages 111–213) also contain their own background sections, which consider—and also build on—the literature that is reviewed in this chapter.

Section 1: Background articles

Four articles were (co-)authored by STB to review components of the relevant literature which thereby addressed three foundational research questions. Specifically, consideration was given to examining the various typologies of civil-military cooperation in public health emergency responses that have been published; the key civil-military guiding documents that delineate roles, responsibilities, and expectations of civil-military cooperation in such contexts; and a Royal Institute of International Affairs (Chatham House) roundtable discussion that demanded special attention due to its considerable relevance to the thesis' research area and design. The literature review components of these articles are summarised in the following sections (the articles are also reproduced in full the thesis' annex. See Appendix A-4–A-7, pages 340–384).^b

Typologising civil-military cooperation during public health emergency responses

The first background article reviewed the various efforts scholars have made to typologise civil-military cooperation in humanitarian and public health emergency responses, and therein, sought to answer the following question:

1. Historically, in what ways have militaries cooperated with civilian workers, specifically related to public health issues?^c

There are a number of motivations for the deployment of military forces to contexts that include public health emergencies. For example, many foreign governments adhere to variations of Fusion Theory or the Comprehensive Approach, which maintain that peace overseas enhances security at home, and can be

^b As published papers reviewing elements of the literature base, the chapters themselves also represent contributions to the relevant literature.

^c This language draws from *Understanding medical civil-military relationships within the humanitarian-development-peace 'triple nexus': a typology to enable effective discourse* (Appendix A-4, pages 245–245). Please refer to the chapter's research paper cover sheet on page 245 for further information on re-use permission.

achieved through a blend of security, political, financial, and development tools.^{442,443} Adherents of these strategies believe that militaries can support many aspects of fragile states beyond simple peacekeeping—interventions which may result in civil-military interaction (CMI) and therefore the development of civil-military relationships (CMRel).^d Meanwhile, for civilian response actors (defined in Box 2) adhering to Humanitarian Principles of neutrality, impartiality, humanity, and independence, there are legitimate concerns that CMRel unacceptably blur the line between agents with very different motivations. In extreme cases, this could bring physical harm to humanitarians, mistaken by belligerents and others for those supporting disputed political agendas.¹⁸¹

Box 2: Defining ‘civilian’

In this thesis, ‘civilian’ is used to describe anyone not in the armed services, nor in any other armed group including the police (though some do argue that police forces should be considered civilian institutions).

As pertinent to this thesis, the ‘civilian’ group can be further differentiated by those responding to a given crisis (e.g., humanitarian aid workers), and those affected by it (i.e., crisis-affected communities). Where otherwise unclear, this distinction is sign-posted, though it should be noted that crisis-affected community members can and often do respond informally to these kinds of crisis (see Box 1, Chapter 2, page 36).

Given the at-times ambiguity of terminology in the literature (e.g., whether a ‘humanitarian actor’ appropriately captures a government civilian employee), later in the thesis, the term ‘classical response actor’ is defined and then used (see Box 1, Chapter 7, page 149). This is so as to capture the full range of actors that comprise the civilian response actor grouping. In the thesis’ discussion chapter (Chapter 9, pages 214–236) the use of this term is discussed at length.

Despite these concerns, there are areas where CMRel are relatively uncontroversial. For example, few dispute the obligations of an occupying force to ensure the provision of aid to a conflict-affected civilian population, as enshrined in International Humanitarian Law (IHL).^{372,501} Similarly, military support to disaster relief efforts in peaceful regions is largely accepted by the international community, with clear guidelines for CMRel in these contexts.³⁵⁶ Domestic CMRel (a distinct area, between a military and its own government) are also widely described and generally accepted.

Other contexts generate significant disagreement and debate. For example, international guidelines exist for CMRel in ‘complex emergencies’ (which are reviewed in the following section), where a humanitarian crisis occurs within an area suffering “total or considerable breakdown of authority resulting from internal or external conflict”.³⁷¹ However, the practical implementation of these guidelines is often contentious, particularly provided the dynamic and unpredictable nature of these environments. Similarly, the role of CMRel in public health crises such as the 2013–2016 West Africa Ebola Epidemic remains undefined, as it is for military ‘hearts and minds’ activities (i.e., those with an explicit counterinsurgency purpose), or military capacity-building which occurs alongside civilian development projects.^{444,510}

^d The term CMRel is used rather than CMR as the latter has been used to describe specific forms of CMRel. CMRel is not a term used in the literature and so is used to avoid conflation with previously described concepts.

Several authors have attempted generic CMRel typologies, but none are sufficiently and comprehensively workable for public health-specific CMRel. For example, Seybolt describes a typology for military humanitarian interventions based on the nature of intervention.³⁴⁵ Although relevant to the wider humanitarian context, Seybolt's system does not span the breadth of relevant public health contexts. It also fails to consider the constituent components of militaries, which may include independently deployable corps that do not engage in offensive operations (such as health workers or engineers) with which civilian organs may selectively establish CMRel despite concerns about the wider military. The United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) describe a cooperation to coexistence spectrum and also outline appropriate CMRel according to the level of conflict, ranging from direct delivery of aid, to logistics support, to infrastructure support (the cookie-truck-bridge-model).³⁵² However, again this fails to capture the diversity and complexity of real-world motivations and contexts which underlie CMRel,^{182,445} perhaps explaining why awareness and implementation of their guidelines is limited on the ground.^{156,183} Other CMRel typologies such as those by Penner,¹⁸⁴ Staniland,¹⁸⁵ Rietjens *et al.*,¹⁸⁶ Feaver (described in Gurcan),³⁰³ Luckham,¹⁸⁷ and Bymen *et al.*³⁵ are similarly valuable contributions to the literature, but are insufficiently comprehensive nor specifically applicable to CMRel arising in public health emergency contexts.

Creating a comprehensive typology of CMRel in these contexts was therefore crucial background for understanding the role of the British and Sierra Leonean militaries in Sierra Leone's Ebola response, especially for understanding the extent to which the civil-military dynamics and challenges had historical precedent. Accordingly, in *Understanding medical civil-military relationships within the humanitarian-development-peace 'triple nexus': a typology to enable effective discourse* (Appendix A-4, pages 340–350),²⁷⁰ the range of existing civil-military typologies previously described in the literature was considered and examined with a view to developing a more comprehensive typology of CMRel specific to public health interventions. This followed a five-stage process influenced by Kluge,⁵⁹⁷ which included identifying the range of actor motivations for establishing public health-specific CMRel (i.e., influence, social perception, positive health outcomes, professional obligations, and the humanitarian imperative), as mapped against CMR type. It also considered the level of civil-military engagement (i.e., strategic, operational, or tactical), and the area's context as related to stability (i.e., conflict-affected or not). The typology derived from the literature (Figure 2) predicted two distinctly problematic contexts: tactical CMRel in unstable areas, and CMRel in contexts where military intervention could disrupt ongoing development programming. A conceptual element, civil-military alignment (CMA), was also proposed in the chapter as a novel mechanism through which contexts could be rapidly appraised to predict the degree of risk arising from CMRel.

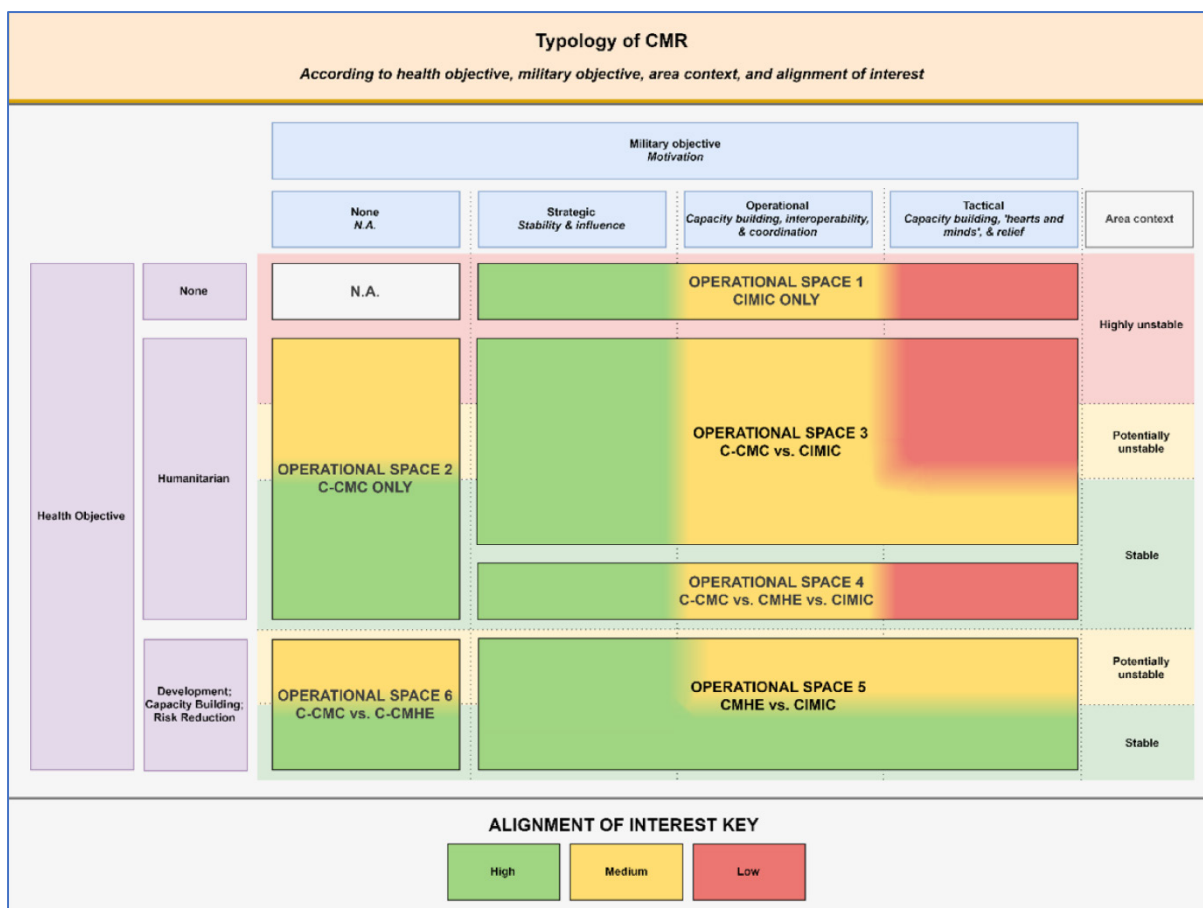


Figure 2: Novel CMRel typology derived from the literature^{270, e}

In *Understanding the risks of Civil-Military Relationships in Healthcare: a validated typology* (Appendix A-5, pages 351–362),²⁶¹ original qualitative survey data was analysed using a mixed-methods approach to test whether the new CMRel typology (which was theoretically derived) corroborated with the views of key civilian and military stakeholders. Likert scale data was analysed quantitatively using Mann-Whitney rank sum tests.⁵⁹⁸ Value statement analysis drawing on Tricco was also used to analyse free hand responses.⁵⁹⁹ Findings validated the typology (though further research is required to do so more robustly).

Reviewing civil-military global guiding documents and examining their relevance for public health emergency responses

Civil-military guiding documents comprise another core component of the relevant literature, in that they document key principles and best practices intended to inform civil-military cooperation in response to humanitarian crises and public health emergencies. Therefore, they were reviewed, with the intent of addressing the following question:

^e As used in this figure: CIMIC, i.e., military-led civil-military coordination; C-CMC, i.e., civilian-led civil-military coordination; CMHE, i.e., civil-military healthcare engagement.

2. What are the key principles of the civil-military guiding documents that regulate and inform CMR in humanitarian crises, and what relevance do they have for public health emergency responses?^f

The civil-military regulatory domain is complex but comprises five broad groupings of policies: general guidance on CMR; guidelines related to a specific emergency; guidelines on particular elements of CMR; guidelines relating to specific bilateral arrangements; and intragovernmental arrangements.⁴⁴⁶ Most of the documents that concern international military deployments (such as the British Armed Forces' deployment to Sierra Leone) fall in the first broad grouping, which usually assumes the deployment of a Global North military to the Global South.

Several key UN guidelines form the basis of most discussion regarding this kind of CMR. Specifically, UN OCHA maintains three sets of guiding documents—the Inter-Agency Standing Committee (IASC) Reference Paper (2004); the Military and Civil Defence Assets (MCDA) Guidelines (revised 2007); and the Oslo Guidelines (revised 2006).^g They represent the three core, consensus-driven, and global guiding documents that have been adopted and accepted by the UN for wide international consideration and applicability.^h In *Civil-military relations: a review of major guidelines and their relevance during public health emergencies* (Appendix A-6, pages 363–372), these documents were reviewed and examined for their relevance to public health emergency contexts.

The IASC Reference Paper (2004) is arguably the most comprehensive of UN OCHA's guidelines.¹⁸⁸ It argues for the maintenance of the civilian character of humanitarian assistance, the use of military as a 'last resort', and a clear division of labour wherever possible.^{373,448} Starting from this position of difference, the IASC Reference Paper recognises that both civilian and military groups may "pursue common goals... [using] basic strategies [that] range from coexistence to cooperation... [alongside the] shared responsibility" of coordination.^{34,188,359} While the IASC Reference Paper reaffirms the significance of the Humanitarian Principles (i.e., humanity, neutrality, impartiality and independence), it is relatively flexible in their application, recognising that a humanitarian imperative "may at times necessitate a pragmatic approach" to CMR.¹⁸⁸ However, the IASC Reference Paper contains further principles that limit the contributions of military, and stipulates that military relief activities are "by their nature and definition, not 'humanitarian'".¹⁸⁸ The MCDA Guidelines were adopted in 1994 by consensus and revised

^f This language draws from *Civil-military relations: a review of major guidelines and their relevance during public health emergencies* (Appendix A-6, pages 245–245). Please refer to the chapter's research paper cover sheet on page 245 for further information on re-use permission.

^g While part of the 'core four' UN CMR guiding documents, this analysis does not consider the 2013 IASC Non-Binding Guidelines on the Use of Armed Escorts for Humanitarian Convoys. This is because the document addresses the use of armed escorts for humanitarian convoys specifically, rather than providing guiding principles for CMR in humanitarian settings more generally.

^h In 2018—after this paper was drafted and submitted for publication—UN OCHA published a new core guiding document titled 'Recommended practices for effective humanitarian civil-military coordination of foreign military assets (FMA) in natural and man-made disasters.'³⁵⁵ However, as with the other guiding documents, this document is found to "fall short in terms of offering adequate guidance on the full array of relevant response contexts, including epidemics, pandemics, and forced displacement crises".⁴⁴⁷

in 2007. They were developed at the request of UN OCHA and the International Federation of the Red Cross and Red Crescent Societies (IFRC) in response to CMI that occurred during emergencies in the early 1990s such as the Spitak, Armenia Earthquake (1988) and Operation Provide Comfort in northern Iraq (1991–1996).³⁴ The guidelines provide a model legal framework for the utilisation of MCDA in humanitarian contexts, and address situations such as man-made and environmental disasters in times of peace.^{351,356} The Oslo Guidelines, developed in 1994 and revised in 2006, underpin most global civil-military policies. The guidelines “were intended to establish principles and standards that would improve [the] coordination and use of military and civil defence assets in response to natural, technological, and environmental emergencies in peacetime”.³⁴ Emerging under the auspices of the Consultative Group on Humanitarian Civil-Military Coordination, they enjoy a unique status of being internationally agreed and IASC-endorsed, and are the “leading international instrument concerning the role of militaries in the response to natural disasters”.⁴⁴⁹

These guiding documents are consistent in emphasising compliance with two humanitarian (rather than public health) principles: they emphasise action based on impartial needs assessments, free from discrimination; and explicitly circumscribe the use of military assets as a last resort only. Further, they discourage dependency, encourage maximal civilian operational independence and control, advocate for distinction between military and civilian response activities, and suggest military assistance should be provided at no cost to the crisis-affected state. These principles should be maintained, the documents argue, even if they may circumstantially disadvantage beneficiaries in need of crisis assistance. It is important to re-note that the global guiding documents (and therefore these principles) apply only to international third-party interventions (i.e., the documents do not address the consequences of a host nation taking a different view and deciding to deploy their national military within domestic borders). It is also important to note that public health is considered as an issue within a broader humanitarian context, rather than as the primary focus of the crisis at hand.

While the key guiding documents offer a relatively consistent position on civil-military cooperation, their practicability is increasingly challenged. Experiences in countries like Haiti, Myanmar, Pakistan, Afghanistan and Iraq “have all demonstrated continuing weaknesses in civil-military coordination”.⁴⁵⁰ Furthermore, “military and humanitarian actors have consistently failed to reach a common understanding of the role that each plays, the challenges they face and, critically, the priority needs of affected populations, and how these can or should be addressed”.⁴⁵⁰ The documents do not consider non-military armed actors (see Box 3), and also fail to consider and articulate how humanitarian practitioners ought to navigate the Humanitarian Principles alongside the assertion of state sovereignty vis-à-vis the deployment of national militaries (even though national militaries can be highly relevant actors in these contexts as in the Sierra Leone case).^{356,357,449,451}

Box 3: Defining ‘military’

As discussed in the *Civil-military relations: a review of major guidelines and their relevance during public health emergencies* background article, the global guiding documents consider militaries, but fail to capture the full range of relevant armed actors, which includes private security companies; armed police or gendarmerie; national security personnel or apparatus; or non-state armed groups (NSAGs). In this thesis, however, ‘military’ is used to refer to state militaries and their personnel in a more traditional sense. This is because the primary non-civilian actors involved in Sierra Leone’s Ebola response were the Republic of Sierra Leone Armed Forces (RSLAF, i.e., Sierra Leone’s national army) and the British Armed Forces. To a lesser extent in the thesis, police and security services are also considered, though where this occurs, this is referred to as ‘security services’ rather than ‘military’.

Most pertinently, the global guiding documents do not consider public health emergencies as a unique kind of crisis, so their application to these contexts has several limitations. The response to such emergencies includes, for example, the maintenance or repair of essential infrastructure, securing or initiating public health programmes, and repairing or constructing new healthcare, laboratory, and quarantine/isolation facilities.²⁷¹ The breadth of this support requires a cross-sectoral approach, including health, security, economy, education, and infrastructure. No one organisation can provide all components, and foreign and domestic militaries have become increasingly involved in supporting various health-related response elements. Crucially, this support is often provided over a sustained period of time, rather than as temporary relief in response to a singular natural disaster event. The complexity of public health emergencies as an operational context also means different civilian response actors take different CMR positions, a diversity that is reflected by many non-UN guidelines—many are concerned with minimising civil-military overlap, some with maximising co-operation, and some with addressing specific issues.⁴⁴⁶ There are ongoing efforts to develop appropriate civil-military cooperation frameworks that consider public health emergencies, including one by the World Health Organisation (WHO), but this is neither published nor tested, and leaves significant gaps by not addressing the array of non-medical components of a public health emergency response (e.g., logistics or coordination) that a military may support. UN OCHA has published a two-page document on understanding the global guiding documents during COVID-19, but is extremely brief and *ad hoc* (and as such, does not constitute core CMR guidance).³⁵⁴

Preliminarily examining the perspectives of key military and civilian responders from the Ebola response

These two questions (and three associated background articles) are followed by consideration of a third question (and fourth background article), *The Next Ebola: Considering the Role of the Military in Future Epidemic Response* (Appendix A-7, pages 373–384):

3. Given the (contemporaneously) thin literature base regarding military contributions to and civil-military cooperation during the Sierra Leone Ebola response specifically, what lessons can be

learned and what research gaps can be identified through the convening of key civilian and military responders involved in the response?ⁱ

To answer this third question, STB partnered with Chatham House to conduct a roundtable meeting of key civilian and military responders involved in Sierra Leone's Ebola response. The March 2017 meeting—held under Chatham House Rule at 6–9 Carlton House Terrace in London—used the Sierra Leone Ebola response as a case study to

...help inform the debate on military participation in future disease outbreak responses... [and] provide opportunity for critical reflection on the ethical, operational, and other challenges inherent to a civilian-military response to a public health emergency.²⁷¹

STB was responsible for defining the meeting's objectives and agenda, as well as for co-organising the event and identifying attendees.^j More than 50 individuals from 20 organisations attended.^k The day's discussions were recorded and transcripts produced, which were then reviewed.

All participants agreed that the Ebola outbreak in Sierra Leone offered a unique context that contributed to the British military's success in supporting the response. The British military had a strong pre-crisis relationship with Sierra Leone; the country was not experiencing significant political turmoil; and Sierra Leonean people generally hold their own military and the United Kingdom (UK)—including its military—in high regard.

Nonetheless, participants noted many challenges to civil-military cooperation. This included challenges related to outbreak prevention, preparedness, early warning, and rapid response (namely that if these systems were more robust, the need for civil-military cooperation would be curtailed); military 'force protection', 'risk appetite', and risk management (i.e., that military personnel were hampered by force protection requirements limiting their movement and ability to deliver services); community engagement (which was haphazardly considered in the Sierra Leone case); decision making within organisations (specifically the strengths and limitations of hierarchical coordinating structures); interagency coordination between civilian and military actors (including lack of clear consensus on relevant terminology and organisational culture); and philosophical considerations related to the perception, public relations, and

ⁱ This language draws from *The Next Ebola: Considering the Role of the Military in Future Epidemic Response* (Appendix A-7, pages 245–245). Please refer to the chapter's research paper cover sheet on page 245 for further information on re-use permission.

^j This meeting was formative and purposefully agenda-setting for the thesis, as it: provided ample opportunity for scoping the contemporaneous conversation related to the militaries' role in Sierra Leone's Ebola response; helped to identify lessons learned and gaps requiring further examination; and helped to inform subsequent data collection (the thesis' methodology is described at greater length in the subsequent chapter, Chapter 4, pages 66–94). Relatedly, the meeting also facilitated connections with potential respondents to be interviewed for the thesis at a later date.

^k Attendance included representation from a range of groups. This included academic, policy, and private groups; British and Sierra Leonean government (HMG and GoSL, respectively) departments; UN agencies; and (international) non-governmental organisations ((INGOs).

pragmatism of a civil-military response to a public health emergency (especially the perceived risk to the erosion of the Humanitarian Principles).

Despite these challenges, participants suggested that the 2013–2016 West Africa Ebola Epidemic provided evidence that permissive contexts do exist within which militaries can be appropriate players in disease outbreak responses. Meeting participants proposed that even in less receptive environments, militaries may be able to provide peripheral support to civilians for some activities, such as facility construction and training. Several participants said that, particularly considering these and the other unique strengths of militaries, objections to their inclusion may need to be reassessed if future disease outbreak responses were to operate as efficiently and effectively as possible.

Taken together, the four background articles: reviewed existing civil-military typologies to establish pre-Ebola examples of civil-military cooperation during public health emergency responses (Appendix A-4–A-5, pages 340–362); reviewed and considered the relevance of key civil-military guiding documents during such kinds of crisis (Appendix A-6, pages 363–372); and reviewed transcripts related to the Sierra Leone case specifically for key civil-military themes and challenges (Appendix A-7, pages 373–384).

Section 2: Other key themes and debates

In addition to the key themes and debates raised in the background articles, the wider search identified a number of others in the literature. Namely, that includes literature that is: generally sceptical of involving militaries in public health emergency responses; focused on concerns about the ability of military and civilian actors to productively and effectively work together in such contexts; and is focused on concerns over localisation in the case of exogenous intervention (including by militaries). These key themes and debates are discussed in turn.

Literature that is sceptical of involving militaries in response to humanitarian crises and public health emergencies

Many civilian response actors—especially humanitarian actors—claim adherence to the Humanitarian Principles of impartiality, neutrality, independence, and humanity (the definitions given by UN OCHA are provided in Table 1).^{114,189,190,309,374}

Table 1: The Humanitarian Principles	
Impartiality	“Humanitarian action must be carried out on the basis of need alone, giving priority to the most urgent cases of distress and making no distinctions on the basis of nationality, race, gender, religious belief, class, or political opinions”. ⁵⁰²
Neutrality	“Humanitarian actors must not take sides in hostilities or engage in controversies of a political, racial, religious, or ideological nature”. ⁵⁰²
Independence	“Humanitarian action must be autonomous from the political, economic, military or other objectives that any actor may hold with regard to areas where humanitarian action is being implemented”. ⁵⁰²

Humanity

“Human suffering must be addressed wherever it is found. The purpose of humanitarian action is to protect life and health and ensure respect for human beings”.⁵⁰²

Table 2: The Humanitarian Principles

They were first made explicit as “fundamental [operating] principles” by the International Committee of the Red Cross (ICRC) and IFRC in 1965.⁵⁰² In 1992, they were adopted by the UN General Assembly—with ‘independence’ being incorporated as a fourth principle in 2004—to govern the way humanitarian response is (or at least should be) carried out.⁵⁰²

Scholars and practitioners alike characterise the Humanitarian Principles as sacrosanct to humanitarian practitioners (some even argue that adherence to the principles themselves is what makes an activity humanitarian in nature. See, e.g., Hilhorst,¹⁹¹ Gordon *et al.*,¹⁸⁹ and Krahenbuhl²³). This is for various reasons. Of particular note is the argument that the principles improve access to vulnerable populations: that is, as argued by scholars such as Colona,³⁰⁹ Gordon *et al.*,¹⁸⁹ and Meyer *et al.*,⁴⁵² by disassociating themselves from political agendas, civilian response actors are better able to negotiate access and maintain an operational presence in politically fraught contexts. Furthermore, in doing so, they also help ensure their own safety (see, e.g., Horne *et al.*,²⁷⁰ Grace,³⁷⁴ Labbé *et al.*,¹⁹⁰ and Alejandria *et al.*⁴⁴⁷). That is, by remaining neutral towards, independent from, and impartial to political actors, civilian response actors are less likely to be seen as political agents, and are therefore less likely to be considered appropriate targets of violence.^{23,189,191,270,374,l-m}

Many scholars therefore argue that civil-military cooperation in response to humanitarian crises and public health emergencies is inherently fraught, in that it inevitably associates civilian response and military actors regardless of the extent to which adherence to the Humanitarian Principles is sustained by the latter (note, for example, the civil-military guiding documents’ previously discussed focus on the need to thoroughly maintain distinction).^{23,34,36,453,454} This is particularly the case if and when civilian response actors rely on military assets, and thus lose the ability to claim true independence from military actors and other political interests (see, e.g., Rana,¹⁹⁵ Pugh,³⁶ and Studer¹¹¹). Pugh, for example, writes that

^l This is a contested view—scholars have argued that some threat actors, such as the Islamic State, are relatively indiscriminate in the violence they commit towards civilians because violence itself serves a political end regardless of its target (i.e., regardless of whether a target is ostensibly independent, neutral, and impartial).^{192–194,374,492,503,504} Further, others argue the activities of civilian response actors may be co-opted by such groups. For example, one MSF commentator with experience working in Syria wrote that “as long as [the Islamic State] takes a short-term view of its end-of-world scenario, it is unlikely that cooperation will lead to anything other than the exploitation of international humanitarian resources to build, through the use of unfettered violence, a totalitarian society as a prelude to the end of time”.⁵⁰⁵

^m Principles articulated by the key civil-military guiding documents (which were previously described, see pages 45–48) generally focus on how the Humanitarian Principles can be best maintained during CMI. This includes arguments for the clear distinction between civilian response and military actors, the need for civilian leadership, and the use of military assets in humanitarian contexts as a last resort only. UN OCHA’s spectrum of CMI (ranging from co-existence to cooperation) assumes that the less conflict-affected an area is, the less politicised CMI is likely to be, and therefore the less problematic civil-military cooperation becomes.²⁷²

...initiatives to institutionalise the relationship [between civilian response and military actors]... entail a dilution of humanitarian independence... [which] run[s] counter to the potential for humanitarian organisations to foster a cosmopolitan ethos that would not only preserve humanitarian principles but also contest statist assumptions about conflict, development, and power.³⁶

Scholars generally agree, therefore, that civil-military cooperation presents significant reputational risks to those claiming adherence to the Humanitarian Principles,^{23,24,26,36,199,321,322} if not significant risks to the principles themselves (and therefore, humanitarianism more generally).^{196–198,326,376}

Many authors point to the specific principle of ‘humanity’ as one that is particularly risked by civil-military cooperation in response to humanitarian crises and public health emergencies (see, e.g., Hillhorst¹⁹¹ and Gordon *et al.*¹⁸⁹), namely, due to the characterisation of militaries as threat actors (i.e., inherently political agents that exercise control through the threat or use of force).ⁿ Overtly, violence of any kind neither alleviates “human suffering” nor “protect[s] life and health”, but rather serves to exacerbate these harms.⁵⁰²

In the literature, this argument is made theoretically but also empirically, as scholars have documented numerous examples where civil-military responses to humanitarian crises and public health emergencies have resulted in violence and human rights abuses. Examples are numerous but include the COVID-19 pandemic, which in Nigeria and Kenya, has been associated with civilian deaths at the hands of military and security services enforcing lockdowns; in the Philippines, with police brutality and prison deaths; and in Sri Lanka, with press censorship.²⁰⁰ To draw on two other examples, in the 2013–2016 West Africa Ebola Epidemic, military personnel securing quarantine in Monrovia took a very heavy-handed approach to enforcement in the West Point area and shot a child during a period of unrest;²⁶³ and in the 2018–2020 Kivu Ebola Epidemic in the Democratic Republic of the Congo (DRC), cash payments by civilian response actors to military personnel for armed protection allegedly resulted in increased instances of sexual exploitation and violence.^{273,447}

There are also related arguments that the deployment of militaries to such contexts can create “fear and stigma” amongst vulnerable populations; “transform... local populations into threat actors”; and “rationalise weaponised responses to violence against health workers”.⁴⁷⁸ Parker *et al.*, meanwhile, argues that militarised enforcement measures fail to “understand... and respect... local norms, social values... and public authority of affected populations” that they argue are fundamental to successful interventions (related issues on localisation are discussed towards the end of this chapter).²⁶⁴ In infectious disease outbreaks specifically, scholars have also found that military actors can be epidemic vectors themselves. Documented instances include the propagation of the human immunodeficiency virus (HIV) and cholera by peacekeeping forces.^{201–203}

ⁿ This is also why, in the civil-military guiding documents that were previously examined, military activity in support of humanitarian endeavours is described as “by... nature and definition, not ‘humanitarian’”.²⁷²

Taken together, therefore, scholars and practitioners generally agree that civil-military cooperation in response to humanitarian crises and public health emergencies is extremely fraught, in that it threatens the very principles underlying humanitarian action, and also puts vulnerable populations at increased risk of violence and other harms. Furthermore, scholars from other disciplines—predominantly international relations and political science—argue that it also presents significant risks at the strategic political level. In contemporary discourse, these risks are often referred to in debates surrounding militarisation, and as a related phenomenon, securitisation.

While there is no one accepted definition, broadly defined, militarisation is the process by which military actors and assets are drawn on to respond to problems not typically associated as being within a military's purview (pertinently, this includes development, humanitarian, and public health emergency contexts).^{23,25–27,204–207,455,585} Many scholars argue this is increasingly common, and therefore represents a major global shift of the past several decades (see, e.g., Loyd,²⁰⁶ Studer,¹¹¹ Ingram,²⁰⁷ and Kamradt-Scott *et al.*⁵⁸⁵). As with militarisation, securitisation does not have one definition, but generally “refers to the process by which states determine threats to national security based on subjective rather than objective assessments of perceived danger”.³³⁹ Therein, securitisation is not related to the role of militaries or other security services *per se* (as it is with militarisation). Rather, it describes the way in which any non-kinetic threat (e.g., climate change, infectious disease outbreaks, drug use, and poverty) are characterised as threats to national security, and therefore entertain greater political interest.^{207,265,323} As related to public health emergencies, this phenomenon is often critiqued in literature using the term ‘[Global] Health Security’ (see, e.g., Rushton,^{176,586} Bernard,²⁰⁸ Abraham,²⁰⁹ Brown *et al.*,³⁴⁰ and Davies *et al.*³²³).^o Due to the process of militarisation, as highlighted above, some scholars argue that securitised threats are increasingly likely to incur the deployment of militaries as part of a whole-of-government intersectoral response taking a comprehensive approach,^{176,271,309,456} and therefore, are increasingly likely to oblige civil-military cooperation despite its various risks.^{24,28,176,266,340–342,586}

There are many concerns raised in the literature related to militarisation and securitisation. For example, some scholars argue the securitisation of health may (or at least may seem to) disproportionately focus efforts on public health issues affecting Global North countries (see, e.g., Feldbaum *et al.*²¹⁰, Abraham,²⁰⁹ and Rushton¹⁷⁶). Scholars also argue that militarisation can prevent important capacity building within civilian institutions (see, e.g., Davies *et al.*);⁵²⁸ makes the settlement of disputes through violence more likely (see, e.g., Zwi);²¹¹ masculinises operations (see, e.g., Patel *et al.*);²⁰² and reinforces structural violence (see, e.g., Loyd).²⁰⁶ Calcagno, meanwhile, argues such an approach to public health emergency response

^o These phenomena can—and often do—occur concurrently. One contemporary example is the US’ use of military personnel to deliver infant formula from Europe due to a national shortage, and the simultaneous invocation of the Defense Production Act to increase domestic supply (the act allows the US President to increase supply of items they “deem key to national security”).⁵⁰⁶ In this example, the political establishment decided the non-kinetic problem was considered a national security concern (i.e., the problem was ‘securitised’), and due to their airlift and other logistical capabilities, the military was thus called on to help alleviate the problem (i.e., the response was ‘militarised’).

creates a fundamental disconnect with genuine health needs (and therefore results in poor medical outcomes);²⁷ and de Waal concludes it is “worryingly authoritarian, bad for public health, and strategically counterproductive”.⁵⁰⁹ In short, civil-military cooperation in response to humanitarian crises and public health emergencies—especially non-kinetic ones—can be seen as an extreme example of both the securitisation and militarisation of humanitarianism and global health, and thus invites robust criticism.^{28,29,71,208,209,212–214,267–269,507,509,527}

Some scholars acknowledge these challenges and risks, but nevertheless suggest there are instances—namely, when even exogenous civilian actors are overwhelmed—where civil-military cooperation in response to humanitarian crises and public health emergencies may be beneficial overall. Kamradt-Scott *et al.*, for example, argues that during the 2013–2016 West Africa Ebola Epidemic, the deployment of foreign militaries helped facilitate the arrival of (international) non-governmental organisations ((I)NGOs), and that many civilian response actors found military personnel to be “open, engaging, and keen to learn”.²⁰ Ultimately, Kamradt-Scott *et al.* found that

...foreign and domestic military assistance proved pivotal in establishing an orderly response to contain the outbreak... [and] were seen by many as a game changer in the Ebola response... Civil-military cooperation... proved necessary,... ultimately saving lives.^{494,p}

They conclude, on this basis, that “unmitigated opposition towards military involvement in health-related emergencies [therefore] warrants re-evaluation”.²⁰

Other scholars argue (in a more general sense) that completely eschewing civil-military cooperation response to such crises risks “throwing the baby out with the bathwater”.¹⁷⁰ For example, scholars point to potential value in a military’s ability to: help secure civilian response actors during complex emergencies and in other insecure environments (see, e.g., Burkle);¹⁷⁰ move humanitarian supplies efficiently and at scale by relying on military supply chain and other logistical strengths (see, e.g., Barber);³¹⁰ increase political (and also public) awareness of humanitarian crises and public health emergencies that may have otherwise gone un(der)noticed and un(der)funded (see, e.g., Fidler,²¹⁵ McInnes,²⁶⁵ and Youngwan *et al.*⁴⁵⁷); and to contribute military medical and other scientific research that may prove vital in aiding crisis-affected communities, such as the sharing of novel vaccine and therapeutic technologies for high-consequence infectious diseases (HCIDs) (see, e.g., Ratto-Kim *et al.*).²¹⁶

However, even scholars that identify potential value in civil-military cooperation in response to humanitarian crises and public health emergencies generally acknowledge the depth and breadth of associated risks, not least because of the lack of robust mechanisms for ensuring it is effectively and consistently applied according to the civil-military guiding documents and other best

^p The authors argue, on this basis, that “a critical analysis is needed when we consider the Ebola response as a precedent for future civil-military cooperation in health”—something this thesis intends to examine.⁴⁹⁴

practice.^{20,34,36,270,374,447,458,494} Therefore, civil-military cooperation in such contexts remains highly controversial.

Concerns about the ability of military and civilian response actors to productively and effectively work together in response to humanitarian crises and public health emergencies

The literature reviewed above is concerned with various risks that academic and practitioner communities associate with CMRel, and how some therefore advocate for limiting civil-military cooperation in response to humanitarian crises and public health emergencies.

Other scholars—from an intersection of disciplines ranging from international development and relations, to sociology and social anthropology, to security studies, *et cetera*—argue that CMRel challenges are somewhat more fundamental: that is, that civilian response and military actors are so different in their organisational nature that cooperative CMRel is difficult (if not impossible) to operationalise regardless of its perceived risks.

Metcalf *et al.*, for example, write that “different cultures... present a major challenge to effective [civil-military] interaction”.³⁴ This difference, they argue, is significant:

The humanitarian community is described generally as a loosely configured system or network of actors... without an effective chain of command... [which] contrasts with militaries, which are characterised as hierarchical and output-driven.³⁴

Byman *et al.* also argues this point clearly, elaborating how civilian response actors are

...very different from... the military... [because they] are managed in a highly decentralised manner... [and] prefer to work by consensus rather than responding to direction. Rather than being hierarchical,... [their] structure is usually egalitarian, with much debate required before a consensus-based decision [is made].³⁵

In other words, civilian response actors are usually—though, as later discussed, not always—characterised in the literature as bottom-up institutions (see also, e.g., Beuregard),²¹⁷ meaning they do not generally espouse clear lines of authority, nor do they accept top-down direction.^{34,374,458} Rather, decision-making is grounded in cycles of discussion, starting with conversation about the problem at hand (explicitly considering the viewpoints of various stakeholders including niche and special interest groups); democratic consideration of proposed interventions; and then either acceptance of the proposed interventions, or, a return to discussion if and when consensus is lacking.³⁴³

To some extent, this reflects an inevitable lack of cohesion amongst civilian response actors when compared to military ones because of the number and diversity that may respond to a given crisis—with relevant actors ranging from UN and other multilateral agencies, to (I)NGOs and civil-society organisations (CSOs), to government departments, to donors.⁴⁵⁸ Therefore, collaborative processes are inherent. Further, no single civilian response actor is generally capable of compelling the others, as organisations have autonomy that is highly valued and carefully preserved.⁴⁵³ “Accustomed to this

autonomy”, argues Byman *et al.*, civilian response actors “have little patience with military hierarchies” (discussed below) that might otherwise circumscribe operational independence.³⁵ Scholars also argue this horizontal method of self-organising attaches more importance to long(er)-term effects and impacts of day-to-day decision making, in that the process itself can build bonds of mutual trust and solidarity between those involved.²¹⁸ A key drawback, some argue, is that this method of decision making and self-organisation—however deliberate—can be time-consuming and thus represents a conservative approach to change, which could be problematic in humanitarian crises and public health emergency contexts when lives are at risk.^{34,35,183,219,320}

Many consider militaries, on the other hand, to be more monolithic (i.e., they are larger institutions that in any given context have relatively few institutional peers). They are stereotypically disciplined and rule-bound, with clear lines of authority, relatively rigid accountability measures, and larger, more centralised operations.^{160,320,374,445,458,459} Their culture is goal-oriented, and is highly structured: personnel adhere to a “daily battle rhythm” and attach significant importance to rank, authority, and toughness.³⁴⁴ While this does mean that decision making within military institutions can be both directive and often coercive (see, e.g., Gourlay),¹⁸² it also means that decisions can be taken and actioned very quickly (i.e., without the need for consensus-building processes). Militaries argue this efficiency and control is an operational imperative in life-threatening contexts (see, e.g., Rietjens).⁴⁵⁸

In short, many scholars argue that civilian response and military actors have very different relationships with hierarchy, in that the former eschew it,⁹ while the latter embrace it. In both cases, the way decisions are made is an inviolable component of organisational nature. On this basis, Rietjens argues the two approaches are “polar opposite”,⁴⁵⁸ and Grace argues the two groups are “inherently different”.³⁷⁴ This, in turn, presents a fundamental problem for cooperative CMRel, as it makes civil-military communication, coordination, and cooperation extremely difficult, and also lowers the bar for misunderstanding and disagreement (see, e.g., Pugh,³⁶ Starr,²²⁰ Clarke,⁴⁶⁰ Collinson and Elhawary,⁴⁶¹ Slim,⁵⁰⁸ Abiew,¹⁶⁰ Williams,⁴⁵⁹ and Minear *et al.*⁴⁶²).

These key differences in organisational *modus operandi* alongside the aforementioned scepticism of involving militaries in response to humanitarian crises and public health emergencies in the first place create a lack of trust between civilian response and military actors that is very acute—an “attitudinal abyss”, in the words of the former head of the UN Protection Force Civil Affairs unit.⁴⁵⁸ Winslow, for example, concludes that civilian response and military actors are therefore inevitably “characterised by avoidance or antagonism”, and commonly hold prejudiced and pejorative associations with the other.²²¹ Indeed, Anders argues that military actors see civilian response actors as “tree huggers”, while civilian response actors see military actors as “baby killers”;¹³⁵ Winslow, agreeing, writes that

⁹ Byman *et al.* writes that civilian response actors are “scornful of military hierarchies”.³⁵

...NGOs [describe military actors] as ‘boys with toys’, rigid, authoritarian, conservative, impatient, arrogant, civilian phobic, homophobic, excessively security conscious, and so forth... [whereas] NGOs [are seen by military actors] as ‘non-guided organisations’..., ‘Children of the ‘60s’, flaky do-gooders, permissive, unpunctual, obstructionist, anarchic, undisciplined, self-righteous, anti-military, and so forth.^{221,r}

She concludes that civilian response actors “form the nucleus of an international civil society whose *esprit de corps* distrusts national military structures”,²²¹ representing a significant impasse to effective and productive civil-military cooperation in response to humanitarian crises and public health emergencies.

Despite these concerns, some authors argue these challenges can be overcome (or at least mitigated) through effective communication and information sharing, role delineation, the use of liaison officers, relationship building, civil-military training and simulation exercises, and various other forms of pre-crisis engagement.^{20,161–163,182,271,338,374,435} For example, Alejandria *et al.* argue a number of CMRel challenges could be mitigated through the redoubling of efforts to cultivate a community of practice; the revision of civil-military guiding documents to include new operational contexts including public health emergency responses; and through greater investment in more robust high-level diplomatic engagement.⁴⁴⁷ Others, such as Abiew and also Rollins, posit closer integration between civilian response and military actors could resolve many cooperative challenges (and therefore, that principles encouraging strict organisational independence and civil-military distinction should perhaps be reassessed on a case-by-case basis).^{157,222} While proposals to effect more cooperative CMRel are diverse—not least because they come from a range of academic, policy, (I)NGO, and military communities, focusing variably on the strategic, operational, and tactical levels of engagement—they do consistently argue in favour of building mutual understanding between relevant partners as a critical first step.^s

These proposals are also consistent in that they start with the basic premise that civilian response and military actors are fundamentally different in how they self-organise (i.e., the argument in the literature that is presented above). However, it should be noted that some scholars argue against the notion that civilian response actors are as anti-hierarchical as the literature often suggests. Instead, they argue that civilian response actors sometimes also sometimes embrace hierarchical decision making and self-organisation (see, e.g., Campbell,²²⁴ Clarke *et al.*,¹⁷⁹ and Heyse²²⁵). This is perhaps especially the case with governmental departments and multilateral partners—the WHO’s nascent Incident Management System (IMS), for example, is an inherently (and purposefully) hierarchical model for rapid decision making during public health emergency responses.²²⁶ Some argue that (I)NGOs can also evidence hierarchical

^r These kinds of divergent stereotypes are often described in the literature. As another example, Rietjens writes that “the military is frequently characterised as an insensitive, ill-informed, controlling, and inflexible war machine, while personnel of some humanitarian organisations as sandal-wearing, two-faced, undisciplined, and uncoordinated liberals”.⁴⁵⁸

^s Some militaries, for example, maintain handbooks to help encourage mutual understanding between their personnel and civilian response actors they might plausibly interact with on deployment (the British Armed Forces’, for example, is titled *Sharing the Space: a Guide to Constructive Engagement with Non-Governmental Organisations and the Aid Community*).^{35,223,438,463,464}

forms and exercise top-down approaches, at least in the sense that they can be used to represent values and impart power of the Global North (see, e.g., Walton *et al.*²²⁷ and Fassin *et al.*³²¹). Furthermore, other authors argue that some forms of militarised hierarchy could be used not for stereotypically coercive and top-down decision making, but rather, for the decentralisation and empowerment of more localised decision making in a way that is more aligned with civilian response actor agendas (in particular the localisation agenda, discussed below. See, e.g., Pearce *et al.*,²²⁸ Storr,²²⁹ Howieson,²³⁰ Yardley,⁴⁷⁵ and Yardley *et al.*²³¹).

However, while the review demonstrates there is literature on measures that might mitigate challenges to cooperative civil-military responses to humanitarian crises and public health emergencies, literature on how civilian response actors may be more comfortable with hierarchy than is typically characterised, and literature on how a particular type of militarised hierarchy could better align with the agenda of civilian response actors, there is little-to-no literature on how hierarchical ordering might be used to resolve civil-military challenges specifically. That is, rather than being a potential resolution to organisational differences between civilian response and military actors, the literature generally argues that different proclivities for hierarchy represents a distinct and significant problem that limits—or perhaps even prevents—effective civil-military cooperation during humanitarian crises and public health emergency responses.

Concerns over ‘local ownership’ in the case of exogenous intervention (especially by militaries) in response to humanitarian crises and public health emergencies

Discourse on hierarchical and top-down approaches to crisis response links the previously discussed literature to that on localisation—i.e., arguments in favour of grounding responses to humanitarian crises and public health emergencies at more local levels so that they are more consistent with local power configurations, resources, and interests.

Scholars argue that, from the second half of the 20th century, neoliberal reforms have often contributed to the weakening the resilience of health systems in the Global South.^{112,232,335,527} Often, these reforms were part of structural adjustment programmes (SAPs)—that is, development aid packages from the West that were conditional on countries lowering taxes, deregulating businesses and other services, and reducing government spending.^{41,233,274,275,527,530} Taken together, these post-Bretton Woods reforms focused on the shrinking of the state, including its role in providing health services (which were often privatised in part or whole).^{41,234–239}

These reforms have been associated with less endogenous capacity to respond to humanitarian crises and public health emergencies.^{30,37,43,235,264,335,465} Focusing on the example of infectious disease outbreaks, for example, scholars including Bausch *et al.*, Rulli *et al.*, and Leach (among others) associate the reforms with an increased likelihood of zoonotic leap due to: deregulated timber extraction placing human populations ever closer to wild animal ones; systemically impoverished communities relying on these animal

populations for protein; and sickened individuals not being effectively interlinked with local health systems and therefore uncaptured by passive hospital-based surveillance (a phenomena which is further discussed below).^{275–279,511,530} Scholars including Chandler *et al.* and Dzingirai *et al.* also argue that the same reforms leave health systems less able to contain an outbreak if and when it arises,^{30,37,43,259,264,335,465,530} due to systemic under-investment in human resources for health (HRH) and other basic health infrastructure.^{240,275,280,281,375,527} Hence, writing on the 2013–2016 West Africa Ebola Epidemic, Dzingirai *et al.* argue:

Far from being a thing of the past, the Ebola outbreak [was to] reveal... starkly how these histories continue to shape patterns of development, producing vulnerability in the region and making it difficult to respond to epidemics such as Ebola.⁵³⁰

In turn, argue Duffield and Ismail *et al.* and other scholars, exogenous civilian response actors are called on to respond to crises when they do occur (an intervention that can include military actors if the response has been militarised).^{232,241,321,322,530} Indeed, for exogenous civilian response actors focusing solely on crisis response (rather than, for example, development programming), intervention is their *raison d'être*.^{66,232,242,243,326,335,466,473} Some critics argue, therefore, that these actors serve to (temporarily) fill critical service gaps left by 20th century neoliberal reforms and the shrinking of the state (see, e.g., Abdullah *et al.*³³⁵ Ismail *et al.*,²³² and Fassin *et al.*³²¹), and are thus a “favoured” tool of the Global North (which historically pushed for these reforms, as above).²³²

Furthermore, some scholars argue interventions that are primarily exogenous in nature—whether comprised of civilian response actors, military actors, or both—may limit local capacity building that might otherwise be possible if endogenous institutions were more effectively included in the response to the crisis at hand. If this occurred, the argument goes, endogenous institutions could not only exercise their mandates, but in doing so, would help train personnel to be better prepared for the next crisis; would make funding available that would have positive implications for health system strengthening; and more generally, would build more trust in public authority (i.e., it would serve to strengthen governance) (see, e.g., Martineau,²⁸² Martineau *et al.*,²⁸³ Enria,⁵³ and Wilkinson *et al.*⁴⁶⁵ among others).^{30,43,89,244,264,273,284–286,512} Indeed, as previously referenced, this is one of the key concerns that scholars associate with the securitisation and militarisation of humanitarianism and global health (i.e., that it focuses too much on protecting the Global North, and fails to address the lack of endogenous resilience that made a given state and its population vulnerable to crisis in the first place).

The arguments above generally refer to the deleterious effect that exogenous interventions have on formal institutions (i.e., primarily focusing on the relationship between international-level and national-level actors). Other scholars, though, raise concerns about the effect that exogenous interventions can have on sub-national local actors (especially those outside the formal health system). Namely, this includes arguments on how the failure to robustly include these actors has various negative effects, ranging from the exacerbation of mistrust, inequity, and marginalisation, to—in the case of infectious

disease outbreaks—failed consideration of local contexts and capacities with epidemiologically counterproductive consequences.

Firstly, as argued by scholars including Mayhew *et al.*, Parker *et al.*, and Wilkinson *et al.* (amongst others), top-down approaches that do not robustly include local actors in formal responses mean that those most directly affected by a given crisis have little-to-no say in the way the formal response is organised.^{71,89,264,285,374,447,467} This is despite a growing body of evidence that local actors may well wish to organise responses differently, according to their local needs and capabilities (see, e.g., Mayhew *et al.*²⁸⁵ and Richards,³⁷ among others).^{43,264,335} This, in turn, means that exogenous responses are also associated in the literature with the exacerbation of power inequities and the further marginalisation of some local actors (especially those in more rural and less politically privileged areas).^{37,264,441,447}

Furthermore, scholars also argue that top-down approaches serve to foster mistrust in humanitarian and public health emergency responders. That is, by not being robustly included as participant leaders, disenfranchisement leads to rumours, stigma, and suspicion (or at best, indifference).^{30,37,53,264,273,465,513} These approaches and their effects are also associated with further discouraging communities' linkages with public authorities, and therein, with further weakening governance at its most local levels (see, e.g., Enria⁴³ and Parker *et al.*²⁶⁴).

Taking these issues together, this can have very deleterious consequences, including during infectious disease outbreaks specifically. For example, without robust trust in public authorities and local health systems, populations may not seek health services when they first experience signs and symptoms of infectious disease (see, e.g., Bausch *et al.*).²⁷⁵ Rather, for example, individuals may instead seek healthcare from informal providers.^{264,275,514} As passive hospital-based surveillance is foundational to identifying outbreak clusters,^{287,346,347} this means early cases may not be efficiently identified and isolated, which in turn, elevates epidemic potential. No less importantly, for many life-threatening HCIDs, early tertiary care is crucial for survival, so no or late presentation to the formal health system can result in increased mortality (see, e.g., Abramowitz *et al.*,⁸⁴ Hoenen *et al.*,²⁴⁵ and Keita *et al.*⁹⁵).

Furthermore, scholars including Mayhew *et al.*, Enria *et al.*, Parker *et al.*, Wilkinson *et al.*, and Richards argue that when local actors are insufficiently included, emergency responses are less considerate of local contextual factors, which can also be epidemiologically detrimental.^{37,53,84,264,284,285,288,289} Wilkinson *et al.*, for example, argues that

...understanding social dynamics is essential to designing robust interventions and should be a priority in public health and emergency planning.⁸⁹

Similarly, Parker *et al.* argues that

...the impact [of any reform at the international level] will be limited without understanding and respecting local norms, social values, practical capacities, and public authority of affected populations.²⁶⁴

During the 2013–2016 West Africa Ebola Epidemic, for example, local burial practices were quickly understood to have superspreader potential.^{290–292} However, blanket bans did not necessarily prevent these culturally vital rituals from taking place (see, e.g., Parker *et al.*,²⁶⁴ Pellechia *et al.*,²⁹³ Lipton,²⁹⁴ and Moran²⁹⁵). Social scientists including Richards and Parker *et al.* found that in the limited instances when local actors were consulted and permitted to participate in burials (with training to ensure safety), they were able to continue practicing this socially vital event in a way that did not present a risk to disease spread (see also Lee-Kwan *et al.* and Mbonye).^{264,285,291,296} Relatedly, a number of scholars argue that local actors have significant capacity to perform crisis response functions;^{37,285,297–299} thus, Abramowitz *et al.* argue that

communities in urban Liberia... engaged in self-reliance in order to contain the epidemic at the micro-social level. These innovations were regarded as necessary.⁸⁴

Scholars therefore argue that better including these actors would therefore not only serve to ground-truth a given response (as above), but would also mean that all available capacity is brought to bear.^{37,53,84,264,284,285,288,289} For example, there are arguments that local actors could be trained to effectively perform numerous response roles in infectious disease outbreaks such as contact tracers, social mobilisers, or burial team members.^{84,284,285,296,500,t}

As part of the wider nexus of exogenous intervention, these concerns are also issues facing civil-military responses, though notably, Alejandria *et al.* describes the

...disconnect between the field of civil-military cooperation during public health emergency responses, and the emerging yet already robust policy discourse on re-envisioning and reforming humanitarianism...⁴⁴⁷

...towards better mechanisms for such localisation.^{u–v}

^t Local actors did, indeed, respond to the Ebola outbreak in various ways (see Box 1, Chapter 2, page 36).^{37,285,297–299} However, drawing on the example of the 2013–2016 West Africa Ebola Epidemic, scholars have also argued that the “...post-Ebola narrative of military victory... [for the ways that it] invisibilises the resilience of nationals of Ebola affect countries, as well as the efforts of local health workers... to address and control the outbreak”.⁴⁷⁸

^u A key moment in the evolution of this strand of humanitarian policy discourse was the Grand Bargain adopted at the 2016 World Humanitarian Summit. The Grand Bargain, adopted by donor governments and humanitarian organizations, was a commitment to increase the volume of direct funding to local humanitarian organisations.⁴⁶⁸ This moment heralded a period of increased attention on the localisation agenda, by which the international humanitarian system would broadly make more of an effort to empower local response organisations. Nevertheless, there has been great disappointment in stakeholders’ reluctance to fulfil Grand Bargain commitments.⁴⁶⁹ In the midst of a largely stalled localisation agenda, a more robust decolonisation agenda has emerged, focused more broadly on ways that the international humanitarian system propagates unequal power dynamics, requiring widespread self-reflection among humanitarians about necessary systemic reform.⁴⁴¹

^v The language in footnote u draws from *Humanitarian-Military Relations in Complex Emergencies: Evidence, Insights, and Recommendations*, a report co-authored by STB and published by the Brown University’s Watson Institute for International & Public Affairs. STB would like to extend his thanks for the re-use permission that was granted for the language included here (02 June 2022).

Few argue the localisation agenda is simple, and some assert that it is poorly understood and inconsistently defined. For example, some scholars including *Doyle et al.* argue that the legitimacy of CSOs is not automatically assured, and should be empirically tested.^{191,246–249,264,284,285,298,348,349,470} Others including Enria contend that there is no consensus on what the ‘local’ in ‘localisation’ necessarily refers to.^{43,250,259} That is, while there is general consensus that ‘localisation’ does not mean the empowerment of international actors, there is less clarity on whether national actors could be considered ‘local’ in a relative sense. Some, for example, argue that from the perspective of crisis-affected communities (especially the most politically marginalised ones), national actors are still relatively hegemonic and exogenous (see, e.g., Richards³⁷ and Parker *et al.*²⁹⁸). Relatedly, others such as Osborne *et al.* and Parker *et al.* highlight the lack of clarity surrounding what ‘community engagement’ means, despite it being consistently identified in the literature as one of the most important components of effective responses to humanitarian crises and public health emergencies (as is described above).^{89,259}

However, while there may not be clear consensus on definitions and certain elements of the localisation agenda, there is generally consensus that—despite being those most directly affected—local actors are insufficiently incorporated into exogenous responses to humanitarian crises and public health emergencies. This, in turn, has a number of deleterious consequences, ranging from the further marginalisation of vulnerable populations, to less effective and efficient crisis response, to a general lack of capacity building that leaves public institutions and local populations more vulnerable to future crises.

Statement of the problem, research gap, and research significance

As described in Chapter 2 (pages 28–38), the scale and complexity of the 2013–2016 West Africa Ebola Epidemic led to Médecins Sans Frontières’ (MSF’s) International President issuing an unprecedented request for international military assistance in the autumn of 2014. The British Armed Forces intervened, working with RSLAF to provide contributions to help control and eventually contain the Ebola epidemic. The military assistance—which was primarily coordinated from within thoroughly civil-military centres—spanned many capabilities, including: planning, logistics, and information management; the provision of Ebola and non-Ebola medical services; and, notably, command and control (C2) systems (i.e., the design, establishment, staffing, and leadership of the civil-military centres themselves).

The use of militaries in delivering health assistance in this way has many potential benefits including a capacity for rapid and large-scale deployment which more orthodox forms of health assistance may lack. During significant infectious disease outbreaks such as the 2013–2016 West Africa Ebola Epidemic, such capacities may prove crucial to the overall response, especially in contexts where health systems lack resilience and governments are poorly resourced. Indeed, some considered the militaries’ intervention in the Sierra Leone case to be broadly successful, and thus argue that consideration should be given—at least on a case-by-case basis—to expanding militaries’ roles in response to future humanitarian crises and

public health emergencies (though as a result of the COVID-19 pandemic, this is a *de facto* phenomenon).^{12,16,20,38,39,165,170,374,436,464}

However, there is also significant scepticism regarding civil-military cooperation in response to these kinds of crises, which—as pertinent to this thesis and its findings—coalesce around three key themes and debates.

The first key theme and debate is concerned with risks associated with military interventions in humanitarian crises and public health emergency contexts. This includes arguments that civil-military cooperation risks eroding the Humanitarian Principles, which scholars argue can put civilian response actors at greater risk of harm and can also limit their access to vulnerable populations. Given the principles' significance for humanitarian action, some scholars argue that civil-military cooperation represents an even greater risk to the sustainability of humanitarianism itself. Further, scholars have documented instances of when military actors performing humanitarian and public health emergency response functions have committed acts of violence and abuse against crisis-affected populations, thus definitionally undermining the Humanitarian Principle of humanity. Other related concerns raised in the literature include how militarised responses create fear and stigma amongst vulnerable populations, fail to capture and respect local authority, and—in the case of infectious disease outbreaks—possibly serve to propagate the outbreak at hand. At the least, the deployment of militaries to non-kinetic humanitarian crises and public health emergencies is seen by some as an extreme example of the securitisation and militarisation of humanitarianism and global health, which alone invites criticism.

The second key theme and debate is focused on a more fundamental concern: that the constitution and organisational nature of civilian response and military actors are sufficiently different that civil-military cooperation in response to humanitarian crises and public health emergencies is unworkable. Namely, the difference highlighted in the literature is concerned with approaches to and relationships with hierarchy. Civilian response actors are characterised as being highly sceptical of command and control (C2) hierarchy, while military actors are characterised as fully embracive of it. Scholars argue these different approaches represent fundamentally different ways of organising and decision making in response to a given crisis, which as response actors, ultimately means they are characterised as inherently different (and perhaps incompatible) organisations. This, in turn, serves to significantly limit trust and, transitively, the ability to effectively and productively cooperate.

The third key theme and debate is concerned with localisation in the case of exogenous intervention in response to humanitarian crises and public health emergencies. Of note are arguments that such interventions are expedient, in that they may alleviate suffering in the short term, but fail to build crucial capacity within local institutions and amongst other local actors. Further, some scholars have argued that by not robustly incorporating and empowering local actors, exogenous interventions also serve to undermine local trust; further marginalise populations and exacerbate inequities; and fail to consider local

contexts and capacities in a way that is deleterious to the overall response effort as well as resilience to future crises.

These three key themes and debates make evident a significant breadth and depth of scepticism towards civil-military cooperation in response to humanitarian crises and public health emergencies, such as the civil-military response to the 2013–2016 West Africa Ebola Epidemic in Sierra Leone. However, despite being one of the 21st century's most significant public health emergencies, and despite being one of the most conspicuous examples of military intervention and civil-military cooperation in response to these kinds of crisis, the event is understudied. Given the event's relevance to these key themes and debates, therefore, this represents a crucial research gap.

Of particular note is the lack of research which rigorously documents and examines the perception of military and civilian Ebola Response Workers (ERWs) themselves—especially sub-district Ebola response leaders who may hold valuable insights into localisation—on these issues,^w despite them being uniquely placed to comment on the civil-military cooperation that was manifested in Sierra Leone's Ebola response.^x Any significant challenges could be an important check on arguments to further expand the role of militaries in public health emergency responses (and other kinds of humanitarian crises). On the other hand, if ERWs were broadly supportive of the military contributions that were made and found mechanisms for effective civil-military cooperation, this might corroborate arguments that permissive non-kinetic contexts do exist in which risks can be overcome, and ultimately, in which militaries can be effective public health partners. Either way, the documentation and examination of these key stakeholder perspectives should serve to draw out particularities specific to the Sierra Leone case and inform the key themes and debates that were landscaped in this chapter, namely: the role of militaries in response to public health emergencies and other kinds of humanitarian crises; the viability of civil-military cooperation in these contexts; and the perceived effect that civil-military responses have for the localisation agenda.

In short, the rigorous documentation and examination of ERW perspectives promises to nuance and complicate these important debates regarding military intervention and civil-military cooperation in response to humanitarian crises and public health emergencies. Therefore the research that is presented in this thesis seeks to offer a formative and significant contribution to the academic literature, with

^w It is important to note that this thesis does not specifically examine the various self-organised community-level interventions that were implemented in the Sierra Leone's Ebola response (see Box 1, Chapter 2, page 36), nor does this thesis specifically examine the origin, nature, and effect of the militaries' intervention as related to these informal Ebola response activities. This remains an important research limitation (see Chapter 9, pages 214–236). Rather, this thesis examines the formal response—that is, the one acknowledged and operated at a central level by GoSL within the National and District Ebola Response Centres (the NERC and DERCs, respectively)—and the role of and relationships between various civilian and military actors in the implementation of response activities therein.

^x This has been queried to an extent (e.g., in the aforementioned research by Kamradt-Scott *et al.*), but not in a country-specific and sub-national way.^{15,16,20}

implications for policy and practice (which are detailed and reflected on in the thesis' discussion chapter, i.e., Chapter 9, pages 214–236).

Chapter 4 | Methodology

This chapter begins by detailing the thesis' associated research aim, objectives, and questions (Table 1, pages 67–68). Thereafter, the objectives are mapped against the thesis' chapters (Figure 1, page 68).

This chapter continues by turning to an extended discussion of the methodology used for the thesis' original findings chapters (chapters 6–8). This includes a description of the primary research data and data collection methods; an explanation of how data were subsequently organised and analysed; and a discussion of the frameworks and theoretical grounding that were used.

Then, a brief overview of ethics, risks, and risk mitigation is provided. The chapter ends by briefly prefixing the subsequent chapters of the thesis.

Overall research aim, objectives, and questions

Given the evidence gap identified at the end of Chapter 3 (see pages 62–64), the overall aim of the thesis is to examine the origin, nature, and effect of military support to public health emergency response, focusing on the example of the 2013–2016 West Africa Ebola Epidemic in Sierra Leone and the perceptions of civilian and military Ebola Virus Disease (Ebola) Response Workers (ERWs). The overall aim is achieved through meeting four objectives and associated research questions (Table 1, pages 67–68). Furthermore, Figure 1 (page 68) provides a snapshot of the data collected for each of the four research objectives, as well as how different findings chapters are organised to address them.

Table 1: Themes, objectives, and associated research questions

#	Theme	Objective	Associated research questions
1	How did the British Armed Forces and the Republic of Sierra Leone Armed Forces (RSLAF) become involved in the Ebola Epidemic response?	Substantiate the political processes that led up to the decision to involve the British Armed Forces and RSLAF in the 2013–2016 West Africa Ebola Epidemic in Sierra Leone.	<p>How did the involvement of the British Armed Forces in the 2013–2016 West Africa Ebola Epidemic come to pass?</p> <ul style="list-style-type: none"> • What global political and philosophical developments facilitated the securitisation of health as necessary to contextualise the decision to involve the British Armed Forces in the 2013–2016 West Africa Ebola Epidemic? • What historical instances of foreign military support to disease outbreak response exist, and what (if any) change over time can be extricated from these case studies? How can they be used to inform and contextualise the military support provided to Sierra Leone in the 2013–2016 West Africa Ebola Epidemic? • What specific political processes occurred, as motivated by/advocated for by whom, that resulted in the decision being made to deploy RSLAF and the British Armed Forces to Sierra Leone in response to the 2013–2016 West Africa Ebola Epidemic?
2	What did the British Armed Forces and RSLAF do during the Ebola Epidemic?	Investigate the nature of the British Armed Forces and RSLAF response to the 2013–2016 West Africa Ebola Epidemic in Sierra Leone at the strategic, operational, and tactical level, including the key actors taking decisions to intervene, actions and processes of involvement, and forms of integration with civilian response organs.	<p>What was the structure and content of the British Armed Forces' and RSLAF's supporting role during the 2013–2016 West Africa Ebola Epidemic?</p> <ul style="list-style-type: none"> • What Ebola response organs (institutions, structures, and mechanisms) existed at the international, national (Sierra Leone), and district level that integrated either the British Armed Forces or RSLAF with civilian ERWs? <ul style="list-style-type: none"> ◦ Which actors proposed, designed, and created these organs, and within what political milieu? ◦ How were these organs structured, and how did their structure change over time? • What Ebola response activities (planning, management, and execution) were RSLAF and the British Armed Forces involved in at the international, national (Sierra Leone), and district level?

<p>3 How did the civilian and military actors involved in the response perceive and understand what the British Armed Forces and RSLAF did during the Ebola Epidemic?</p>	<p>Investigate how the civil-military work of the British Armed Forces and RSLAF in the 2013–2016 West Africa Ebola Epidemic in Sierra Leone was perceived and received by civilian and military ERWs at the sub-district, district, national, and international levels, particularly related to perceived advantages and disadvantages of the military’s involvement and the civil-military organisational organs of Sierra Leone’s Ebola response.</p>	<p>How was the military component of the civil-military nature of the Ebola response understood by ERWs of all kinds at the (sub)district, national, and international level?</p> <ul style="list-style-type: none"> • To what extent was the involvement of the British Armed Forces and RSLAF known to, and the details understood by, civilian and military ERWs? • What nature of relationship, if any, existed between civilian and military ERWs working alongside one another, and did this change over time? • What nature and degree of controversy or lack thereof is attributed by civilian and military ERWs to the involvement of the British Armed Forces and RSLAF in the Ebola response, and why? • What do civilian and military ERWs consider the effect of military involvement in the Ebola response? • What post-response considerations (‘lessons learned’) do civilian and military ERWs have related to the involvement of the British Armed Forces and RSLAF in the Ebola response? • Do civilian and military ERWs think militaries have a role to play in future disease epidemic responses, and if so, how should this role be delineated?
<p>4 What are the implications of all of this?</p>	<p>Identify lessons for the militarisation and securitisation of humanitarian response and global health, and contribute to the ongoing debate about the role of military and security forces in humanitarian responses to future disease outbreaks; more specifically, about what HMG can and should do in these scenarios and the mechanisms by and through which responses can be made maximally inclusive in nature.</p>	<p>In what ways does this research on military support to the 2013–2016 West Africa Ebola Epidemic upset or corroborate existing critiques of the militarisation and securitisation of humanitarianism and global/public health, and what insights does it offer to more broadly inform and contribute to relevant discourse?</p>

Table 1: Themes, objectives, and associated research questions

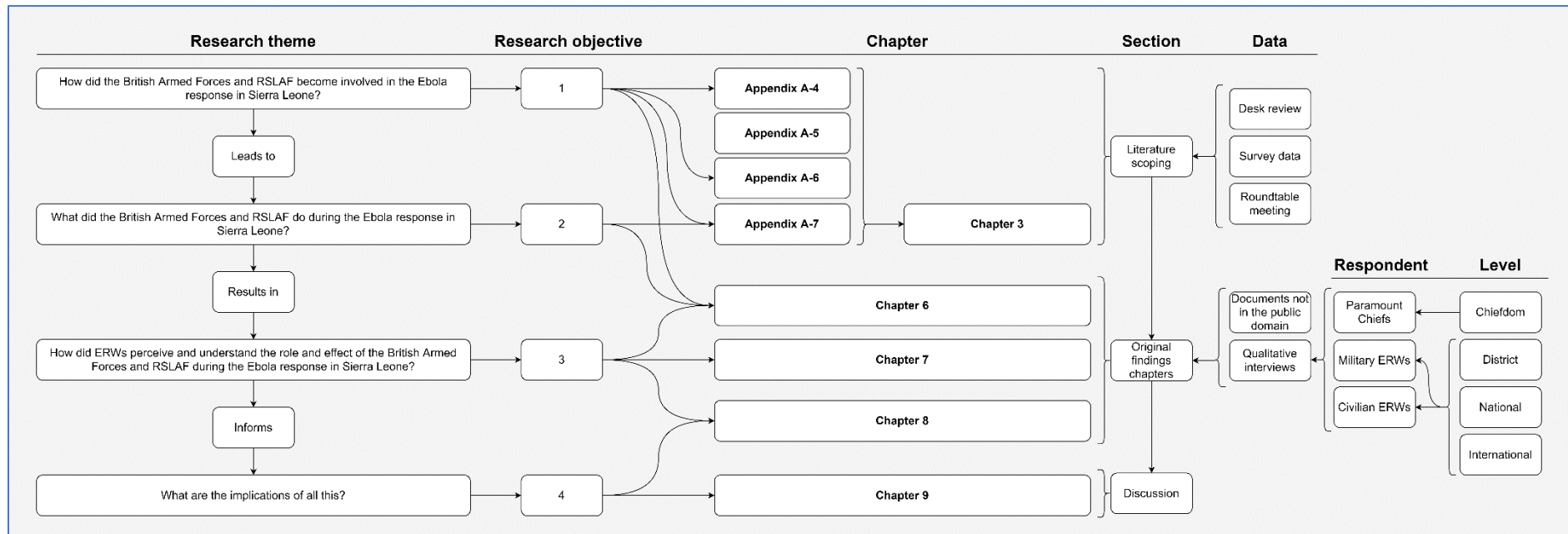


Figure 1: Methods, structure and content, research objectives, and associated research chapters of the thesis (Source: author)

Methods of data collection, organising and coding of the data, and analysis

The methodology used for chapters 6–8 (i.e., those resulting from detailed primary data analysis from Sierra Leone) including data collection, organising and coding of the data, and analysis is described below.

Data collection

Original research predominantly focused on the collection and analysis of confidential semi-structured qualitative interviews. Site selection, respondent selection, and interview method are described in turn.

Site selection

From October, 2014, the Ebola response in Sierra Leone was coordinated out of the civil-military National Ebola Response Centre (NERC) in Freetown, with constituent civil-military sub-coordination District Ebola Response Centres (DERCs) located in district capitals throughout the country (see Chapter 2, pages 35–36). The former was primarily responsible for defining national-level strategies and initiatives, with the latter primarily responsible for their operationalisation into day-to-day interventions. The NERC and DERCs had a significant presence of British Armed Forces and RSLAF personnel. Accordingly, in order to effectively examine the origin, nature, and effect of military support to the 2013–2016 West Africa Ebola Epidemic in Sierra Leone, collecting and examining the perspectives of civilian and military ERWs with experience working in or adjacent to the NERC or DERCs was deemed essential (while the NERC was the primary coordinating body for national-level Ebola response activities, other relevant institutions and organisations were represented in Western Area Urban District from which interviews were also sought (see respondent selection, described below)).

To collect NERC and other national-level perspectives, data collection was focused in Western Area Urban District (i.e., Freetown; green, Figure 2); to collect DERC and other (sub-)district-level perspectives, data collection was primarily focused in Kambia District (blue, Figure 2). Kambia District was chosen due to the extensive experience of the PhD candidate (STB) working there during the Ebola response (see Chapter 5, pages 95–110), as well as for the contemporaneous presence of other London School of Hygiene & Tropical Medicine (LSHTM) research projects. These factors ensured STB had a preliminary list of contacts to target for interviews, and also mitigated several access-related limitations. Further, because Kambia District is reasonably accessible from both Freetown and Sierra Leone's international airport, traveling to and between field sites was straightforward. Further still, as a relatively small district, STB was able to travel throughout Kambia District, rather than limiting research to the district capital, thereby improving access to sub-district respondents and the collection of their perspectives. In order to ensure district-level research saturation was met, some additional data

collection took place in Port Loko District (yellow, Figure 2) where STB also worked during the Ebola response (see Chapter 5, pages 95–110).^{a–b}

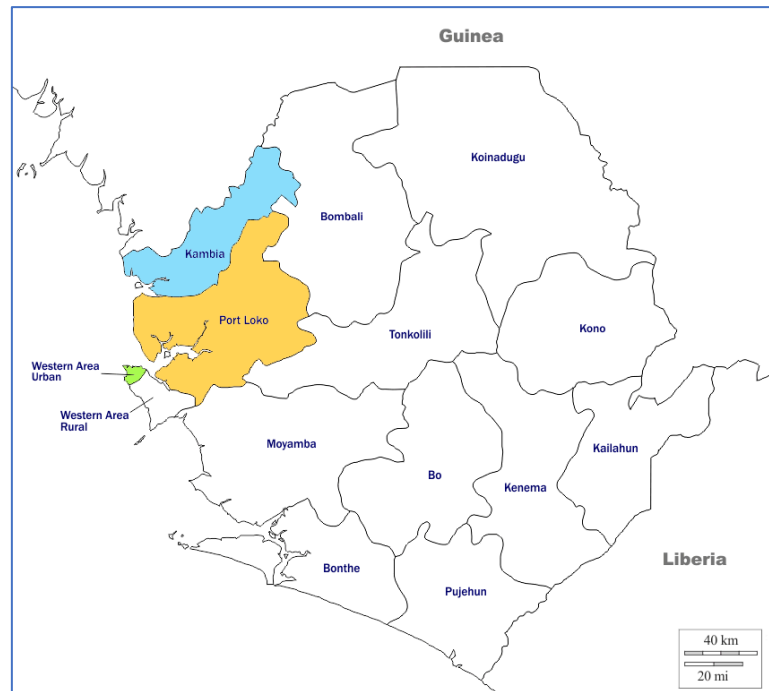


Figure 2: Data collection sites of Western Area Urban (Green), Port Loko (Yellow), and Kambia (Blue) districts (adapted by author)⁶⁰⁰

Data collection also occurred in London, Geneva, Atlanta, and at various military bases in the United Kingdom (UK). Further, an extensive number of interviews were conducted and recorded remotely by telephone or over an encrypted internet service. This international data collection (i.e., that which was collected outside of Sierra Leone) was necessary due to the fact that many individuals who had worked in Kambia District or Freetown during the Ebola response had since left the region or country. International data collection was additionally necessary so as to capture the perspectives of decision makers in HMG, intergovernmental organisations (IGOs), and international organisations (IOs) who were involved in the Ebola response at a regional or international level (e.g., at the World Health Organisation (WHO) headquarters (HQ) in Geneva).

Respondent selection

Across these data collection sites, 110 qualitative interviews were conducted amongst Paramount Chiefs (n=6), other civilian ERWs (n=78), and military ERWs (n=26). Figure 3 (page 74) summarises selection.

^a By design, field research in highly rural and hard-to-reach areas was generally limited to Kambia District, as STB had accommodation from where day trips could be conducted. Field research in Port Loko District was thus purposefully gap-filling in nature and so did not include the Paramount Chief research grouping. Limitations of Port Loko District's partial exclusion are elaborated further in the thesis' limitations section (Chapter 9, pages 234 to 236).

^b In 2017, two new districts were created in Sierra Leone. For clarity, throughout this thesis, district names and geographies are referred to as they were during the 2013–2016 West Africa Ebola Epidemic.

Paramount chiefs

Paramount Chiefs are, in many ways, representatives of Ebola-affected communities, but they also helped to oversee and coordinate Ebola response operations within their respective ‘chiefdoms’:^c Paramount Chiefs were leaders of Ebola Task Forces (as examined in Chapter 8, pages 176–213) and routinely participated in DERC meetings. Therefore, Paramount Chiefs were somewhat of an interlocutor between the Ebola response and Ebola-affected communities, though there are evident limitations to the extent their perspectives can be taken to represent the latter’s. Of particular note is the way their authority largely derives from efforts to establish indirect rule by the British colonial administration (see Chapter 2, pages 28–29; see also Appendix C-1, pages 416–417). Despite these limitations, Paramount Chiefs’ position and role in the Ebola response as sub-district leaders was significant, unique, and (as examined in Chapter 8, pages 176–213) somewhat integrated with the formal response organised within the NERC and DERCs. Therefore, the collection of their perspectives was deemed important. Due to the limited number of Paramount Chiefs in Kambia and Western Area Urban districts, all (n=8) were asked to participate in this study.^a

Civilian and military ERWs

In addition to Paramount Chiefs at the chiefdom level (n=6), data collection focused on collecting the perspectives of civilian and military ERWs (n=104) working in the formally organised Ebola response at the district (n=43), national (n=45), and international levels (n=16). These respondents were sub-divided according to whether they were civilian (n=78) or military (n=26).^d While the latter consisted solely of governmental respondents from Sierra Leone (n=16), Britain (n=9), and United States (US) (n=1),^e the civilian grouping was further sub-divided according to whether a respondent’s affiliation was primarily governmental (n=48), transnational (n=15), or non-governmental (n=15).^f

Taken together, respondents included those working for the Sierra Leone Government (GoSL) (n=43), HMG (n=23), and the US government (USG) (n=8); the United Nations (UN) and its constituent agencies (n=15); and a number of international and national non-governmental organisations ((I)NGOs) (n=15). Therein, data was collected from a diverse and large number of different organisations, agencies, and governmental departments (n=40), collectively representing a significant proportion of those

^c This fits with Sierra Leone’s ‘blended’ governance, incorporating both governmental and chieftaincy structures (described in Appendix C-1, pages 245–245).

^d The ‘military’ research grouping included several respondents from the Sierra Leone Police (SLP) and GoSL’s Office of National Security (ONS). These are actually civilian institutions, but given their security function, are categorised alongside military respondents in this thesis.

^e One key informant interview was conducted with a member of the US Armed Forces (n=1) to provide insights into and comparisons with Liberia’s Ebola response and its civil-military context as supported by the United States (US) Armed Forces organised under Operation United Assistance.

^f By definition, military personnel are governmental. ‘Armed groups’ is a wider term that can include non-state armed groups (NSAGs) and private security companies (PSCs) (among others), but these groups were not involved in Sierra Leone’s Ebola response. Nevertheless, in other contexts, these groups can be important actors, despite being largely unaddressed by civil-military global guiding documents (as examined in Appendix A-6, pages 245–245).

involved in the Ebola response. Figure 3 (page 74) summarises and further breaks down the thesis' respondents and the various ways they can be grouped and sub-grouped.[§]

Early interviews were conducted amongst those known to STB through prior work in the Ebola response (see Chapter 5, pages 95–110), as well as with those identified through the Royal Institute of International Affairs (Chatham House) roundtable event (see Chapter 3, page 48; see also Appendix A-7, pages 373–384). Thereafter, snowballing (i.e., chain-sampling) was used to identify respondents with a view to maximally diversifying the sample of represented organisations and eventually achieving research saturation.

While this study primarily focuses on the formal architecture and mechanisms of the Ebola response—that is, those organised within the NERC and DERCs—it was not assumed that decision making and implementation only occurred in a top-down manner. Bottom-up processes were also integral to this process, even within the formal coordination structures.^{601,602} Therefore, while key decision makers and political stakeholders were selected for interview, a substantial effort was also made to speak with individuals that held less decision making power but may have nevertheless influenced daily Ebola response operations in a meaningful way. Further, in order to capture the response as a process of adaptive implementation, respondents with experiences and perspectives spanning the full duration of the outbreak in the research sites were sought (though as the epidemiology of the outbreak at the research sites was somewhat unique—see Appendix C-1, pages 440–442—this does not necessarily reflect the full duration of the outbreak as experienced elsewhere in Sierra Leone. This is a research limitation that is further discussed in the thesis' discussion chapter on pages 234–236 specifically).^{603–605} Care was taken throughout to ensure that sectional interests were not artificially highlighted; the research aim, objectives, and questions (Table 1, pages 67–68) were addressed; and research saturation was eventually achieved.

[§] It is important to (re-)note that data collection methodology only captures perspectives on informal community-level Ebola response processes incidentally (i.e., when ERWs happened to also have knowledge of these initiatives). These perspectives were no less important than those collected for this project (see Chapter 2, Box 1, page 36). This remains a limitation of the thesis and its findings (see Chapter 9, pages 214–236).

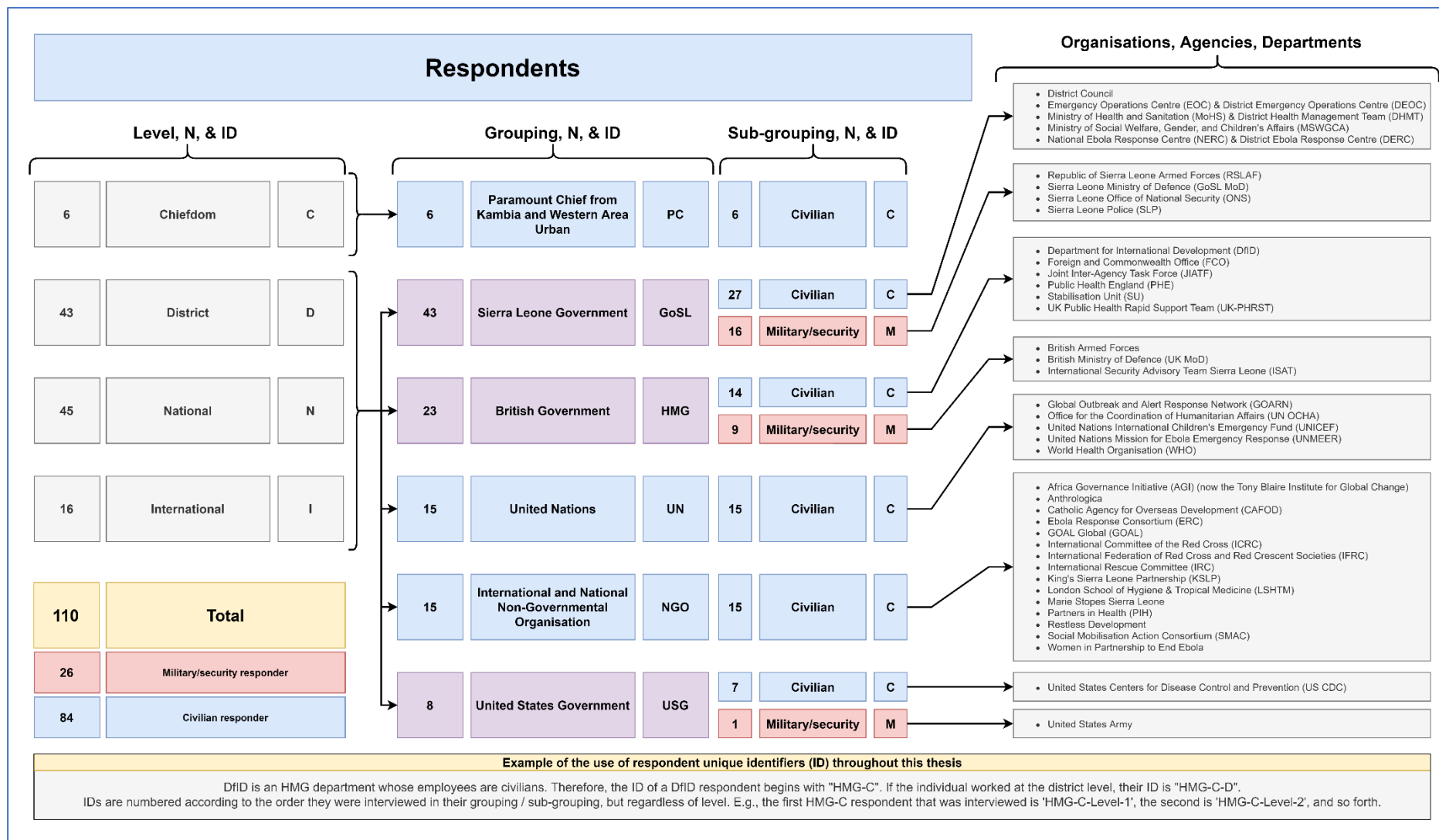


Figure 3: Respondents (Source: author)

Respondent selection supports research validity by representing a broad cross-section of ERWs (including governmental and non-governmental respondents from both civilian and military institutions). Further, it captures these perspectives across a significant breadth of levels (i.e., international, national, district, and sub-district chiefdom level), and does so across the full timeline of the formal Ebola response (i.e., that operated out of the NERC and DERCs) at the selected research sites.

Interview method

To conduct the interviews, a guide was developed (and adapted for Paramount Chiefs, civilian ERWs, and military ERWs) in consultation with thesis supervisors and subject-matter experts. As the guides informed data collection, which in turn informed the code frame, attention is given herein to their nature and method of development.

The interview guides were purposefully broad in nature: they included, for example, questions related to respondents' communication and relationships with military actors; their memory of the militaries' role and processes of military involvement; their opinion on and perception of the various challenges and opportunities presented through and by this involvement; and consideration of relevant political, philosophical, and safeguarding issues. In other words (and in accordance with health policy scholarship),^{606,607} the guides sought to identify and query the role of military actors; their formal and informal institutions; the processes through which these actors and their institutions interacted and implemented Ebola response activities; and the broader contexts in which each of these factors was situated.

The guides also considered *a priori* themes identified in the literature, including those from the civil-military typology (Appendix A-4, pages 340–350), civil-military guiding documents (Appendix A-6, pages 363–372), and Chatham House roundtable event (Appendix A-7, pages 373–384).⁶⁰⁵ Given the diversity of respondents and complexity of the case, these *a priori* themes were considered central, but there was also flexibility in the interviews to introduce new topics and themes as required. Accordingly, Constructivist Grounded Theory and a conceptual lens—the 'syndemic constellation of elements'—were also drawn on.

In essence, Constructivist Grounded Theory is a relativist approach that moves away from the (hypothetically) purely inductive nature of classical grounded theory. For example, Constructivist Grounded Theory acknowledges the creation of meaning by respondents and by the researcher, thereby normalising reflexive considerations.^h Relatedly and of central importance, Constructivist Grounded Theory also permits the assumption of philosophical bases in research design.^{608,609} This is not deterministic, but rather helps examine the positionality of a given event (such as Sierra Leone's Ebola response and military contributions to it) as intertwined with other relevant factors.ⁱ

^h As STB has extensive experience related to the research topic (see pages 95–110), this was thought to be valuable.

ⁱ Some of those which are relevant for the case study are considered in the thesis' original findings chapters (i.e., chapters 6–8).

To consider these factors and their effects most fully in the development of the interview guides, the syndemic constellation of elements conceptual lens was also used, as it helps to elucidate

...diseases or health conditions that arise in populations that are exacerbated by the social, economic, environmental, political, and historical milieu in which a population is emerged.¹⁰⁴

This ‘interrelating milieu’ is purposefully broad in nature, so as to ensure consideration is given to often-underexamined factors that contextualise a given event within its broader social construction. Indeed, as Sierra Leone’s civil-military Ebola response was significantly influenced by the country’s particular history (Chapter 2, pages 28–38), any thorough examination of the response ought to consider this multitude of complicating, imbricating, and inter-dependent factors (that are not always effectively described in the relevant literature). In essence, therefore, the broad and holistic nature of this conceptual lens can be thought of as facilitating a kind of ‘guided inductivity’, where the researcher is encouraged to throw the research net very wide. Figure 4 (page 77) elaborates on some of these elements in relation to the militaries’ intervention in Sierra Leone’s Ebola response. Each contributes to the event’s production and plausibly influences its effects (however, these factors are not intended to represent the totality of those to be considered. Rather, they are examples used to evidence the diversity of plausibly relevant factors).

As used in this thesis, therefore, the use of Constructivist Grounded Theory and the syndemic constellation of elements helped to ensure that any *a priori* themes identified during the review of the literature (see Chapter 3, pages 39–64) were considered in a holistic way (i.e., as informed by reflexive as well as imbricating social, environmental, economic, political, and historical factors). These factors were incorporated into the guides, and openly and actively considered during interviews. Accordingly, the guides were also revised and adapted in-country as new themes (and therefore questions) arose during the interview process. These new themes and questions were continuously checked against the research aim, objectives, and questions to ensure applicability and focus.

The degree to which the guides prescribed interviews decreased over the course of data collection, as interviews became more conversational and flexible; STB became more attuned to and capable of navigating iterative thematic questioning across respondent groupings; and interviews became more focused as research saturation was met in some places. Interviews were recorded and transcribed. Respondents were informed that their participation was confidential, and that any statement provided was to be de-identified (ethics, risks, and risk mitigation are described on page 91).

Extensive note and memo taking was undertaken during and following each interview. These notes and memos were used to ensure interviews remained focused; to ensure retention of data in the case that a recording was lost or corrupted; and to document emerging themes and questions for consideration during subsequent interviews as above. These notes and memos were complemented by reflexivity journaling in line with best practice according to Mays and Pope (2000).⁶⁰⁵

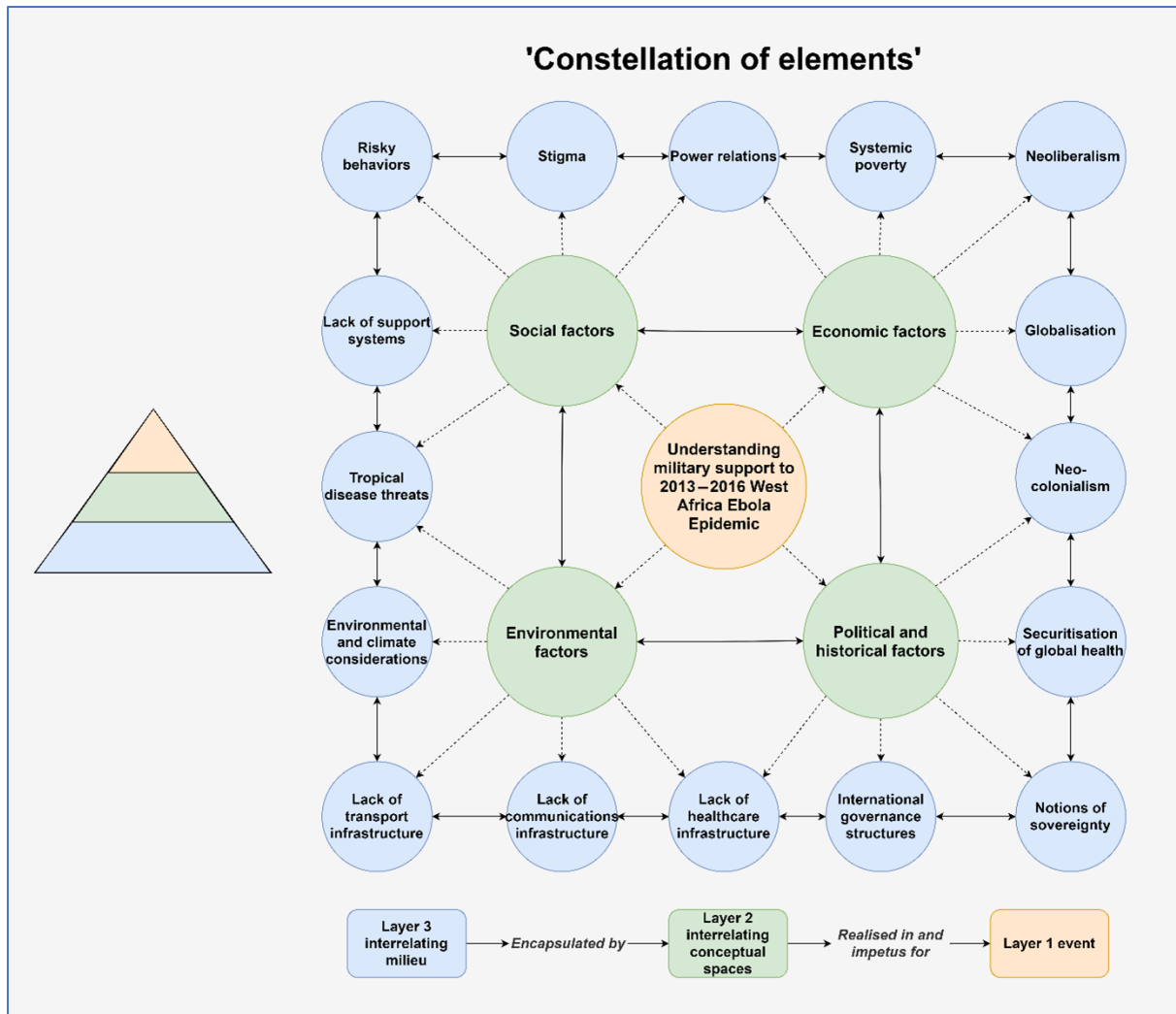


Figure 4: Syndemic constellation of elements related to military support to the 2013–2016 West Africa Ebola Epidemic (Source: author)

Other data

To complement the interview data, documents not in the public domain were requested under the Freedom of Information (FOI) Act of 2000 (FOIA) from both the UK’s Department for International Development (DfID) and Ministry of Defence (MoD). These institutions were chosen because they primarily constituted the Joint Inter-Agency Task Force (JIATF) and the UK’s District Ebola Support Teams (DESTs) (see Chapter 6, pages 111–144).ⁱ

An initial FOI request was rejected by both DfID and the UK MoD for being too broad, and both asked that specific documents be requested by name. However, by definition, the names of documents not in the public domain are not known to members of the public. Fortunately, STB was in possession of a small number of key documents through the aid of other individuals with access to them and was thus

ⁱ Several other documents not in the public domain were accessed and retained by STB, as several individuals spoken to for this study proactively offered up an array of documents that are not accessible to the general public. This ranges from personal communications and photographs, to meeting minutes and reports, to governmental documents, to working and as-yet unpublished academic papers.

able to request those documents (as well as the various other documents that were explicitly referenced within).

In total, 2 documents were provided by DfID and 19 by the UK MoD (including various appendices). Many of the documents are marked ‘official sensitive’, meaning that the information is not necessarily classified but “is of a particularly sensitive nature... where loss or disclosure would have damaging consequences for... [the British] Government”.⁶¹⁰ Accordingly, access is “only... granted on the basis of a genuine ‘need to know’ and an appropriate personnel security control”.⁶¹¹ Consequently and notably, DfID withheld a significant number of the requested documents, writing that “the balance of public interest in this case favours withholding the information” due to “international relations”, “personal information”, and/or “commercial interests”;⁶¹² meanwhile and whereas, the UK MoD not only provided every document requested, but subsequently (and without further request) sent additional documents several months later in a second tranche. Most of the documents provided by both agencies include substantial redactions, presumably for the reasons listed above.

Documents were not comprehensively incorporated into research analysis. Rather, they were rapidly appraised for their relevance and referenced where they complemented the qualitative interview data.

Organising and coding of the data

When research saturation was met, no further interviews were conducted. Interviews were then transcribed and input into NVivo.^k Thereafter, elements of framework analysis were used for a first comprehensive pass-through of the research data in order to organise and code it.^{613,614}

Familiarisation was accomplished through STB’s role in conducting all interviews (researcher roles are further elaborated in Chapter 5, pages 95–110). This was further facilitated by extensive note and memo taking during and after all interviews as previously described, as well as the systematic review of all notes, memos, and interview recordings during the coding process.

A preliminary code frame for examining the transcripts was developed, wherein statements were indexed or coded according to repeated and common themes, which were subsequently grouped into categories for further analysis. The preliminary code frame was modelled on themes considered in the interview guides,^l a process that was closely supported by the research supervisors: they and STB independently coded a selection of five interviews across research groupings and then re-convened to compare, contrast,

^k This included the de-identification of interview data, and respondents were assigned a unique identifier (Figure 3, page 74).

^l As above, these had been based on a range of *a priori* themes from the literature and consideration of various social, economic, environmental, political, and historical factors (as guided by the syndemic constellation of elements). They were then built upon in-country as new and previously unconsidered themes arose during the data collection process.

and harmonise the respective code frames. During this process, the research aim, objectives, and questions were also cross-checked, and a preliminary code frame was agreed upon.

All qualitative interviews were then coded by STB. When a statement was examined and found to not appropriately fit an existing node, a new node was created. Therein, the code frame was further elaborated and continuously refined throughout the coding process. Statements were coded into any relevant category, even if this meant a statement was coded against multiple nodes.

Following the coding of all interviews, the code frame was re-examined. Where appropriate and relevant, nodes were aggregated, disaggregated, or removed. Excluding processes of involvement, four hypernodes arose (containing 50 sub-nodes): institutional working culture; institutional (in)competencies; practical considerations; and conceptual, political, and philosophical considerations (including risks). Relationships were then identified between recurring themes, which were charted, mapped, and interpreted to examine patterns in the data within and between different respondent groupings (Figure 3, page 74). Thereafter, organised data were thematically analysed using an inductive approach, in order to examine the origin, nature, and effect of the militaries' intervention in Sierra Leone's Ebola epidemic, as well as how CMRel were manifested.^{614–616,m} This process was only preliminary, however, as a means to further familiarise STB with the data and provide the thematic groundwork on which to apply subsequent analysis.

Analysis

The overall aim of the thesis was to examine the origin, nature, and effect of military support to Sierra Leone's Ebola response. To analyse the data accordingly (i.e., as differentiated by the examination of origin, nature, and effect as interrelated but nevertheless distinct components of the study), a multi-step analytic process was used.

First (Step 1), to examine the structural origins of the decision to intervene militarily, political economy was considered (i.e., the relevant social, economic, environmental, political, and historical factors underlying the case study, in accordance with Constructivist Grounded Theory and the syndemic constellation of elements as previously described). This provided a key foundation on which subsequent analysis was grounded. Accordingly, the origin of the militaries' intervention was further examined through the use of structured frameworks (Step 2), onto which otherwise descriptive elements of policy decisions and process were hooked. Taking Step 1 and Step 2 together, the origin of the militaries' intervention in Sierra Leone and the content of their role(s) were examined (the results of which are presented in Chapter 6, pages 111–144). Thereafter (Step 3), theories of interaction and power were used to deepen the analysis by examining the nature of CMRel that were manifested within the militarised NERC and DERCS (the results of which are presented in Chapter 7, pages 145–175, and Chapter 8,

^m As previously described, the analysis of documents not in the public domain was conducted only after the interviews were coded. The documents were then rapidly appraised with consideration of any gaps remaining from the interview data. Where deemed complementary to the interview data, the documents were block coded.

pages 176–213). Finally (Step 4), the theories of interaction and power were reconsidered alongside political economy (as in Step 1) so as to examine some of the wider effects of the militaries’ intervention (the results of which are presented in Chapter 9, the thesis’ discussion, pages 207–236).

This multi-step design was initially developed and proposed as part of LSHTM’s Research Poster Day (Figure 5, page 81) in April, 2021, which provided ample opportunity to receive and incorporate feedback. The resulting step-by-step method was then revised and streamlined (Figure 6, page 82).ⁿ

Step 1: A neoliberal basis (i.e., understanding the social, environmental, political, and historical context)

Consideration of political economy helped to contextualise and situate Sierra Leone’s Ebola outbreak and response (see, e.g., Chapter 6, pages 115–116 and pages 139–143). This includes, for example: entrenched poverty and an inadequate formal health system resulting from neoliberal reforms; a lack of trust in public authority, especially during and after the 1992–2001 Sierra Leone Civil War; the historical empowerment and resourcing of hierarchical institutions including the military; and the systematic under-empowerment and marginalisation of local actors since the country’s colonial era (see Appendix C-1, pages 415–418).

The need to consider and incorporate such factors in social science analysis has been identified by Mustapha (2006) as necessary so as to address the Western reification of African political science.⁶¹⁷ Further, others—e.g., Enria (2020), Abdullah (2017), and Benton and Dionne (2015)—have effectively argued that examining the outbreak and its effects must be understood with these factors in mind,^{43,335,527} with the former writing how a “lens of structural adjustment and post-war neoliberal policies... had undermined the development of a strong and accessible health system”.⁴³

In short, these factors—many of them considered *a priori* in the interview guides and code frame—help to explain not only the emergence of Ebola as an uncontained outbreak, but also the subsequent failure of the Ministry of Health and Sanitation (MoHS) to contain it. It also helps to explain the subsequent reliance on empowered institutions including the militaries and their ‘systems hardware’ to intervene in response to the gap left by the MoHS (see page 84 for a definition of this term and its relevance to the thesis; see Chapter 6, pages 111–144, for the resulting findings). Taken together, this formed a foundation onto which further analysis could be contextualised, in accordance with the four-step analytic process (Figure 6, page 82).

ⁿ Note, each chapter contains its own methods section. The analytic methods described here are intended to overview the *œuvre*.

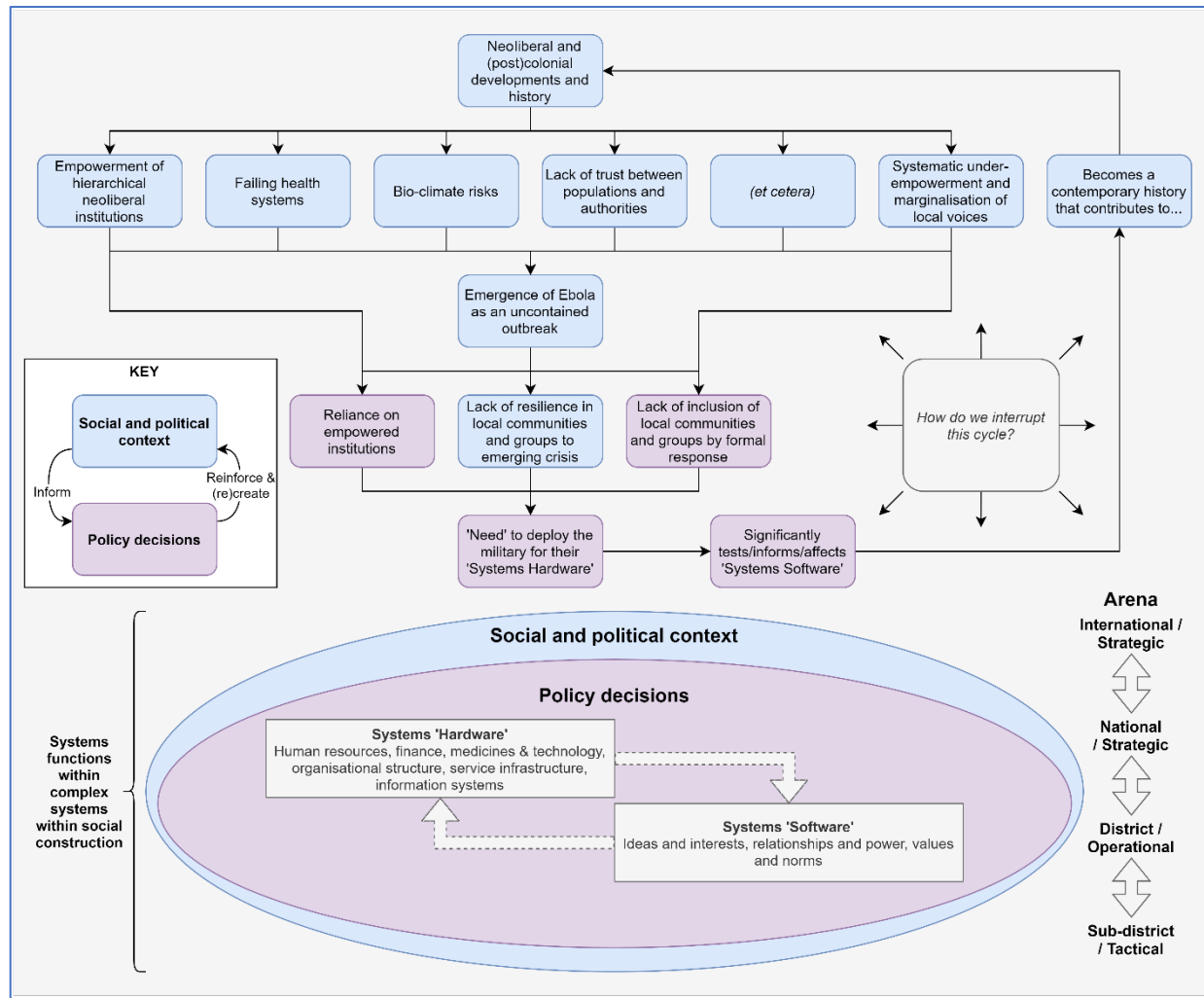
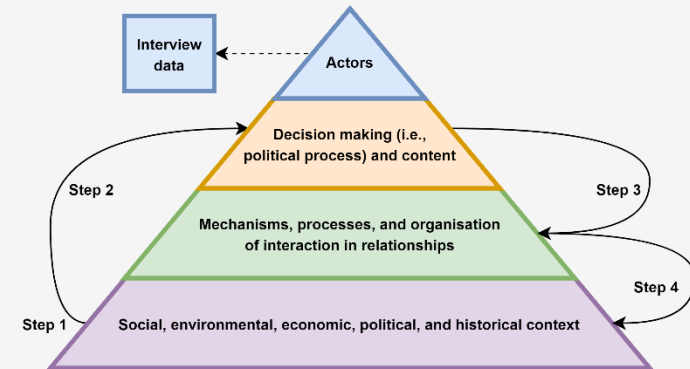


Figure 5: The cycle of social (re)construction, drawing on Sheikh et al. (2011) (source: author)

Layering structured frameworks and theories: evaluating actors through to context via decision making, processes of interaction, and organisation



- Step 1** Use neoliberal theory and critique to situate the historical social and political contexts that produced Ebola as an emergent crisis and the process of militarisation prior to the outbreak
- Step 2** Use structured frameworks to explain the political process behind this decision to deploy militaries to the response; Landscape the content of the militaries' roles and (preliminarily) examine the effects these contributions were perceived to have
- Step 3** Use neo-Durkheimian theories of Mary Douglas to explain each actors' social organisation and 'thought style' and the power/interaction/conflict that therefore existed between them (including initial friction and how this developed over time); Explain how the hierarchical coordination fora that underlay this interaction facilitated interaction in the relationship, including for the ways it was conflict attenuating
- Step 4** Use neoliberal theory/critique to (re)situate the social and political contexts that the Ebola response can be found to contribute to

Figure 6: Structured frameworks and theories and how they are utilised in this thesis as part of a four step analytic process (Source: author)

Step 2: Using structured frameworks to detail decision making processes

Thereafter, Shiffman and Smith’s ‘determinants of political priority’ framework (2007) was used to organise and type the factors shaping the political prioritisation to deploy militaries to Sierra Leone’s Ebola response (Table 2).⁶¹⁸ The framework draws on a range of scholarship on collective action to examine the “power of involved actors, the ideas they use to position [an] issue, the nature of the political contexts in which they operate, and the characteristics of the issue itself”.⁶¹⁸ As applied to the research data in Chapter 6, pages 111–144, the framework was particularly useful for contextualising the perspectives of key stakeholders taking the decision to intervene militarily within broader political processes (while quite comprehensive, these determinants do not directly consider political economy, hence the first step of the analytic process).^{618,°}

Table 2: Determinants of political priority for global initiatives			
Category	Description of category	Factors shaping political priority	Description
Actor power	The strength of the individuals and organisations concerned with the issue	Policy community cohesion	The degree of coalescence among the network of individuals and organisations centrally involved with the issue at the global level
		Leadership	The presence of individuals capable of uniting the policy community and acknowledged as particularly strong champions for the cause
		Guiding institutions	The effectiveness of institutions or coordinating mechanisms with a mandate to lead the initiative
		Civil society mobilisation	The extent to which grassroots organisations have mobilised to press international and national political authorities to address the issue at the global level
Ideas	The ways in which actors understand and portray the issue	Internal frame	The degree to which the policy community agrees on the definition of, causes of, and solutions to the problem
		External frame	Public portrayals of the issue in ways that resonate with external audiences, especially the political leaders who control resources
Political contexts	The environments in which actors operate	Policy windows	Political moments when global conditions align favourably for an issue, presenting opportunities for advocates to influence decision makers
		Global governance structures	The degree to which norms and institutions operating in a sector provide a platform for effective collective action
Issue characteristics	Features of the problem	Credible indicators	Clear measures that demonstrate the severity of the problem and that can be used to monitor progress

° The framework is described and discussed at length in Shiffman and Smith’s *Generation of Political Priority for Global Health Initiatives: A Framework and Case Study of Maternal Mortality* (2007).⁶¹⁸

Severity	The size of the burden relative to other problems, as indicated by objective measures such as mortality levels
Effective interventions	The extent to which proposed means of addressing the problem are clearly explained, cost-effective, backed by scientific evidence, simple to implement, and inexpensive

Table 2: Determinants of political priority for global initiatives (reproduced from Shiffman and Smith (2007))⁶¹⁸

After using Shiffman and Smith’s framework to help trace the decision to intervene militarily in Sierra Leone’s Ebola response, Sheikh *et al.*’s (2011) ‘systems hardware’ and ‘systems software’ framework was drawn on to type the content of the militaries’ various roles that then transpired. Respondents described an array of these roles, and Sheikh *et al.*’s framework was therefore useful for organising the data and typing it accordingly.^{619,p} Taking Shiffman and Smith as well as Sheikh *et al.*’s frameworks together, therefore, the political process that led to the militaries’ deployment was examined, as were the various roles and contributions they subsequently performed (as detailed in Chapter 6, pages 111–144). This provided the necessary landscape and basis on which to examine the ways in which the involved actors (Figure 7) perceived and reacted to the decision to intervene militarily, as well as the CMRel that were subsequently manifested over the course of the outbreak (i.e., Step 3 and Step 4, as examined in Chapter 7, pages 145–175, and Chapter 8, pages 176–213).

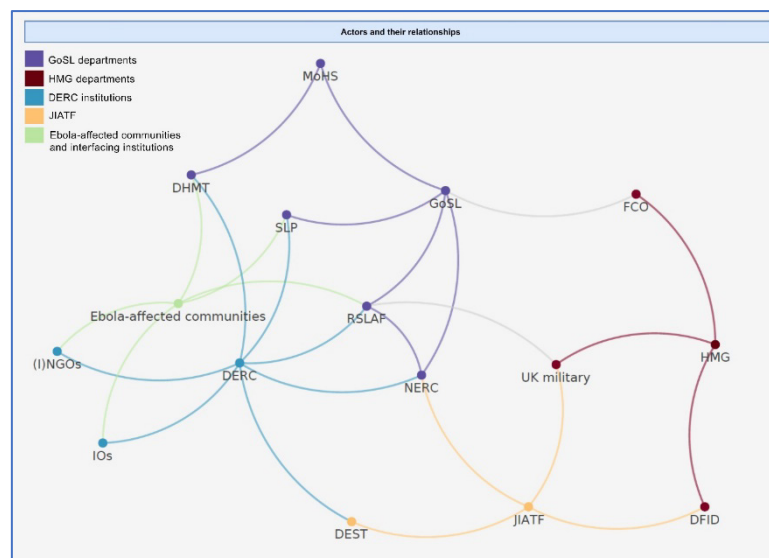


Figure 7: Actors and their relationships (Source: author)

Step 3: Using theories of interaction and power to examine mechanisms and processes of interaction and the manifestation of power in relationships

To more closely examine the CMRel that were manifested in Sierra Leone’s Ebola response, the neo-Durkheimian theories of Mary Douglas (hereafter Douglasian Theory) was drawn on (as are elements of

^p Systems software is an institution’s “ideas and interests, relationships and power, values and norms”.⁶¹⁹ Systems hardware is their “human resources, finances, medicines and technology, organisational structure, service infrastructure, and information systems”.⁶¹⁹

Assemblage Theory, described below). Douglasian Theory was chosen for its focus on the examination of hierarchical organisations (such as militaries) and the hierarchical schema that can exist between different groups (such as civilian and military ERWs working together in the NERC and DERCs). Douglasian Theory also considers the ways that conflict inevitably arises between different actors, as well as the ways this conflict can be mitigated (such as what was seen in Sierra Leone, as examined in chapters 7–8). Note, ‘civilian ERWs’ is a diverse grouping. In the findings, they are sometimes presented together using the term ‘classical response actors’ (Box 1).

Box 1: Use of the term ‘classical response actors’ in chapters 7 and 8

Note, there is considerable diversity within the civilian ERW group. This includes, for example, governmental and non-governmental personnel; international, national, and sub-district actors; and institutions that may or may not be primarily focused on emergency response. However, in chapters 7–8, many of these actors are considered together under the umbrella term ‘classical response actors’ (defined in Chapter 7, Box 1, page 149). This is due to the actors’ normative role in responding to humanitarian crises and public health emergencies, despite their diversity (i.e., as exemplifying an established and often dominant norm). While these actors are coupled in this way for this reason, the thesis’ discussion chapter (Chapter 9, pages 214–236) directly addresses the diversity inherent within this group as relevant to the research topic and findings. Further, where there is differentiation between these actors’ perspectives (e.g., where civilian GoSL ERWs hold differing opinions to international ERWs), this is noted in the relevant chapter.

Taken together, therefore, Douglasian Theory was deemed useful for the examination of the nature and effect of CMRel that was manifested during the response to the 2013–2016 West Africa Ebola Epidemic in Sierra Leone. Various Douglasian Theory concepts that were important to analysis are now described (in turn), including: the elementary forms of social organisation, thought styles, and the causal mechanism; anomaly, territory, and the inevitability of conflict; and hierarchical conflict attenuation.

The elementary forms of social organisation, thought styles, and the causal mechanism

According to Douglasian Theory, different actors manifest one of four elementary forms of ‘social organisation’ (Table 3, page 86).^{620,9} Each form has a different degree of social regulation and socialness, and can therefore be represented (and contrasted) on a two-dimensional plane (see Chapter 8, Figure 1, page 182).⁶²⁰ Hierarchical ordering—such as that seen in military institutions—is strongly regulated and socially integrated (though, within one organisation, these factors can differ by degree, even to the extent that an organisation blends into another elementary form). Notably and as above, in addition to describing the nature of a specific organisation and its actors, the four elementary forms can also be used to describe the organising spaces that define and regulate interaction between multiple (and differently ordered) groups.

⁹ Unless indicated otherwise, the language in Table 3 (page 86) is drawn directly from *Mary Douglas: Understanding Social Thought and Conflict* by Perri 6 (*sic*) and Paul Richards.⁶²⁰ This book was a principal reference for grasping Douglasian Theory.

Table 3: Douglasian forms of social organisation			
Form of social organisation	Degree of regulation and socialness	Description of the extreme form (to the point of disorganisation)	Example
Individualism	Weak regulation; weak social integration	“Fatalistic isolation, barely able even to sustain survivalism; Hobbesian state of nature, (where no one can achieve greater power to pass on constraint to others); or else despotic tyranny, where one person can pass on constraints by imposition, at least for a while”. ⁶²⁰	A “quite general institutional ordering which sustains a cult of the individual person”. ⁶²¹
Isolate	Strong regulation; weak social integration	“Baroque over-regulation producing opacity in rules; demotivation because of inability to trust understanding of rules any more as rules proliferate”. ⁶²⁰	Politically passive groups that dissent from the majority and “tend toward a fatalistic outlook, and not surprisingly, since there is little they can do about anything in their lives”. ⁶²²
Enclave	Weak regulation; Socially integrated	“Schism, conflict, extreme millenarianism, sacred contagion; or else demotivation by exhaustion from demands of incessant principled action and collective decision making”. ⁶²⁰	Cohesive rural communities on society’s periphery, “defined only negatively in frustrated reaction against the centre, either by revolt or by withdrawal and circumvention”. ⁶²¹
Hierarchical	Strong regulation; Socially integrated	“Anarchic, ruthlessly competitive zero-sum relations; demotivation of many less well-resourced people because very few individuals monopolise most opportunities”. ⁶²⁰	Rule-driven organisation and ordering, such as an organised religion, government, or military, typically they are “loyal, stable, and compartmentalised, and coordination is very effective”. ⁶²²

Table 3: Douglas' forms of social organisation

Regardless of form, Douglasian Theory argues that social organisations are ritually enacted through ‘quotidian ritual interaction’ (i.e., routine activities and interactions or *modus operandi*, which are rituals performed to a certain meter or ‘clocking’).^{620,623} In turn, this cultivates a particular ‘thought style’ (i.e., an idiosyncratic *modus vivendi*).⁶²⁰ Douglasian Theory argues that this reinforces—to the point of disorganisation when in an extreme and unmitigated form (Table 3)—the social organisation which initially produced the quotidian ritual interaction.⁶²⁰ Taken together, therefore, Douglasian Theory argues for a two-phase feedback loop, whereby “we dance our social organisation into institutionalisation and the structure or ‘dances’ in turn reflect the social organisation that they reinforce” (Figure 8, page 87).⁶²⁰ This is no small observation: explanations of why actors have different *modus operandi* and *modus vivendi* can be explained through Douglasian Theory as the ritual enactment of a particular thought style, rather than straightforward claims to factors like organisational culture.

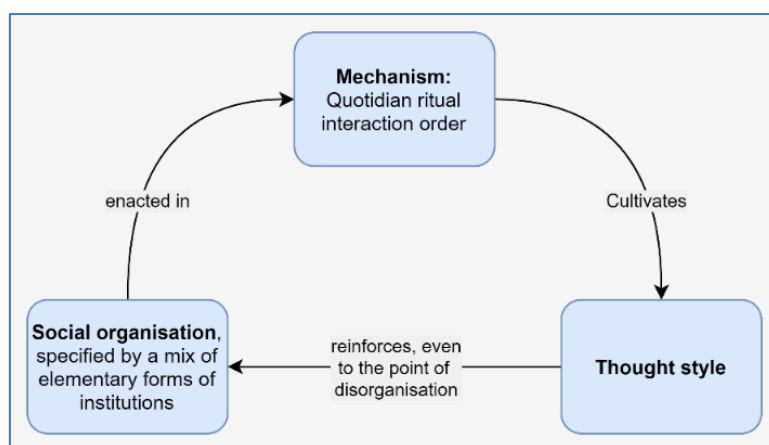


Figure 8: The causal mechanism in Douglasian Theory: a two-phase feedback loop (adapted from 6 and Richards by author)^{620,624}

Anomaly, territory, and the inevitability of conflict

Douglasian Theory also provides the useful concept of ‘anomaly’, that is, something that unexpectedly confronts and threatens a social organisation.⁶²⁰ Anomaly can either be accommodated (i.e., the social organisation renegotiates its constitution and adapts accordingly), or, it can result in exhaustion or schism within the group (i.e., the social organisation is unable to adapt and as such either collapses or separates into multiple groups).⁶²⁰ Regardless of the outcome, Douglasian Theory posits that this process of interaction between different social organisations and adaptation in the face of anomaly results in the perception of tension, threat, and vulnerability, particularly when a group does not perceive itself to have the capability or permission to easily continue its quotidian ritual interaction. Therefore, the theory argues that conflict within and between interacting groups is inevitable.⁶²⁰ For the purposes of the thesis, the emergence and unprecedented escalation of the Ebola outbreak—and equally, the highly unusual military intervention in response to it—were perceived anomalies that rocked various groups, actors, and their institutions (and were therefore felt to threaten their respective social organisations). This created significant consternation and handwringing amongst some actors (as examined in Chapter 7, pages 145–175). However, to avoid exhaustion or schism, these anomalies had to be accommodated, necessarily recharacterising the involved organisations’ constitutions (as examined in Chapter 7, pages 145–175, and Chapter 8, pages 176–213).

Assemblage Theory—a bottom-up ontological framework for analysing social complexity—nuances this concept. In short, Assemblage Theory asserts that any given assemblage is comprised of unstable relational components, and can therefore be understood as a system.⁶²³ In response to anomaly, an assemblage goes through a process of ‘territorialisation’, “because [it] need[s]... [a landscape] to confront chaos”.⁶²³ This is a deliberate process that

...regulates co-existence of subjects by defining how much space they need for their comfort and security, and it maximises the number of co-inhabitants of a space by assigning them ‘specialist roles’.^{623,†}

[†] In Assemblage Theory, ‘style’—akin to the Douglasian concept of a thought style—is a dimensional component of territory.⁶²³

‘De-territorialisation’ is the attempt to reform or change this territory (and an assemblage’s organisation of functions as well as its belief systems) in response to chaos.⁶²³ However, this reorganisation or ‘re-territorialisation’—the expressive rather than material side of a given assemblage—can also result in negative coping mechanisms, especially when the process of de-territorialisation is by force of crisis (such as civilian actors intervening in and becoming overwhelmed by an Ebola outbreak, resulting in the intervention of an atypical and exogenous actor).⁶²³ As above, Douglasian Theory posits that conflict both within and between groups is inevitable as a result of this constant process of reorganisation and re-territorialisation.⁶²⁰

Hierarchical conflict attenuation

However—and no less importantly—Douglasian Theory examines not only the ways that conflict will inevitably arise within and between differently organised groups in response to anomaly, but also the ways that this conflict can be mitigated and overcome. Of particular note is hierarchical social organisations’ ability to attenuate conflict through the accommodation (rather than confrontation) of other social forms. As above, hierarchy is of particular interest and importance to this study, as the militaries that intervened in Sierra Leone were hierarchical in their internal nature and imparted this nature to the Ebola response centres they established and subsequently helped to lead.

Douglasian Theory argues that hierarchical ordering has a “peculiar capacity” for this kind of ‘conflict attenuation’, which is enacted through four different (but interrelated and inter-dependent) mechanisms: ‘rule-bound niches’, ‘neutral zones’, ‘co-dependence’, and ‘hybridity’.

Rule-bound niches are “internally distinguished rule-bound statuses and roles for a variety of activities”.⁶²⁰ Hierarchically ordered social organisations are uniquely capable of actualising rule-bound niches because an organisation defined by adherence to established rules is capable of defining exceptional spaces or ‘special social zones’ within its domain (so long as those spaces remain rule-bound). In other words,

...hierarchy integrates by accommodating, in constrained rule-based tension and complementarity,... rival principles... In hierarchy, each of these forms [of social organisation therefore] has its peculiar status... [and] by these means, anomalies are adjusted for and alternative imperatives are each given their appropriate place and role, without reduction to a single metric. [Essentially,... hierarchy introduces transformations by making ritual practices themselves specialist affairs... [avoiding self-reinforcement to the point of disorganisation and thereby]... accommodating those willing to consider more moderate positions available in niches afforded by hierarchical differentiation within an overarching scheme of integration”.⁶²⁰

In a similar way and effect, hierarchically ordered social organisations can establish neutral zones, defined as a space “in which negotiations might be sustained, but where none of the forms has a power of absolute veto or insistence”.⁶²⁰ In other words, these are spaces in which interactions between different forms of social organisation can peacefully co-exist, as the interaction manifests (and debates are negotiated) in a way that is not perceived to be existentially threatening to any of the involved

organisations. Structures of inclusivity are, in short, established and can be sustained, at least for those groups willing and able to operate within the rule-bound niches and the neutral zones that the hierarchical ordering affords.

In addition to rule-bound niches and neutral zones, Douglasian Theory also argues that hierarchically ordered social organisations can engender co-dependence, wherein a social organisation is made mutually dependent on another, thus requiring their peaceful and complementary interaction for survival.⁶²⁰ This, argues Douglasian Theory, is another strength of hierarchically ordered social organisations, and is likewise essential for attenuating conflicts.⁶²⁰

Co-dependence requires a “tight coupling of shared interests” that evidence the interlinkages between differently ordered and co-dependent groups, thus ensuring that “everything, and everyone, has a recurrent place”.⁶²⁰ Accordingly,

...organic solidarity, or organisation that recognises, celebrates and integrates difference and dissimilarity among people, as they classify each other, must rest on creating mutual dependencies among the institutions that make for that dissimilarity.⁶²⁰

This conflict attenuating co-dependence is further complemented by hybridity, wherein a form of social organisation blurs into or borrows from an adjacent one.⁶²⁰ Therein and taken together, Douglasian Theory is powerful for the very reason that it

...provides a method by which to diagnose how far the process of ritual self-reinforcement of thought styles in each of these forms has gone in any situation, and conversely, what capacities and capabilities in performance and thought style are being cultivated, or have ritually been left to atrophy, in performing the attenuation of conflict.⁶²⁰

In other words, hybridity and co-dependence demand a certain compromise in and “incorporation” of thought style, rather than an outright “confrontation” between differently ordered groups.⁶²⁰

Importantly, this hierarchically facilitated incorporation ought to be possible even if the social organisations involved are quite different from one another (including if and when they fall fully outside of the hierarchical type).⁶²⁰ This is particularly the case when a hierarchy “insists on grand unity”—such as the shared objective of ending an Ebola outbreak, for example—and therein

...allow scope for atonement, reintegration, and a more porous conception of the community open to individual or local group commitment and efforts to join [the overall scheme].⁶²⁰

In other words, more than the attenuation of conflict is made possible by joining hierarchical ordering and the four forms of conflict attenuation with unity of purpose: a mechanism can be created through which the boundaries between various groups are made permeable and local groups can become proactively (and even necessarily) participant, and peace can thus be created.⁶²⁴

In short and as relevant to this thesis, conflict inevitably arises within and between different social organisations, but the hierarchical form has a unique capacity for attenuating this conflict through the use of rule-bound niches, neutral zones, co-dependence, and hybridity.^{620,s} This is fundamental not only for the examination of the conflict that arose between differently ordered actors in Sierra Leone's Ebola response (as in Chapter 7, pages 145–175), but also the examination of the ways this conflict was negotiated and mitigated within the hierarchical NERC and DERCs (as in Chapter 8, pages 176–213).

Step 4: A return to neoliberal theory/critique and concluding remarks on the frameworks and theories used

In turn and in conclusion, these theories of interaction and power return analysis to consideration of political economy (as in Step 1). This is done so that findings can be (re)situated within their broader social construction, and so that further ways to attenuate (or even overcome) inter-organisational conflict and its harmful effects can be theorised.

Taken together, the four-step analytic process results in the thesis' three major contributions:

1. The militaries' intervention was widely perceived to be very valuable. However, when the militaries' generally lauded 'systems functions' are re-situated within Sierra Leone's broader 'social construction', their intervention is found to be both endogenous and exogenous of it, and is therefore cyclically self-replicating and amplifying of an often-harmful political economy. This is a paradox that the thesis terms the 'political economy of expedience';
2. Civilian ERWs may be typically characterised as distinct from military actors, but they are found to be similar in important ways, including for their hierarchy and their participation in the political economy of expedience paradox;
3. Despite this, the hierarchically ordered militaries—and the hierarchically ordered NERC and DERCs—provide key lessons for interrupting the political economy of expedience paradox without doing away with the valuable contributions that were made through the exogenous and militarised intervention.

Each of these three contributions is argued for in a dedicated chapter (chapters 6–8, respectively). Where the various structured frameworks and theories are used in these chapters is indicated in Table 4 (page 91).^t Project management is now briefly described, after which the findings chapters are presented.

^s Douglasian Theory does not explicitly state that hierarchical ordering is the only form of social organisation capable of attenuating conflict, only that it is the only form that could do so in these ways.⁶²⁰ Mary Douglas died before theorising other social organisations' forms of conflict attenuation.

^t Greater detail on how each chapter seeks to address a specific research objective(s) in sequence has been detailed earlier in this chapter (Figure 1, page 68).

Table 4: Research objectives and framework components of original findings chapters and discussion				
Research objective	Research aim relevance	Analytic step	Contribution	Results
1 & 2	Origin	1 & 2	1	<i>Public health's bitter pill: examining military intervention in Sierra Leone's Ebola epidemic and proposing the 'political economy of expedience' paradox</i> (Chapter 6, pages 111–144)
2 & 3	Nature	3	2	<i>Enmity and empathy between civilian and military Ebola responders in Sierra Leone's National and District Response Centres</i> (Chapter 7, pages 145–175)
3 & 4	Nature & Effect	3 & 4	3	<i>Beyond the ethical imperative: examining the militarised hierarchy of Sierra Leone's Ebola response and implications for inclusive and efficient decision making during public health emergencies</i> (Chapter 8, pages 176–213)
4	Effect	4	--	<i>Discussion</i> (Chapter 9, pages 214–236)

Table 4: Research objectives and framework components of original findings chapters and discussion

Ethics, risks, and risk mitigation

Ethics approval was sought from and granted by the LSHTM Research Ethics Committee (reference 14424) and the MoHS Office of the Sierra Leone Ethics and Scientific Review Committee (no reference provided; approved 28 August 2017 and re-approved 15 February 2018).

Risks to the researcher were nominal, though the nature of research in Sierra Leone did require accessing some hard-to-reach populations. In-country research in Kambia and Port Loko districts was therefore conducted in the country's dry season (September to May) in order to facilitate the safest possible access (i.e., to ensure road safety).^u These risks were further mitigated by STB's extensive experience in the areas of study (see Chapter 5, pages 95–110) as well as through the generous logistical support of LSHTM, GOAL Global (GOAL),^v and the LSHTM-affiliated Public Health England Rapid Support Team (UK-PHRST).

While all work and related research was conducted according to best practices for ethical research—including the provision of a project information sheet to all respondents and the documentation of informed consent—there were some risks to participation if a loss of confidentiality was to occur.

This was particularly the case for respondents working for or with the British or Sierra Leonean governments—many of whom did not have formal authorisation to participate in this study, including some who were privy to high-level closed-door conversations and official sensitive information. Of particular note was the permission that was required from the RSLAF Chief of Defence Staff (CDS) (i.e.,

^u This was not considered a significant concern for research in Western Area Urban District.

^v For whom STB had previously worked (see Chapter 5, pages 95–110).

the professional head of the armed forces) in order to interview some Sierra Leonean military personnel. Mitigating the relevant risks for this research grouping reflects the measures taken with others, and is therefore described below.

RSLAF personnel often live in military barracks, so it was not possible to access most RSLAF respondents without first accessing their guarded army bases. This required speaking with the respective base commander, explaining the objective of the visit to them, and securing their permission to continue with identifying and interviewing respondents. Initial attempts to secure this permission were refused by base commanders pending receipt of written permission from the CDS. STB requested this permission from the CDS which was granted. This supplementary permission was shown to base commanders (in order to gain access to army bases, as above), and also to any RSLAF respondent who indicated they would need permission from a superior before consenting to an interview. Therefore, some (though not all) RSLAF respondents were aware of the CDS's knowledge of the study. The CDS's authorisation was unconditional, and therefore may have served to encourage respondents' openness. However, alternatively, respondents may have been circumspect in offering truly transparent criticisms of their institution, given any concern that the CDS could try to re-identify any critical statements that were later published (this and other limitations are described in Chapter 9, pages 214–236).

These risks—regardless of research grouping—were mitigated through various protections outlined in the project's information sheet and consent form (the protections were therefore known to all respondents). This included: the large number of respondents falling into any one research grouping (Figure 3, page 74); relatedly, the confidential and voluntary nature of participation; and the strict privacy of all interviews. Further, respondents were informed they could refuse answering any given question (which was relatively straightforward given the flexible and conversational nature of the interviews). Respondents were also informed that they could withdraw consent at any time, including after the interview had concluded (amongst the respondents that agreed to participate in the study, none withdrew their consent either during or after the interview). Further, all digital and physical data was stored and processed securely according to best practice, including the de-identified interview transcriptions. These protections—which were known to respondents, as above—should have reasonably mitigated any concern that may have otherwise limited openness. The fact that many respondents were known personally to STB may have also encouraged openness (indeed, STB's interview notes suggest that most interviews were congenial if not vibrant).

Despite these protections and other mitigating factors, it is nevertheless possible that some respondents were guarded in their statements or otherwise taciturn (though STB's memos do not indicate any relevant concerns). The large number and diversity of respondents (Figure 3, page 74) helped to mitigate this residual risk, in that data collection continued until research saturation was achieved (i.e., respondent

statements could be readily cross-checked if anything seemed incongruent or incomplete). These limitations and any other research gap were then resolved through subsequent interviews.

The same protections and mitigating measures applied to the Sierra Leonean civilians who were asked to participate in this study and, therein, to provide their perspective on their government and military (which, as noted in Chapter 2, pages 28–38, is an institution with a history of human rights violations during the 1991–2002 Sierra Leone Civil War).^w As they had worked within (or were affiliated with) the NERC and DERCs, these respondents were relatively elite actors who had spent considerable time alongside RSLAF personnel during the Ebola response. They were therefore not considered to be a particularly vulnerable population. Further, no interview questions directly queried instances of abuse or other anxiety-provoking sensitivities. However, if respondents raised these concerns of their own accord, STB did not discourage their consideration. In these instances (which were very limited in number and mostly second-hand), careful notes were taken of respondents' manifested anxiety or stress, STB remained open to ceasing the interview at any time, and respondents were proactively reminded of the voluntary nature of the interview and their unconditional ability to withdraw consent at any time without prejudice. Numerous respondents in all research groupings and at all levels did express critical perspectives of GoSL, HMG, and both governments' respective militaries (as examined at length in chapters 6–8), which indicates that most felt secure and comfortable during their interview.

Prefix to the findings chapters

As previously described, the thesis' findings (i.e., those resulting from detailed primary data analysis from Sierra Leone) are separated into three chapters. From the following page, each is presented in turn.

While these three chapters constitute the thesis' findings (which are included hereafter), there are several other highly relevant papers in various stages of development that should be mentioned (in addition to those which are discussed in Chapter 3, pages 39–64). Of some importance are several papers related to an ongoing research project titled *Civilian-Military Interaction in Conflicts: Best Practices and Perceptions*. In this research project, the thesis' underlying study design is applied to three other civil-military case studies: the Syrian refugee crisis in Jordan; natural disaster response in the Philippines; and the response to the 2018–2020 Kivu Ebola Epidemic in the Democratic Republic of the Congo (DRC). The research project is fully funded by the USG State Department Bureau of Population, Refugees, and Migration (PRM) and is based out of Brown University's Watson Institute for International and Public Affairs. STB is helping to lead this research project, for which there are a number of forthcoming publications including three peer-reviewed academic journal articles (see Appendix B-2, pages 403–406), as well as two extended research and policy reports (see Appendix B-3, pages 407–413).

^w Though it should be noted that RSLAF is technically a different institution than the Sierra Leone Army (SLA) given the security sector reform (SSR) that occurred after the war (Chapter 2, pages 28–38).

Additional and relevant articles have been published by STB. As with the *Civilian-Military Interaction in Conflicts: Best Practices and Perceptions* publications, these papers are not included as part of the thesis' findings, but nevertheless complement them. Therefore, where published, these papers are included in the thesis' appendices (Appendix A-1–A-7, pages 303–384), and constitute a significant contribution to the research topic in their own right; where written but not yet submitted, the working document is included (Appendix B-1, pages 385–402); and where in draft, in review, or in press, they are briefly summarised (Appendix B-2, pages 403–406). There are further relevant but non-peer-reviewed publications (e.g., blogs, policy reports, *et cetera*) which are also briefly summarised in the thesis' appendices (Appendix B-3, pages 407–413).

Taken together, these additional publications and other research outputs not only indicate but strengthen the impact of this thesis.

Chapter 5 | Reflexive considerations

Introduction to the chapter

With the support and contributions of others (not limited to but especially including research supervisors), I—the PhD candidate—was primarily responsible for all elements of this study. This includes its conceptualisation; the development of the research aim, objectives, and questions; and the overall research design. It also includes data collection (of both qualitative interviews and of documents not in the public domain obtained under the Freedom of Information (FOI) Act of 2000 (FOIA)); data organisation and coding (with the exception of interview transcriptions, for which several Sierra Leonean Research Assistants were hired); data analysis; and the write-up of research findings that are presented in the three subsequent chapters.^{a–b}

However, my relationship to the study’s area of focus began before my registration at LSHTM in 2016, as this was after the 2013–2016 West Africa Ebola Epidemic in which I worked as an Ebola Virus Disease (EVD) Response Worker (ERW). As a practitioner with a number of personal and professional experiences relevant to this study, it felt important to include a chapter in which I could detail and examine these experiences. This is done with a particular focus on the influence they may have had on the development of this thesis at various stages. Indeed, the overall choice of research topic is a result of my personal and professional experiences working with and alongside members of the British and Sierra Leonean militaries throughout my time in Sierra Leone. This background also influenced my choice of research questions and informed subject selection (as colleagues and contacts from the Ebola response constituted a natural starting point for this project’s respondent selection).

Accordingly, the following chapter details my deployment(s) to the 2013–2016 West Africa Ebola Epidemic, with a focus on the specific personal and professional experiences which are of most relevance to this study. The chapter also discusses subsequent professional work with and adjacent to military and security forces (and at times non-state armed groups (NSAGs) such as during the 2018–2020 Kivu Ebola Epidemic), as well as another ongoing research project that I am involved with related to the role and perception of military and security forces in the response to public health emergencies. At the end of this chapter, these experiences and their relevance to this study are summarised, which is followed by a discussion of their possible influence(s) on the study and the mitigating measures that were taken. Note, an extended chapter further detailing my relevant experience(s) and associated reflexive considerations is included in the thesis’ appendix (Appendix C-2, pages 446–471).

^a Where others contributed to the write-up of research findings, this is indicated and detailed in the respective chapter’s Research Paper Cover Sheet (as required by the London School of Hygiene & Tropical Medicine (LSHTM)).

^b This was a challenging workload for one researcher and led to concerns of burnout, especially during the COVID-19 pandemic. However, support was provided from peers while in Sierra Leone, and opportunities to discuss interpretation of the findings with other academic researchers did arise through a separate (and highly relevant) ongoing research project that is referred to in Appendix C-2 (pages 245–245).

Setting the emotional stage

My first trip to Sierra Leone was initially nothing to do with Ebola: I arrived in Freetown on July 23rd, 2014 on placement from my then-university to provide programmatic support to the King's Sierra Leone Partnership (KSLP). KSLP was (and still is) focusing on supporting health system strengthening and long-term capacity building in Freetown's Connaught Hospital. This seemed fitting to me. My previous work experiences had been in maternal and child health programming in South Sudan and health systems strengthening in Kenya, and I intended to provide support to KSLP in line with these general areas.

On the humid Wednesday evening that I arrived and settled into my accommodation, things felt normal. People went about their day, going to bars and beaches and markets. Conversations about Ebola—even amongst the health professionals that I was living with and working alongside at Connaught Hospital—generally coalesced around the notion that the outbreak was a relatively contained and rural concern. This was clearly not the case, as a small and rudimentary Ebola isolation and holding unit had been built at the hospital. Further—though largely unnoticed by the international community—Sierra Leone's borders had already been closed with Liberia and Guinea, and the Kenema and Kailahun districts in the country's east were being devastated by the virus. Some, notably Médecins Sans Frontières (MSF), were trying to raise the alarm, stating just one month prior to my arrival that the Ebola “epidemic requires [a] massive deployment of resources”.⁶²⁵

Despite these rumblings, I was unaware of much foresight or planning in Freetown for what was soon to come: hand washing stations were not yet the norm, most people still shook hands and physically embraced to say hello, and there was no obvious public health messaging regarding the outbreak; the country had no system for centralising alerts, no database for systematically aggregating or analysing surveillance data, hardly any Ebola Treatment Centres (ETCs) or beds, and no special sites for burying the forthcoming dead. Anyways, there were no biohazard-secure hearses or trained burial teams to transport infectious bodies even if there had been somewhere to safely inter them.

My and others' lack of awareness was to change very soon and very quickly: unbeknownst to myself or my colleagues at the time, the first laboratory-confirmed case of Ebola in Sierra Leone's capital city arrived on the same day that I did.⁶²⁶ The case was publicly reported the following day.

I find it exceptionally difficult to describe what it is like to go to bed in a thriving, noisy, bustling city, and wake up in one suddenly aware of not just what had transpired, but also terrified of what was to come.

As the outbreak escalated and the situation deteriorated, I was asked by KSLP to contribute my time to the Ebola response (specifically, to start working out how an alerts call centre might work). I would never get the chance: later that same day, I was told by my university that I was being evacuated from the country.⁶²⁷ I went to the airport, boarded my flight, the plane taxied to the runway, and I left my new

colleagues behind. Firmly believing they might die working to protect and save the lives of others, I felt that I had abandoned not only them, but an entire nation of people in a time of profound need.

My (second) deployment to Sierra Leone and my experiences with the military while there

In the days leading up to my evacuation from Sierra Leone in early August 2014, it was clear to me that had I contracted Ebola (which, while unlikely, felt like a very real possibility at the time), or had any other kind of medical emergency, the likelihood that I would receive efficient and half-decent tertiary medical care was questionable. Even a relatively routine international medical evacuation appeared increasingly unreliable as airlines began cancelling their flights to West Africa.

From the moment that I was made to leave, I knew that I wanted to return to Sierra Leone, but my knowledge of these risks was a genuinely limiting factor. With new no-touch policies, a nation prepared with hand washing stations, and better personal knowledge of the virus, I was somewhat confident that I could avoid Ebola—but, what was going to happen if I experienced some other kind of medical emergency, such as injuries sustained in a road traffic accident?⁶²⁸

In the process of deciding when and how to return to Sierra Leone, my assessment of both risks—however real—was significantly mitigated by the British Armed Forces, marking the first time that I was conscious of any positionality regarding the militaries' Ebola-related roles in Sierra Leone. The organisation deployed numerous resources intended to backstop medical services to (primarily expatriate) ERWs (these assets and the process of bringing them online is described further in Chapter 6, pages 111–144).

It is undeniable that these military assets made me—and, importantly, my family—feel wholly less alarmed about my interest in and prospect of returning to the country, particularly as the outbreak had escalated significantly since I had been evacuated. In some ways, my sense of relief and comfort was actually more general than the availability of these specific assets: to me, they represented a clear indication that a well-resourced Western government (of a country that I was a citizen of) was committed to ensuring my wellbeing. My risk and fear of being abandoned if something went wrong—something Sierra Leonean people had come to understand all too well over the early days of the outbreak—was gone. With these developments, I felt an expression of solidarity from and between the British government (HMG) and its constituent departments, including the British Armed Forces.

I did what I could to find a full-time position in the Ebola response and I eventually succeeded, returning to Sierra Leone on January 3rd, 2015 to work for the International Non-Governmental Organisation ((INGO) GOAL Global (GOAL). GOAL had been tasked by the Ebola Response Consortium (ERC) to support the operationalisation of surveillance activities in Port Loko District, the contemporaneous epicentre of the outbreak. I was asked to lead this initiative.

Driving in the dark from the airport to my first duty station in Port Loko District, the car's headlights illuminated at least half a dozen bodies by the roadside in what I later learned was community-managed isolation for the dying and deceased.⁶²⁹ This drive also included my first direct interaction with the military in Sierra Leone's Ebola response, when I was required to get out of the vehicle by Republic of Sierra Leone Armed Forces (RSLAF) personnel to wash my hands and get my temperature taken at several checkpoints. I cannot say that I thought much of this, as I was used to military roadblocks and checkpoints from past work in South Sudan. By comparison, this seemed like a friendly interaction.

When I arrived in Port Loko District, I was onboarded and brought up to speed by my organisation. I learned that GOAL's ETC—which had started receiving patients just two weeks prior—had been one of those built by the British Armed Forces Corps of Royal Engineers. Amongst my colleagues, there was chat of frustration and delays in the process of building the facility, but broadly speaking, I felt people were grateful for the support. Who else was could have got it done so quickly, even with the delays?

My work—situated directly within the Port Loko District Ebola Response Centre (DERC)—started the following morning. It is when I first arrived at the DERC that I began to grasp the extent of the British Armed Forces' and RSLAF's role in the response. I was somewhat taken aback: the role went far beyond providing medical care and evacuation services to (mostly expatriate) staff; the building of some ETCs; or the staffing and operation of the occasional health screening checkpoint or roadblock. These are all military functions which, to me, fell more-or-less within the purview of 'normal'.

In the civil-military DERC, however, I saw that military roles could not have been more central: two RSLAF Captains were coordinating civilian District Surveillance Officers (DSOs), another the civilian burial teams, and another civilian ambulance teams; a British Armed Forces Battle Captain chaired coordination meetings and helped strategise response measures (except this time, the fight was against Ebola using inter-agency civilian staff rather than against a belligerent armed group using military force); a British Armed Forces Major and medical doctor provided a public health advisory role alongside two Department for International Development (DfID) Humanitarian Advisors; and a Sierra Leonean colonel oversaw it all alongside an ex-Metropolitan Police Stabilisation Unit (SU) officer. To me, it more or less seemed that military and security services 'ran the show', coordinating the Sierra Leonean civilians doing a lot of the actual implementing work. I was aware this all occurred under the advisement of the World Health Organisation (WHO) and United States (US) Centers for Disease Control and Prevention (CDC), but another major civilian coordinator (at least on paper), the United Nations (UN) Mission for Ebola Emergency Response (UNMEER), was seemingly absent.

I spent the following nine months supporting surveillance and coordination in Port Loko District and later Kambia District, where I felt strongly that the DERC structure and the activities coordinated within were incredibly important contributions to the response. I felt that this interagency and interprofessional milieu allowed for multiple skillsets, perspectives, workstreams, and iterative learning to be built into

response activities.^c In Port Loko District, I even became part of the core group of personnel that comprised the DERC Command Team. I am certainly not suggesting that everything in the militarised DERCs was this positive or simple. Nor, even, am I suggesting that my generally positive perception is necessarily reflective of how the DERCs actually operated. Indeed, these spaces were highly complex, and roles and responsibilities were neither wholly delineated nor fully stable (and were also not consistent between different DERCs). That my perception and memory is of military personnel more-or-less leading day-to-day activities in the DERCs is nevertheless an important and telling observation. So too is the fact that the DERC's joint-civilian leadership was very ambiguous to me at the time.^d This, in turn, reflects how little distinction I understood there to be between military and civilian actors leading and coordinating the Ebola response.

Therein, my interaction with members of the British Armed Forces and RSLAF was daily and substantial, in both specific and diffuse ways. Examples of my specific interactions included:

- Daily management of surveillance activities with RSLAF captains;
- Integrating dead body management and alerts with surveillance functions with RSLAF captains;
- Strategising response operations with the British Armed Forces Battle Captain and health advisor;
- Getting lifts from the British Armed Forces when I did not have an available vehicle;
- Attending meetings chaired by the British Armed Forces and RSLAF;
- Asking for the use of military assets when required (such as navy boats to access riverine areas); and
- Housing members of the British Armed Forces in GOAL residences when DfID closed their Forward Operating Bases (FOBs)—and thereafter living alongside them, which included socialising and sharing meals).

In fact, the two militaries were so engrained in my daily activities and life that I found this section difficult to write: extracting my experiences working alongside armed forces from the wider milieu of district-level coordination feels almost disingenuous (and at the least incongruous) with my experiences in Port Loko and Kambia districts. In other words, military contributions to DERC operations were so constant, substantial, and intertwined within the overall system of coordination that delineating where military contributions stopped and civilian contributions began feels not only irresponsible (as it de-emphasises the depth of civil-military integration), but unworkable: while non-security activities coordinated out of the DERC were infrequently conducted by a military actor, the overall coordination of these activities

^c Along with colleague and friend Gillian McKay, I documented this perspective for the Africa at LSE (London School of Economics and Political Science) blog. The blog is summarised in Appendix B-3 (pages 245–245).⁴⁹⁹

^d The DERC did formally have civilian leadership, through the politically appointed District Coordinator (DC) who worked alongside the District Health Management Team (DHMT) District Medical Officer (DMO). However, in Port Loko District, neither actor seemed particularly present. In Kambia District, the DC was more active, but I also felt they were ineffective and at times found their presence and contributions counterproductive.

within the DERC was very much a shared civil-military space. Therefore, to some extent, all Ebola response interventions were civil-military in nature.

Ultimately, my sense and memory of the British and Sierra Leonean militaries is one of comradeship, though perhaps not one specific to these institutions. Rather, it is a notion that this jumble of actors—military and civilian, national and international, governmental and non-governmental—were ‘all in this together’, with one shared focus and goal.^e

I left the country on September 21st, 2015 with an Ebola Medal for Service in West Africa.^f I resumed my undergraduate studies the following week.⁴⁴⁰ There were only a small handful of Ebola cases following my departure, and the outbreak in Sierra Leone was finally declared over on March 17th, 2016.

Preliminary thoughts on military contributions to Sierra Leone’s Ebola response

After departing Sierra Leone, I returned to the University of Chicago to complete the fourth and final year of my undergraduate degree in Public Policy. I decided to write my undergraduate thesis about the Ebola response in Sierra Leone. However, at this time, my interest in the origin, nature, and effect of British and Sierra Leonean military support to the response was relatively nascent. Rather, I focused primarily on documenting, analysing, and discussing the challenges (and solutions) that I and others had faced operationalising disease surveillance activities.^g

Despite attempting to provide a comprehensive overview of the Port Loko and Kambia districts’ Ebola response in my undergraduate thesis, reference to either the British or Sierra Leonean militaries was relatively thin. However, a few references were made in support of RSLAF. For example, in a footnote, I wrote that the organisation “performed admirably” in their provision of security to field staff and the management of the ambulance system.⁴⁷² I later called them “a more effective C2 (command and control) body” than the DHMT and WHO, but I did not provide any further discussion or detail.⁴⁷²

The most direct and relevant reference to military support came in one of the undergraduate thesis’ recommendations, in which an implicit perspective on the efficacy of the militaries’ contribution is evident:

[HMG] should dramatically increase funding for the SU, and the [US] government [USG] should dramatically increase funding for the equivalent Office of the Coordinator for Reconstruction and Stabilization (S/CRS). As a civil-military collaborative body, SU was extraordinarily effective at coordinating the [Ebola] crisis response, far more so than coordination from the WHO. Additionally, response leaders

^e It is important to note that this could result in attribution biases, as I may unconsciously attribute positive events and outcomes—namely, the success of containment and ending the outbreak—to this whole group, which includes RSLAF and the British Armed Forces.

^f That I remained in-country through the end of the outbreak could result in unconscious telescoping biases, as events, challenges, and frustrations from earlier in the outbreak may be emotively interpreted through a lens of ultimate success.

^g As referenced elsewhere, this was written up and published in a peer-reviewed academic journal which is included in this thesis’ appendix (Appendix A-1, pages 245–245).

should have a strong history of C2 and preferably civil-military collaboration, as well as relevant technical or medical training and preparation.⁴⁷²

As part of this undergraduate thesis, I also conducted original qualitative research in the form of a fairly straightforward survey of 27 DSOs in Port Loko District and 16 DSOs in Kambia District.^h While the survey was quite broad, several questions directly asked DSOs about the degree of perceived involvement, care, receptivity, and support they had received from the British and Sierra Leonean militaries. Second only to GOAL,ⁱ RSLAF was identified by DSOs as a more caring, involved, receptive, and supportive group than any other organisation. Incongruously, when DSOs were asked which organisation was the single most important to them successfully completing their work in the Ebola outbreak, the overwhelming majority listed GOAL,ⁱ but none listed RSLAF.

There were also two questions where DSOs were asked to freely write their answers:

- What is something the (British forces /RSLAF) did very well?
- What is something the (British forces / RSLAF) could have done better?

In retrospect, it is a shame that I did not choose to properly analyse the freehand answers that were given (focusing instead on the quantitative survey data), as a quick glance at them now is telling: RSLAF was commended by a majority of DSOs for providing security to staff, securing quarantined homes, and running checkpoints (with a smaller number of respondents also expressing thanks for RSLAF's technical support and coordination in the response);⁶³⁰ the British Armed Forces was commended by a majority of DSOs for listening and communicating openly with them, for providing technical and logistical support, and also for providing equipment and funding.⁶³⁰ Various criticisms were also expressed: RSLAF was criticised by approximately half of DSOs for getting involved in the response too late and ending their support too soon and for not recruiting, training, or building capacity amongst civilian personnel;⁶³⁰ the British Armed Forces was criticised by somewhat more than half of DSOs for not providing sufficiently comprehensive, sustained, or direct support to the response,^j for not providing DSOs security in the field, and for not offering scholarships, adequate training, or capacity building to DSOs.⁶³⁰

That I asked these questions suggests I understood the central role that the British and Sierra Leonean militaries had in Sierra Leone's Ebola response, and that I was curious to understand the degree to which ERWs considered those roles important and helpful or deleterious to their daily activities. That I considered the militaries' roles as sufficiently important to include them amongst only eight relevant groups for the DSOs to choose from is also telling (though, even in retrospect, this is more or less fair).

^h Ethical approval was sought and granted for this research project by the Social & Behavioral Sciences Internal Review Board (IRB) Office at the University of Chicago.

ⁱ As I had worked for GOAL this is very possibly the result of courtesy bias.

^j Several of these statements were quite direct, such as: *they should have taken a leading role, they should have occupied all the districts and chiefdoms in the country; they should provide more support to all the pillars; and they could stay longer to see that the fight is over* (various DSOs).⁶³¹

Also notable is that I chose to commit one of only thirteen recommendations in my undergraduate thesis to call for response leaders to have “a strong history of C2”—a militarised term I first heard in Sierra Leone—and that “preferably” these leaders should have a civil-military background in addition to other expertise.⁴⁷²

At the time, I do not believe that it occurred to me quite how unusual the civil-military dynamic was in Sierra Leone’s Ebola response, nor was I fully conscious of quite how much it interested me. I just felt that it was important, and whether or not that was problematic (or even particularly noteworthy) was not yet something to which I had committed focused attention.

Starting at LSHTM and formulating this research topic

When I started at LSHTM in the autumn of 2016, I was committed to researching some facet of the 2013–2016 West Africa Ebola Epidemic, but I did not immediately consider investigating the role and perception of the British and Sierra Leonean military contributions therein. In fact, in my application to LSHTM, I said I wanted to examine the effect of the outbreak on access to maternal health services (in line with my prior work in South Sudan). As referenced above, first peer-reviewed academic journal article while registered at the school was on overcoming operational challenges to case investigation in Port Loko and Kambia districts during the outbreak, which included only one brief reference to how DSOs relied on RSLAF’s navy boats to conduct disease surveillance in Kambia District’s numerous riverine areas.⁶³²

While this article’s discussion of the militaries’ roles was thin, it does focus on “district level coordination and operational structures, successes, and failures”, and makes a strong argument that deference to technical epidemiology over logistical and operational needs had a strong and negative impact on the efficacy and efficiency of Sierra Leone’s Ebola response.⁶³² Accordingly, the article calls for the need to deploy operational expertise in addition to technical and medical expertise to public health emergencies.⁶³² Developing this article reinforced my own thinking on the need for and value of effective leadership and coordination in the response, which had not seemed to come from the WHO or the Ministry of Health and Sanitation (MoHS). The WHO Special Representative to the Secretary General (SRSG) in the Ebola response, Dr. Bruce Aylward, admitted as much, saying: “[the WHO is] an organisation that was not designed to be an operational field-based organisation... play[ing] such a role”.⁷⁹

I continued thinking about where coordination in the response had come from, and it occurred to me—as it evidently had, however obliquely, during my time in Sierra Leone—that I felt the British and Sierra Leonean militaries were effective coordinators and operational partners at a time when that skillset was desperately needed and when no other group seemed fully capable or willing to ‘take the reins’. This struck me as a fundamental and crucial insight, despite the fact that a cursory review of the literature found only one paper directly speaking to this phenomenon.²⁰ I found this lack of evidence on an issue I

deemed centrally important to be quite intriguing, and I quickly decided to focus my efforts and study towards understanding this civil-military issue.

Work with Chatham House

These ideas matured substantially when an opportunity arose through LSHTM Professor David Heymann to contribute to (and in some ways define) an upcoming Royal Institute for International Affairs (Chatham House) roundtable event held in March, 2017. The roundtable already had funding, but there was no specific agenda or plan for it. I had a reasonable amount of discretion to define who I wanted to invite, and was given leeway to set the meeting's agenda. Therefore, I decided to use the roundtable as a platform for pulling together a number of key civilian and military stakeholders from the 2013–2016 West Africa Ebola Epidemic in Sierra Leone with a view to start addressing this research gap.

The meeting's primary objectives were to:

- “Identify those aspects of the Ebola response which, if addressed, would have enabled more effective civilian-military cooperation and response;
- Consider the spectrum of a future UK response to an infectious disease outbreak in sub-Saharan Africa; and
- Explore the acceptability, potential and ability of a UK contribution to a civilian-military response, in line with the recommendation of the International Health Regulations (IHR) review committee that military medical teams be available for deployment to a significant outbreak”.²⁷¹

As the event was held at the Royal Society, it was heavily UK-centric: the Foreign & Commonwealth Office (FCO), UK MoD, DfID, Permanent Joint Headquarters (PJHQ), Public Health England (PHE), and the SU were all represented. In addition, there was also representation from three intergovernmental organisations (IGOs), four (I)NGOs, five academic institutions, one private company, one additional think tank, the US Armed Forces, and Sierra Leone's National Ebola Response Centre (NERC). In total, more than fifty individuals representing 20 organisations convened for the roundtable.

As there was so little literature on the role and perception of military contributions to the outbreak, this roundtable served as not only a mechanism for defining a set of key research questions and identifying research gaps to be considered for this thesis, but also for building a preliminary list of prospective interviewees. I documented this discussion in the Chatham House meeting report *The Next Ebola: Considering the Role of the Military in Future Epidemic Response*, which, as a core and foundational component of the background research conducted for this thesis, is discussed in the review of the literature (Chapter 3, pages 39–64) and is also included in the thesis' annex (Appendix A-7, pages 373–384).

Other relevant experiences that inform my perspective

In addition to my personal and professional experiences in Sierra Leone; the development of my thinking during the production of my undergraduate thesis; and the refinement of the topic at the Chatham House event, I have had several other relevant experiences informing my perspective on the research topic that bear mentioning.

Deployment to the 2018–2020 Kivu Ebola Epidemic

On August 1st, 2018, an Ebola outbreak was reported in North Kivu, Democratic Republic of the Congo (DRC). I found an opportunity through the Global Outbreak and Response Network (GOARN) to support the WHO's work as an epidemiologist. I arrived in Beni, my first duty station, on Christmas day.

I was promptly given a radio, a bulletproof jacket, and a blue helmet—and I promptly needed all three: on Boxing Day, the national government decided to cancel the upcoming presidential elections in North Kivu, claiming that the Ebola outbreak made it too unsafe for people to vote. This was very convenient for the government in power: North Kivu and Ituri were (and remain) the opposition stronghold. The provinces are deeply traumatised by and untrusting of then-President Joseph Kabila, his party, and his political allies. Fighting broke out almost immediately in and around Beni, including in the streets surrounding my UN Peace Enforcement (MONUSCO)-protected hotel.

I had been in DRC for all of two days, and—to put it in the mildest possible terms—my doctoral research had already been brought sharply into focus. Here—especially evident following the decision to cancel the presidential elections—the military was an arm of a corrupt and deeply undemocratic and authoritarian government. Meanwhile, despite the Congolese army's (FARDC's) long and credible record of human rights abuses and violence against vulnerable and generally peaceful communities, MONUSCO—visually inextricable from civilian UN actors and infrastructure—had a mandate to support them. MONUSCO may have been fighting the Allied Democratic Forces (ADF) (a terrorist group that had long antagonised and committed hideous atrocities against local people), but they were doing so in support (and with the permission) of the national government. Nevertheless, the WHO (and therefore I) relied on MONUSCO and the FARDC to serve as armed escorts, to fortify hotels and offices, and to deliver supplies through their airstrips and logistics hubs scattered across eastern Congo.

Things took a significant turn when MSF's two ETCs were attacked by an NSAG within a few days of one another, and the organisation understandably made the decision to evacuate their staff and depart the country. Herein lay the painful but unavoidable reality: MSF was not willing to place armed guards outside their ETCs, but they were not willing to remain *in situ* without armed protection. There was no alternative but to leave, and, with MSF gone, no other major (I)NGO was willing to sustain operations in the Butembo area. The WHO could sustain the risk only because MONUSCO had trained peacekeepers and tanks and armoured vehicles and helicopter gunships. And then, 10 weeks later, on April 15th, 2019,

the WHO epidemiologist Dr. Richard Mzouku was assassinated. I was a ten-minute drive away at the time, listening to everything unfold in the radio. And there was absolutely nothing that I or seemingly anyone else could do.

I would love to summarise these experiences and those that followed into something approaching cogency, academically lensed and framed by the topic of my thesis.^k Ultimately, even writing this chapter now—more than 18 months later—I am too upset to think or write in that way.

What I do remember, and what does feel relevant, is that I felt safer for MONUSCO and the FARDC's protection. I felt safer being in a DfID-provided armoured car day in and day out. I felt angry at what I perceived to be the hypocrisy of (I)NGOs running treatment centres that refused armed protection until they really needed it, then pleaded with me to arrange for troops and armoured personnel carriers to come to the rescue them when 'push came to (violent) shove'. I felt thoroughly aware of how the presence and actions of these armed actors drove the distrust and violence that we were facing, and could think of absolutely nothing that might break this most vicious and violent of cycles. The Ebola response could not survive without weapons to defend it from the anger those same weapons produced. But, what were you supposed to do when the lives of staff and the lives of patients very much hung in the balance? There was a fatalistic sense that the response would not abandon a city of almost 2 million people facing Ebola's lethal grip, even if its stubborn presence could be at nothing short of literal gunpoint. The complexity and controversy of the thesis' research area could not have been brought into starker relief. The outbreak finally ended on June 25th, 2020.

Brown University and the *Civil-Military Interactions in Conflicts: Best Practices and Perceptions* research project

In 2018, I attended the Civilian-Military Humanitarian Response Workshop and associated Research Symposium on Civilian-Military Humanitarian Coordination in Providence, Rhode Island. The annual workshop and research symposium is jointly organised by Brown University, the US Naval War College (NWC), and the Harvard Humanitarian Initiative (HHI). There, I met a number of practitioners and researchers interested in civil-military dynamics during humanitarian and public health emergency response. A small group of us decided to apply for a US State Department's Bureau of Population, Refugees, and Migration (PRM) call to conduct relevant research.

^k Many of these experiences and lessons learned were presented and recorded in a seminar at LSHTM (alongside my dear friend and LSHTM DrPH candidate Gillian McKay) in June, 2019 titled *Ebola in conflict: Field perspectives on response strategy and implementation in DRC*.⁶³³ Further, I documented some of my lessons learned in a Guardian opinion piece alongside Gillian and PhD supervisor Susannah Mayhew,⁵⁰⁰ a version of which was submitted to and accepted by a parliamentary review for how the UK government could improve their COVID-19 response.⁶³⁴ My experiences were also documented in the Netflix documentary 'Pandemic: How to Prevent an Outbreak' (in my role assisting the WHO Incident Manager, I facilitated the documentary team's visit to DRC, and was featured in several episodes).⁶³⁵⁻⁶³⁷ I also had the privilege of privately briefing the Archbishop of Canterbury with DfID and LSHTM colleagues on the Kivu Ebola Epidemic and the prospective role that the Anglican Church might play in helping drive locally led responses to Ebola and Ebola-related community needs.

The research project—titled *Civil-Military Interactions in Conflicts: Best Practices and Perceptions* and run out of Brown University’s Watson Institute for International and Public Affairs—was awarded PRM funding in 2018 and is expected to conclude in late 2022. The study examines three humanitarian/public health emergency civil-military case studies, and is therefore highly relevant to this thesis. The case studies are natural disaster response in the Philippines; the Syrian refugee crisis on Jordan’s militarised border; and the contributions to and effect of armed actors including NSAGs during the 2018–2020 Kivu Ebola Epidemic in DRC. The underlying objective is to examine the civil-military interaction (CMI), relations (CMR), coordination (CMCoord), and cooperation at and between each research site, with a view to identifying civil-military lessons learned, challenges, and best practice. As someone with experience working in the 2018–2020 Kivu Ebola Epidemic, I was primarily responsible for managing the DRC site, where—as reasonably aligned with this thesis—the project involved speaking with military responders, civilian responders, and Ebola-affected community members.

Therein, the project has not only further developed of my thoughts on the thesis’ research topic, but may also improve the generalisability of the thesis’ findings through the examination of three additional case studies. Further, it also serves to partially address a key limitation of the thesis (see Chapter 9, pages 214–236), as the project has systematically documented and examined the perspectives of crisis-affected community members. Findings are currently being drafted, and will include two significant research and policy reports (see Appendix B-3, pages 407–413) as well as a series of peer-reviewed academic journal articles (see Appendix B-2, pages 403–406).¹

Summarising my relevant background and experiences

The anecdotes that I included from my first arrival in Sierra Leone in late July and early August 2014 are, to me, necessary contextualisation of my positionality as it relates to this study. My sense of hopelessness, anger, and fear at this time was very real. Well into that autumn, these feelings became increasingly desperate, as friends of mine deployed to the response and described first-hand how unambiguously apocalyptic they perceived the situation to be. Only by clearly stating the depth of these emotions do I believe that I am able to fully convey the sense of relief—a first but invaluable glimmer of hope—that I felt when the British and American governments announced the deployment of their respective militaries to West Africa. To me—and to my friends in Sierra Leone watching dystopia unfold around them—the announcement was very significant.

Once I returned to Sierra Leone in January, 2015, this feeling was reinforced in many ways: things felt decidedly organised and coordinated compared with a few months prior, and I mostly perceived RSLAF

¹ Relatedly, I was also jointly awarded a small seed grant to develop a working paper titled *Civil-Military Engagement During Public Health Emergencies: A Comparative Analysis of Domestic Responses to COVID-19* that is currently being prepared for submission to a peer-reviewed academic journal. This paper is included in the thesis’ appendices (Appendix B-1, pages 245–245).

and British Armed Forces personnel as professional, effective, and efficient. In several cases, these military colleagues became friends with whom I routinely shared meals and social drinks. Therefore, I felt a kind of defensiveness when some critics later reflected negatively on what they called the unfortunate or even dangerous ‘militarisation’ of the Ebola response (see Chapter 3, pages 39–64). I realise and freely admit that my interest in this research topic stemmed, to some extent, from the incongruity of my personal perspective with this external criticism. This thesis, therefore, was not only an opportunity to provide actual data to underlie a debate that felt was quite abstracted and dissonant with my personal and professional experiences, but also an opportunity to challenge and nuance my own perspective on the issue.

In addition to my time working in Sierra Leone’s Ebola response, various personal and professional experiences are relevant to the development of this perspective: my undergraduate thesis was important to developing initial thoughts on this issue, especially consideration of the gap in operational expertise I saw in many civilian actors; my early work at LSHTM—in particular, the affiliated work that I did with Chatham House, through which I developed the thesis’ research aim, research objectives, research questions, and an initial list of respondents—was also formative.

My time spent in Sierra Leone collecting data also nuanced and built understanding of the issue at hand. The Chatham House event, for example, collected data from relatively elite actors (myself included). In Sierra Leone (particularly outside of the capital city), a number of less privileged, hegemonic, and well-documented perspectives—which are presented in the thesis’ findings—were documented. This served to augment my perspective in important ways, in that it unlocked first-hand perspectives that were relatively unknown in the literature or through my personal experience as an ERW. I came to very much appreciate the complexity of the issue at hand and the overall diversity of perspectives amongst those with intimate knowledge of the research area.

This nuancing was furthered through my deployment to the 2018–2020 Kivu Ebola Epidemic, which was a wholly sobering ‘real world’ experience during which I felt armed actors were detrimental to the Ebola response and both threatened and secured my personal safety (therein, the limits of generalising my thesis’ findings could not have been made more clear). The *Civil-Military Interactions in Conflicts: Best Practices and Perceptions* research project nuanced these considerations still further, through robust consideration of three entirely new case studies, as well as the consideration of previously undocumented perspectives, once again elaborating to me on the complexity of the thesis’ topic.

In short, I believe that my relevant experiences and background are, in many ways, inextricable from the design, analysis, and findings of this study (as is further discussed below). Therefore—as is attempted in this chapter—it is right and necessary to contextualise this study and its findings within the milieu of my personal and professional experiences. Accordingly, all reasonable efforts have been made to maintain awareness of the relevance and effect this background may have on the thesis at all stages of its

development. When all is said and done, however, this collection of personal and professional experiences is something of which I am proud—as a commitment to my research topic, but also my professional field. For experiences like those in DRC, I also see my relevant background as diverse, complicating, and thought-provoking in relation to the thesis’ themes and questions, rather than as reductive or self-limiting of my perspective. Ultimately and therein, while I strive to be conscious of not only my implicit biases (which are further discussed below), I also strive to be conscious of and grateful for the multifaceted perspective that my experiences offer.

Bias and mitigation

Taken together, my experience(s) in Sierra Leone’s Ebola epidemic and otherwise are highly relevant to the thesis’ research topic, including its conception and design; analytic process; and write-up (as described above). Therefore, continual attention to reflexivity was crucial at all the thesis’ stages. This included regular journaling and memo writing on the research themes, and relatedly, personal reflection on the material, relationships, and context (in line with Mays and Pope’s recommended best practice, as is described in Chapter 4, pages 66–94).⁶⁰⁵ As elucidated by this systematic reflexive process, it is clear that the extent and relevance of my personal, professional, and academic experiences plausibly confer various strengths to this study, and also introduce the possibility of various biases that could affect research findings.

Plausible strengths of these experiences include a more intimate knowledge of the research topic; knowledge of and access to a larger and more diverse number of respondents than could have been identified through snowballing techniques alone (this was especially pertinent for military ERWs, as no public record or contact database of those involved was found); and access to a number of locales (e.g., Kambia District was chosen as a research site due to not only my knowledge of the terrain, but also due to my ability to reside in the district without charge at my prior employer’s accommodation. This was necessary due to limited field research funds).

Plausible limitations of my experiences include selection, courtesy, and confirmation bias. Each is briefly discussed in turn.

As described above, many respondents were known personally to me. This may have influenced subject selection (indeed, as described in the methods, personal connections were proactively used to identify initial respondents, after which a snowballing technique was used). However, due to mitigating measures taken—the selection of a large and purposefully diverse group of respondents, and the overall objective of achieving research saturation—any selection bias is thought to be small in effect.^m Indeed, the number of respondents that were interviewed actually represents an overall majority of NERC and (respective)

^m This is also the case with ethical risks (see Chapter 4, pages 91–94), as well as various other limitations (see Chapter 9, pages 214–236)

DERC personnel, and there was a considerable cross-section of organisational affiliations represented (Chapter 4, Figure 3, page 74). Ultimately, while a significant number of respondents were known to me (n=38), a much larger number (n=72) were not. Therefore and as above, any selection bias in initial respondent selection should not significantly affect the research findings.

Courtesy bias is perhaps also relevant, given my affiliation with the Port Loko and Kambia DERCs, and also provided my British citizenship. That is, respondents were asked to be critical of HMG and its military, and so may have been guarded in making statements they felt could have caused offense. However, as a civilian (I)NGO worker at the time of the Ebola response (and a PhD candidate at the time of data collection), I have had no direct affiliation with HMG or its military, and there is no reason respondents would believe this to be the case.ⁿ Perhaps more pertinent is the risk that military respondents may have been somewhat restrained in recalling civil-military relationships (CMRel) challenges if those challenges had been with me personally or with GOAL as an organisation. However, at the time of interview, my affiliation was not with GOAL but rather LSHTM, which did not have any significant presence at the research sites during the Ebola outbreak, thus mitigating this potential bias. Also, GOAL was not routinely represented in the NERC, nor was the organisation significantly represented in the Port Loko or Kambia DERCs beyond my personal presence. Therefore, there were relatively few opportunities for CMRel (positive or negative) to arise with the organisation.

As with selection bias, courtesy biases are mitigated through the diversity and large number of respondents. Furthermore, the factors contributing to possible courtesy biases may also confer important research strengths. For example, access to military respondents was made significantly more straightforward through my prior relationships. Further, as related to the issue of British citizenship, HMG (including British Armed Forces) respondents were plausibly more comfortable recalling high-level closed-door conversations and divulging sensitive information to a fellow citizen (especially one known to them) than they might have been with some other interviewers.

Finally, because I had a number of positive but few negative experiences working with military ERWs, consideration should be given to confirmation bias (i.e., the tendency to search for, interpret, or favour information that supported prior beliefs). However, it should be noted that my initial research into the Ebola response (including challenges to its coordination) had scant reference to the role or perception of military actors. This may indicate a degree of researcher indifference to the thesis' research topic prior to the commencement of this study. Furthermore, because new themes were considered and incorporated as they arose through the data collection process, other respondents' critical perception of military actors

ⁿ HMG did help fund this study (see Chapter 1, page 25), however, this funding was unconditional and is therefore not considered a conflict of interest. The aforementioned service medal was awarded to any British citizen that had worked for an Ebola response organisation receiving DfID funds for more than three weeks. This means a very large number of people were awarded these medals (i.e., they are not very distinguishing). Furthermore, I did not receive the award until after the Ebola outbreak, and did not make it known to respondents.

including recollections of specific negative events were systematically explored (i.e., as there was an overall objective to achieve research saturation, these critical statements formed the basis of new lines of questioning with subsequent respondents). Accordingly—for example and as examined in Chapter 6 (pages 111–144)—a significant majority of respondents (n=70) expressed some kind of CMRel challenge during the Ebola response, which were examined at length in the findings. Moreover and as above, reflexive journaling and memoing was a systematic component of this study, which further mitigated the possible bias, as did other operational and research experiences not limited to very relevant and challenging circumstances that I faced while responding to the 2018–2020 Kivu Ebola Epidemic.

In short, reasonable efforts were made to understand and query both the strengths and limitations associated with my relevant experiences, with a focus on highlighting the former and mitigating the latter as above. The depth and breadth of my relevant experiences allowed for better access and the deepening of analysis throughout this thesis. While strengths therefore likely outweigh the (mitigated) limitations of my role(s), findings—which are now presented—should nevertheless be interpreted on the basis that both plausibly influence the thesis.

RESEARCH PAPER COVER SHEET

Please note that a cover sheet must be completed for each research paper included within a thesis.

SECTION A – Student details

Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone's Ebola Response		
Primary Supervisor	Dina Balabanova		

If the Research Paper has previously been published please complete Section B, if not please move to Section C.

SECTION B – Paper already published

Where was the work published?	N.A.		
When was the work published?	N.A.		
If the work was published prior to registration for your research degree, give a brief rationale for its inclusion	N.A.		
Have you retained the copyright for the work?*	Choose an item.	Was the work subject to academic peer review?	Choose an item.

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SECTION C – Prepared for publication, but not yet published

Where is the work intended to be published?	TBD
Please list the paper's authors in the intended authorship order:	TBD
Stage of publication	Not yet submitted

SECTION D – Multi-authored work

For multi-authored work, give full details of your role in the research included in the paper and in the preparation of the paper. (Attach a further sheet if necessary)	N.A.
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SECTION E

Student Signature	
Date	31/01/2022

Supervisor Signature	
Date	28/02/2022

Public health's bitter pill: examining military intervention in Sierra Leone's Ebola epidemic and proposing the 'political economy of expedience' paradox

Key messages

- The decision to deploy military support to Sierra Leone's Ebola response can be traced to the advocacy of a small number of individuals and the compelling alignment of a number of political factors;
- The resulting military support that was provided—in particular, the militaries' *modus operandi* as related to coordination of the response—was considered by most Ebola responders to be a valuable contribution to the overall effort to contain the outbreak;
- However, the need for militarised assistance partly resulted from a political and economic history in Sierra Leone that routinely under-empowered public institutions and local actors—structural factors which the militaries' intervention also helped to perpetuate;
- This vicious cycle—conceptualised as the 'political economy of expedience'—represents a critical paradox that should be considered inherent during militarised responses to public health emergencies.

Abstract

The 2013–2016 West Africa Ebola Epidemic remains the largest recorded Ebola Virus Disease (Ebola) outbreak. In response to the escalating number of cases in Sierra Leone in the summer and early autumn of 2014, the British Armed Forces and Republic of Sierra Leone Armed Forces (RSLAF) intervened in support of the outbreak response. Among other contributions, the militaries established and subsequently helped to lead a national network of bespoke (and inherently militarised) coordination centres, from which almost all formal Ebola response operations were organised. In order to examine the origin, nature, and effect of the militaries' intervention, 110 semi-structured qualitative interviews were conducted and analysed alongside multiple governmental documents not in the public domain obtained under the Freedom of Information (FOI) Act of 2000 (FOIA). Military support to Sierra Leone's Ebola response—the origin and organisation of which was found to result from the advocacy of a small number of individuals—was felt by most respondents to be a valuable contribution to the overall effort to contain the outbreak, especially in light of the perceived weakness of the Ministry of Health and Sanitation (MoHS) to effectively do so. However, a smaller number of respondents emphasised that the military deployments facilitated various structural harms, including for how the perceived exclusion of public institutions (as above) and other local actors from Ebola response decision making was felt to prevent capacity building, and in turn, to limit resilience to future crises. The concurrent provision of life-saving assistance and rendering of structural harm resulting from the militaries' intervention is ultimately found to be part of a vicious cycle, which this chapter conceptualises as the 'political economy of expedience', a paradox that should be considered inherent in any militarised intervention.

Introduction

In December, 2013, a young boy named Emile became severely unwell in the village of Meliandou, Guinea, near the border with Sierra Leone and Liberia.² The boy had contracted Ebola Virus Disease (Ebola), and from him, the virus would eventually spread to more than 28,000 people in 10 countries.¹ The epidemic was and remains the largest in recorded history.¹

For several months following this initial case, the outbreak was mostly limited to rural areas, and there was relatively little international attention or intervention focused on containing the epidemic.¹⁵ However, in the summer of 2014, things changed quickly, including in Sierra Leone: over the course of a few weeks, an Ebola case was confirmed in the densely populated capital city of Freetown;^{638,639} the country's Ebola lead, Dr. Khan, died of the virus;⁶⁴⁰ a national state of emergency was declared;¹⁵ the World Health Organisation (WHO) declared a Public Health Emergency of International Concern (PHEIC);⁶⁴¹ and the United States (US) Centers for Disease Control and Prevention (CDC) published modelling that suggested upwards of 1.4 million individuals could become infected by the virus within six months without a sizable intervention by the international community.⁹

On September 2nd, 2014 and in light of the escalating crisis, Dr. Joanne Liu—then-International President of Médecins Sans Frontières (MSF)—released a statement that was uncharacteristic for the international non-governmental organisation ((I)NGO): it would take

...military mobilisation by wealthy countries with biohazard expertise, not just international aid, to [help] stop the disease... The military are the only body that can be deployed in the numbers needed now and that can organise things fast.¹¹

In fact, two weeks earlier, the United Kingdom (UK) Ministry of Defence (MoD) had deployed a team to Sierra Leone with the explicit purpose of evaluating how the British Armed Forces could assist the outbreak response. By the end of September, Operation Gritrock—the British Armed Forces' Ebola response mission—had deployed the first tranche of an eventual 1,300 military personnel to the country.^{12,78}

These personnel performed an array of functions, including support to command and control (C2) of day-to-day Ebola response activities within the National and District Ebola Response Centres (the NERC and DERCs, respectively) that they helped to establish and lead alongside the Republic of Sierra Leone Armed Forces (RSLAF, organised under Operation Octopus).^{15,78–80,271} From that point in time, military contributions to Sierra Leone's Ebola response were central, as was the militaries' positionality within it.

Due to the importance of the militaries' intervention in Sierra Leone, this chapter sought to examine the processes that led up to the decision to intervene militarily (i.e., research objective 1); and to examine the nature of the militaries' intervention that followed, as perceived by civilian and military Ebola response workers (ERWs) (i.e., research objective 2).

This chapter argues that a majority of both civilian and military ERWs perceived the militaries' contributions to Sierra Leone's Ebola response to be of value for a number of reasons, including those arising from a lack of resilience amongst public institutions and local actors. It also argues, however, that the militaries' contributions served to further impede these critical (and importantly, civilian) players. That structural harms can be found to result from the provision of life-saving assistance in this case can, ultimately, be understood as part of a vicious cycle termed the 'political economy of expedience', a public health paradox that this chapter conceptualises.

Background

Several factors of Sierra Leone's recent history inform the case study in important ways, including the deleterious effects of 20th century neoliberal reforms on public institutions and public trust; the exacerbation of these effects caused by the 1991–2002 Sierra Leone Civil War; and the significant and well-resourced reform of the country's military (but not health system) that occurred thereafter.

By the 1980s, Sierra Leone was no longer able to play the US and Soviet Union off one another for aid.⁴¹ The Sierra Leonean government (GoSL) introduced austerity measures in 1977, and a series of three-year structural adjustment programmes (SAPs) followed.⁴¹ Neoliberal economic reform "became the order of the day":⁴¹ the national currency was floated, the budget was made to be balanced, subsidies were removed, and state services were privatised.⁴¹ Taken together, these reforms led to the overall shrinking of the state, which, in turn, has been associated with the weakening of its health system, both in terms of routine functioning and in its resilience against the emergence of infectious disease outbreaks.^{41,234,235} Further, these late-20th century reforms occurred alongside the narrowing of redistributive networks under President Siaka Stevens (Sierra Leone's leader from 1967–1985), and therein,

...fed into [a] political system... notorious for... rent-seeking, corruption, and related extreme inequities... [as] predicated on patronage of one power base and the marginalization of others at the expense of inclusive state institutions.⁵³⁰

This disenfranchisement and inequity, in turn, contributed to the rise of the Revolutionary United Front (RUF) and the start of the brutal 1991–2002 Sierra Leone Civil War, which caused hundreds of thousands of casualties; millions of forced displacements; and resulted in numerous human rights abuses (at the hands of both state and non-state armed groups (NSAGs)).⁴⁹

The war also caused lasting damage to the country's health system (which was already weakened by two decades of neoliberal economic reform as previously described):⁶⁹ many health professionals fled the country, and physical infrastructure throughout the country was destroyed.^{642,643} The density of community health workers (CHWs) halved,⁶⁴² for example, and a 2009 survey found government hospitals in almost total disrepair and lacking in the most basic supplies and personnel.⁶⁴³ However—and as to be further examined in this chapter's discussion—following the 1992–2002 Sierra Leone Civil War,

the British government (HMG) significantly funded and supported security sector reform (SSR) and put in place a long-term military officer training programme (ISAT) which included the permanent in-country presence of British Armed Forces personnel.¹³

No similar transformation of the health system occurred,¹⁰⁸ and by the 2010s, the imbricating confluence of post-war socioeconomic inequity and a near-collapsing health system left the country vulnerable to disease outbreak.^{240,241,275,280,281,474,530,644–646} Dzingirai *et al.* put it succinctly:

Far from being a thing of the past, the Ebola outbreak [was to] reveal... starkly how these histories continue to shape patterns of development, producing vulnerability in the region and making it difficult to respond to epidemics such as Ebola.⁵³⁰

In summary, by the early 2010s, non-military public institutions in Sierra Leone were structurally un(der)developed as part of a history of neoliberal reform, and were weakened further still by the 1991–2002 Sierra Leone Civil War. Meanwhile and uniquely, the security sector (including the national army) was newly professionalised and effectively funded.

Methods

Ethics are briefly detailed. Thereafter, the data that was collected is presented. Finally, the analytic method used to organise and examine the data are described.

Ethics

Ethical approval for this study was granted by the LSHTM Research Ethics Committee (reference #14424) and the Sierra Leone Ministry of Health and Sanitation (MoHS) Office of the Sierra Leone Ethics and Scientific Review Committee (no reference number given; approved 28 August 2017; re-approved 15 February 2018). All research was conducted according to accepted norms for ethical research, including the documentation of informed consent; the confidentiality of participation; and the anonymisation of statements provided.

Data collection

This chapter relies on the examination of semi-structured qualitative interviews (n=110) conducted over a period of two years (2017–2018). A purposefully wide array of civilian and military ERWs at Sierra Leone's chiefdom, district, and national levels were targeted, as were those at the international level (i.e., where a respondent had worked outside of Sierra Leone, but had nevertheless held responsibility for Ebola response activities within the country) (Figure 1, page 117). A particular focus was given to interviewing those who had worked in (or were otherwise affiliated with) the NERC and DERCS or other formal Ebola response architecture (e.g., the MoHS; WHO headquarters (HQ), or the UN Mission for Ebola Emergency Response (UNMEER)). This ranged from British Armed Forces and RSLAF military

personnel; to HMG, US Government (USG), and GoSL civilian employees; to those working for transnational organisations and (I)NGOs; to Paramount Chiefs.

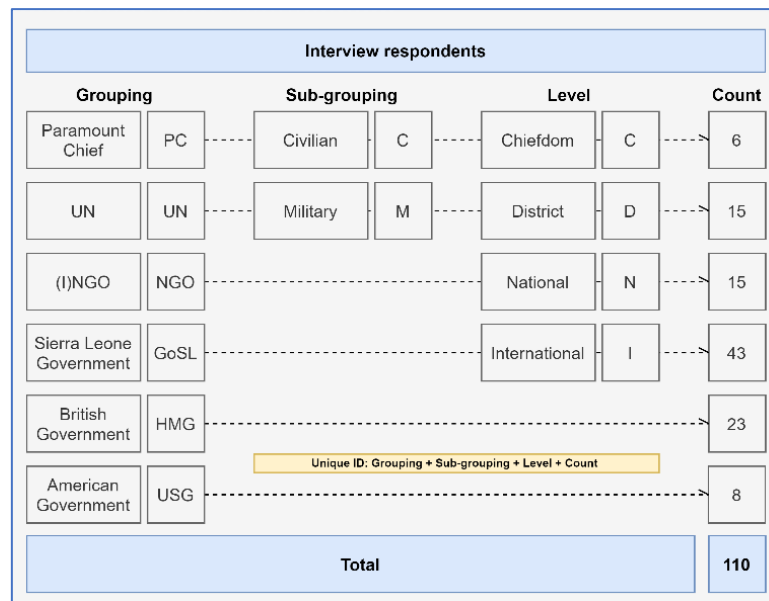


Figure 1: Interview respondents (Source: author)

To further focus respondent selection, three specific research sites were chosen: Kambia District (for chiefdom and district-level perspectives including at the DERC); Port Loko District (to complement Kambia District data where saturation had not been met); and Western Area Urban District (for national-level perspectives including at the NERC). These sites were selected due to the prior role of the lead author (STB) as a civilian ERW in these areas, which helped to facilitate access to otherwise hard-to-reach respondents and geographies. This possibly introduced research limitations as well (which are later described). A general snowballing technique was used, with the exception of the Paramount Chief grouping, for which all in the Western Area Urban and Kambia district (n=8) were targeted (Paramount Chiefs were not targeted in Port Loko District due to STB's inability to secure accommodation there during data collection). Data collection continued until saturation had been met.

Each respondent was designated a unique identifier (ID) according to their grouping; sub-grouping; level; and count (assigned sequentially), as described in Figure 1. Note, the count is respective of grouping and sub-grouping, but not of level.

Interviews—which were audio recorded and then transcribed—were conducted using a topic guide, though were conversational and open-ended in nature. The guide was developed in a manner that was primarily inductive in nature but also included some *a priori* themes identified in prior research including a Chatham House roundtable event held in March, 2017, which was (co-)organised with STB's support. Other themes were considered and incorporated iteratively as they arose through the data collection process.

To complement the interview data, documents not in the public domain were obtained through the Freedom of Information (FOI) Act of 2000 (FOIA) from the UK MoD and Department for International Development (DfID). A total of 21 documents (including various annexes) were obtained (though, as discussed in this chapter's limitations section, several were refused or only provided with significant redactions).

Analysis

Interview data were organised using framework analysis. Familiarisation was accomplished through STB's role conducting all interviews, during which extensive notes were taken, and after which, memos written.

Once data collection was complete, a code frame was developed in NVivo to process the interview transcripts. The code frame initially drew from the topic guide (in its iteratively developed final form), and thereafter, incorporated new themes as they arose through the coding process. Additionally and importantly, Shiffman and Smith's framework on factors affecting political prioritisation (2007) informed the mapping of factors leading to the decision to deploy militaries to the Ebola response in Sierra Leone (i.e., for the first research objective);⁶¹⁸ and Sheikh *et al.*'s 'systems software' and 'systems hardware' distinction (2011) was used to help map references to the various contributions made by the militaries following their respective deployments (i.e., for the second research objective).⁶¹⁹

The code frame was routinely cross-checked against the research objectives to ensure relevance. All qualitative interviews were coded using this methodology, after which the code frame was examined and nodes removed or (dis)aggregated where appropriate. Relationships between recurring themes were then charted, mapped, and interpreted for patterns and variations between research groupings.

Documents not in the public domain obtained under FOIA were rapidly appraised so as to cross-check the interview data and complement any research gaps that remained.

Results

First—in accordance with the first research objective and drawing primarily on national and international perspectives—the political processes that led up to the decision to intervene militarily in the 2013–2016 West Africa Ebola Epidemic are substantiated. Thereafter—in accordance with the second research objective and drawing primarily on national and district perspectives—the perceived nature and effect of the militaries' intervention is examined, considering first the benefits that many respondents felt it may have effected, and then some of the harms it may have facilitated.

Military manoeuvring

Various respondents that were present in Sierra Leone during the summer and early autumn of 2014 recollect this period as a particularly distressing one.^a An HMG civilian respondent recalled,

You know, in the early days, we had nothing. We didn't have [Ebola] treatment centres [ETCs], we didn't have ambulances, and we didn't have testing (HMG-C-N-12).

A notable gap—one that was to be instrumental to the decision to intervene in the crisis militarily—was the need to collect the growing number of infectious corpses that were being left to decompose in public spaces. This issue affected the contemporaneous epicentre of Kenema, where an (I)NGO respondent remembered how “*there were bodies on the street all the time*” (NGO-C-N-14); and also Freetown, where a GoSL civilian respondent remembered how “*people... [kept] dead bodies under their beds*” (GoSL-C-N-24). In short, the system of dead body management that was in place at the time was inadequate in the face of the escalating crisis: an HMG civilian respondent noted that, “*bodies weren't being collected for a week or 10 days. They were actually kind of dissolving in the heat*” (HMG-C-I-5).

In response, a small group of individuals in Freetown began to convene informally in order to discuss what interventions might be feasible to mitigate this growing and morbid issue (HMG-C-N-12; HMG-M-N-5; NGO-C-N-10; NGO-C-N-7; HMG-C-I-9; HMG-M-N-9). An HMG civilian respondent involved in these discussions recalled,

We just had to do something... and the first thing we decided we had to do was just go around picking up bodies that been sitting on streets for six or seven days (HMG-C-N-12).

The small group—which was comprised of fewer than ten individuals—included (I)NGO staff; HMG civilians; and also, notably, RSLAF and British Armed Forces personnel associated with the country's ISAT programme. The inclusion of military personnel may have been atypical, but “*at the time*”, recalled an involved (I)NGO respondent,

...all the NGOs... were swamped... and any other organisation in the world that was interested in stepping up to the party left. The military were the last people I could think of (NGO-C-N-10).

That is, many (I)NGOs had evacuated their staff from Sierra Leone as the crisis had escalated, and those that remained were overwhelmed.^{647–649} However, RSLAF was a historically empowered institution with the support of the British Armed forces, and had more than 10,000 personnel present in country.⁶⁵⁰ As the country was not at war, it was thought the institution might be able to deliver their spare capacity, which was not easily found amongst (I)NGOs at the time. Therefore, as a civil-military team, the small group designed a new system for dead body management that also put military

^a These perspectives are primarily drawn from respondents at the national level, as—unlike some areas in the country's east—Port Loko and Kambia districts were primarily affected later in 2014 (i.e., after the intervention of the British Armed Forces and the installation of the NERC and DERCS).

personnel in coordinating positions. Recalled an involved British Armed Forces respondent, RSLAF personnel were

...trained to be able to manage the... call centre, so they would be able to task the ambulances... to say 'go to X, pick up body X, take it to the cemetery'... And to make sure that... those ambulances took the bodies there, [and] there was somewhere to put them... That was very much the first thing before the DERC in Western Area [Urban District] or any other DERC came into being (HMG-M-N-5).

In doing so, the small group instigated a process that would eventually underpin the transition away from the MoHS and WHO-led Ebola Operations Centre (EOC) to a new military-led outbreak response architecture (i.e., the NERC and DERCs). This was possible because the new system for dead body management was developed in a way that soon incorporated other Ebola response functions which were peripheral but nevertheless integral to the overall system (NGO-C-N-7), despite these functions falling within the EOC's mandate. According to an involved British Armed Forces respondent, the system was

...modelled on what was the greatest need at the time. That's why the burials were the first thing, because the first problem to solve was making sure that we didn't have civil unrest. The second problem was trying to find the sick people, [to] interview them [so as to evaluate whether they met case definition], and then [to] move them somewhere else [for treatment if they did]. And then, as we got quicker at moving them, then we had to very quickly build the quarantine and food and security [systems]... Those were the first... building blocks (HMG-M-N-5).^b

The increasing co-option of other Ebola response roles and responsibilities into this small group's new system for dead body management was quite purposeful. Indeed, members of the small group recalled how there was an overall goal—one they did not initially declare—of continuing to build out the system until an entirely new coordination architecture incorporating all Ebola response functions was realised. “So, it started with burials”, recollected an involved (I)NGO respondent (NGO-C-N-7), who continued:

But we'd been planning it... [and] plotting and scheming for two weeks, mapping and planning, getting all the resources in place, working it out with RSLAF... looking for somewhere where we could base the command centre... What nobody knew is that our coup was not just going to be on burials... It was about proving the C2 concept, and then taking it all over. Nobody knew that. We were essentially trying to launch a coup against the [MoHS]... So, we started developing a model. I remember sitting in ISAT and drawing on whiteboards, things like roles and responsibilities, where we would put different organisations... [We] drew out all the process maps and then [we] got them printed onto big pieces of paper and it was like, okay. This is how it all works. We made sense of the chaos (NGO-C-N-7).

The objective of these small group meetings, in other words, was to fundamentally redesign the architecture of the Ebola response and put it under military leadership, despite the MoHS' and WHO's contemporaneous mandate.

^b To this respondent, social mobilisation and community engagement were “not going to take a body off the street, [were] not going to prevent civil unrest, [and were] not going to save anybody's life?” (HMG-M-N-5), at least not in an immediate sense. The *modus operandi* of the forthcoming command centres was beginning to take shape—a bespoke arrangement modelled not, *per se*, on military functions, but largely designed and heavily influenced by military minds drawing on their skills in command and control (HMG-M-N-5; NGO-C-N-7).

Accordingly, the involved (I)NGO respondent recalled how the MoHS and WHO “*didn’t know anything about it... [the] incognito meetings*” (NGO-C-N-7). However, the small group’s meetings were known to Sierra Leonean senior leadership, as diplomatic negotiations were ongoing between the small group, the British High Commission, and then-President Ernest Bai Koroma. Recalled the (I)NGO respondent:

Everyone was creating momentum for the change that needed to happen... Essentially, [the small group] put a pitch together to go to the government... [and HMG’s in-country Ebola lead] led this pitch [to the Sierra Leonean President] on behalf of the [small group] and got... a gentleman’s agreement between all parties [to put the new system in place] (NGO-C-N-7).

The “*gentleman’s agreement*” was only initially related to the system for dead body management (NGO-C-N-7), but once the civil-military system was online (i.e., effectively collecting and burying corpses), President Koroma was brought to visit, and the small group

...had a broader message [for him] as well. We said... ‘If it works for burials, why don’t we bring every single [Ebola response] function into this room?’ (NGO-C-N-7).

The small group’s advocacy during this visit was apparently effective, especially including the possibility of military leadership within and over the proposed architecture. Crucially, a large contingent of RSLAF personnel was also made suddenly and unexpectedly available due to Ebola-related cancellations of their deployments to UN and African Union (AU) peacekeeping missions (GoSL-C-N-27); and, as noted by a British Armed Forces respondent, by this point in the outbreak,

...you’ve gone through the Ministry of Health or national health service, you’ve gone through the police, you’ve gone through the first responders [who were there at the time], you’ve gone through calling up extra service, you’ve gone through everything, [and the crisis was still escalating]... Somebody has got to help, and there aren’t that many somebodies (HMG-M-N-5).

While the military may have been perceived to be an institution of last resort (at least in the absence of a concerted intervention by the international community), they were nevertheless at hand, something which was evident to President Koroma during this visit. Recalled the involved (I)NGO respondent:

In that moment, [President Koroma] saw the value. He recognised that the only people who were capable of moving at the kinds of speeds to cover the number of districts that were required, to give him the required result, was not only this model, but this model as staffed by RSLAF (NGO-C-N-7).

An involved British Armed Forces respondent also recalled this moment, and how President Koroma

...was keen to have [RSLAF] be seen to be doing it, because the last thing he wanted was for [the response] to look like it’s a British show [and]... with the odd token Sierra Leonean, that certainly ... [would not be] the case (HMG-M-N-9).

President Koroma, in other words, was convinced by the small group’s proposal to replace the EOC with a new civil-military architecture (with coordination centres at both the national and district levels), but felt

it was important that these centres be primarily led by Sierra Leoneans. Therefore, as recalled by an involved (I)NGO respondent,

...that's what we did... [We] continued to build the processes and the systems in the command centre until we built a series of SOPs [standard operating procedures], and that is what was sent out to all the districts. So, everyone [in the country] essentially ran this model that we had written... [and with one exception, the command centre heads] were all RSLAF or UK military (NGO-C-N-7).

Importantly, this proposed model included the support and close cooperation of the British Armed Forces, more so than the small number that were associated with ISAT. Therefore, the deployment of additional British Armed Forces personnel was needed (also for the build of ETCs and other proposed contributions), which required the approval of then-British Prime Minister (PM) David Cameron. Accordingly—in parallel to the small group's advocacy in Freetown—discussions on HMG's prospective role in response to the escalating Ebola crisis were occurring within the Cabinet Office Briefing Rooms (COBR). According to an HMG civilian respondent who was participant in these discussions:

I think people underestimate how much of a trigger was the fact that the British government was then going have to decide, okay, do we close borders down? Do we isolate Sierra Leone? And do we keep people away? Or do we engage in responding to this emergency? And if so, what is that engagement going to look like?... The UK took the strategic decision... quite early that, essentially, the UK border in public health terms was in Sierra Leone as far as Ebola was concerned... That justifies quite a lot of intervention and quite a lot of resources being put into it... Basically, [it was understood that] the UK would need to take a strategic decision to underwrite the international response... There had to be a sort of all-weather guarantee that the platform would work (HMG-C-I-9).

Data thus indicates that there was a growing perception within the Cabinet Office that the UK was at risk, particularly due to the significant presence of Sierra Leonean diaspora living in London (due in part to the country being a prior colony of Britain's); and the possibility of British ERWs contracting the virus in Sierra Leone and returning to the UK for medical treatment (as had first occurred in August, 2014).⁶⁵¹ As summed up by a British Armed Forces respondent, it was increasingly felt within the Cabinet Office that “*the risk of people coming from there to here was higher than getting involved over there*” (HMG-M-N-5), and therefore, that a significant intervention by HMG was required (though its exact form was not yet decided).

Then, towards the end of August, MSF's International President met with then-US President Barack Obama, and the following day, the British PM. In these private meetings, recalled an HMG civilian respondent, “[MSF] *said that they wanted the military logistics and command system to be put in place to try and help with this work*” (HMG-C-I-4). Another HMG civilian respondent recalled how MSF also informed the PM

...that they were going to go public... on both... BBC Breakfast News and on [the] radio... [with their request] for [British] military support to the crisis in Sierra Leone (HMG-C-I-11).

On September 2nd, 2014, they did so.¹¹ This advocacy by MSF—to key decision makers privately, as well as publicly to an American and British audience that was increasingly alarmed by the escalating crisis—

effectively shifted the ongoing COBR discussions where it was being decided how HMG should intervene. An HMG civilian respondent recalled how, suddenly, and

...very much directly from... the PM... was a direction... to [HMG] departments to say, basically, 'get with the program... this is a genuine threat to the UK. All departments are hereby directed to... work together to deliver a solution as best we can at this moment in time'... [Civil servants] went from going into [a] meeting looking at perhaps a 50-bed hospital or [ETC for Sierra Leone], but... came out with the direction from the PM that he wanted to see 600 beds. And so, obviously, that had the result of a massive ramping up in scale and capacity that was being allocated to this particular response (HMG-C-I-11).

This was a sudden and significant scale-up of HMG's proposed intervention, and—in accordance with MSF's advocacy and the small group's discussions in Freetown—it was felt amongst key decision makers in the Cabinet Office that “*the only way [for HMG] to do that was with the [British] military*” (HMG-C-I-9).

Taken together (and as found to be compatible with Shiffman and Smith's list of factors affecting political prioritisation),⁶¹⁸ both RSLAF's and the British Armed Forces' intervention in Sierra Leone's Ebola response was all but assured, as actors were aligned and mobilised; ideas were internally and externally framed in convincing ways; the political context was ripe; and the issue characteristics were perceived to be urgent and to have credible indicators. Accordingly, leaning on the long-standing relationship between HMG and GoSL (HMG-C-N-13), the UK was to become—as written in documents not in the public domain obtained under FOIA—“the framework nation for [the] international response to [Ebola] in Sierra Leone”,⁶⁵² with a significant component of this support coming from the British Armed Forces in support of RSLAF (Table 1).

Date	Event
Early September, 2014	HMG officials determine the British Armed Forces are best-placed to provide not only the treatment beds that the PM has called for, but also to implement the new civil-military coordination architecture being proposed by the small group that President Koroma favours. ¹²
Mid-September, 2014	HMG formally announces the Joint Inter-Agency Task Force (JIATF)—a DfID-led civil-military body for coordinating HMG's interventions—with the British Armed Forces component organised under Operation Gritrock. ^{12,653} These HMG structures purposefully mirror and integrate with GoSL's national response (Figures 2 and 3, page 124).
End of September, 2014	The main British Armed Forces contingent arrives in Sierra Leone. ^{12,c}
Mid-October, 2014	The NERC—at the direction of President Koroma and under the leadership of Sierra Leone's Minister of Defence—formally supersedes the EOC's authority (therein completing the small group's goal of removing the MoHS and WHO from leadership of the Ebola response). ^{12,92,654,655}
November–December, 2014	A network of constituent DERCs—which are led by civil-military Command Teams—are established, thus removing district leadership from the respective

^c Notably, the proportion of British Armed Forces personnel that were eventually deployed to Sierra Leone was very substantial when compared with the number of HMG civilians (approximately 1,300 compared with approximately 200).^{78–80}

District Medical Officer (DMO) and District Health Management Team (DHMT)
(with the exception of Kono District).^{12,92,654,655}

Table 1: Timeline of initial military intervention in Sierra Leone's Ebola outbreak, according to documents not in the public domain obtained under FOIA

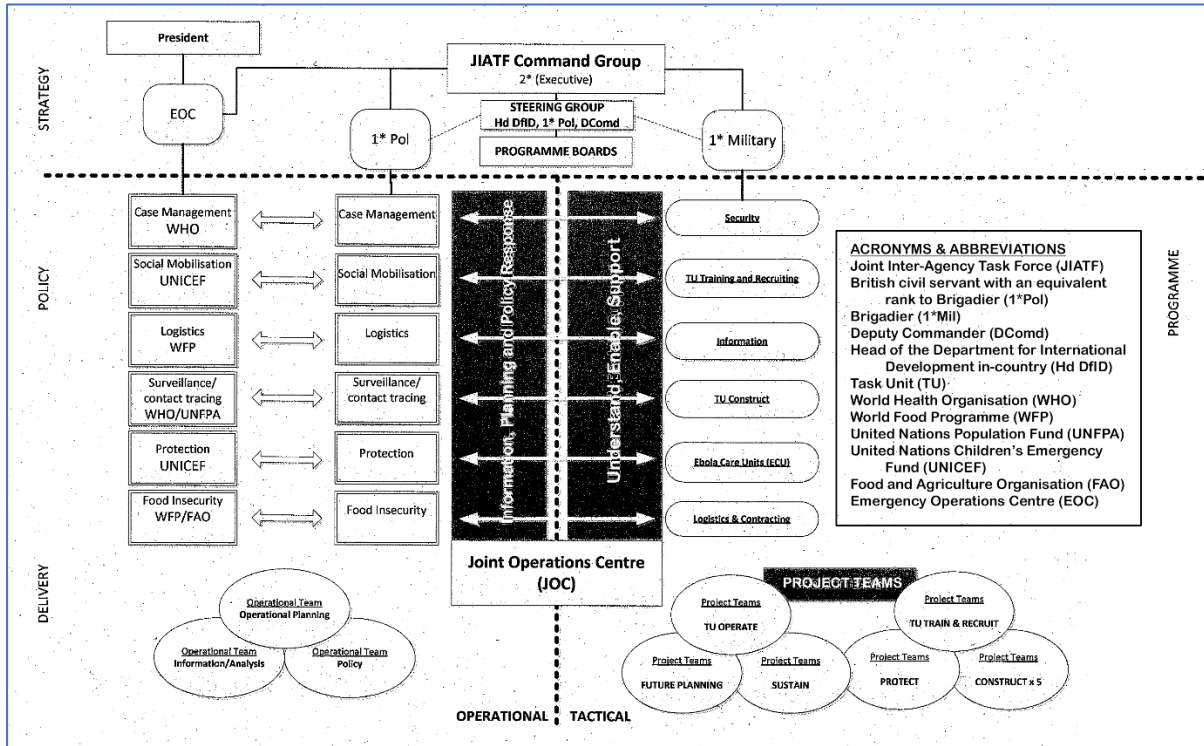


Figure 2: How JIATF linked with the pre-NERC EOC according to documents not in the public domain obtained under FOIA (edited by author for clarity)⁶⁵²

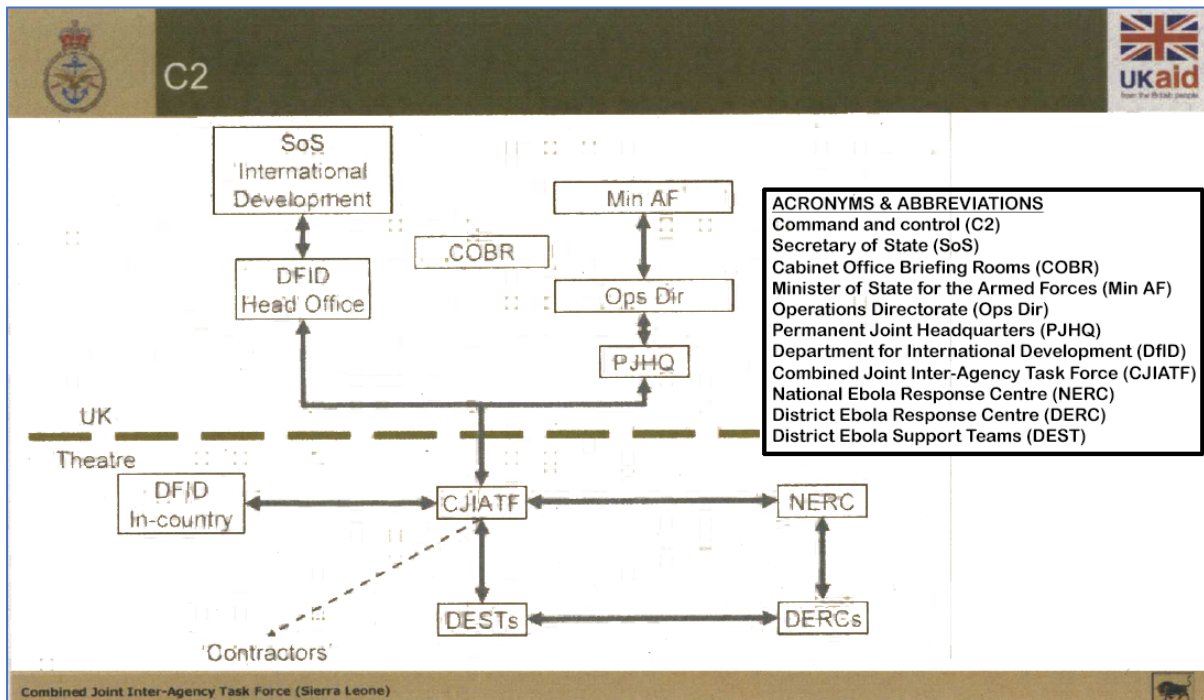


Figure 3: How the UK MoD linked with JIATF and the NERC according to documents not in the public domain obtained under FOIA (edited by author for clarity)⁶⁵³

Military commendation

Following their initial intervention in the late summer and autumn of 2014 (Table 1, pages 123–124), respondents noted various contributions by the British Armed Forces and RSLAF to Sierra Leone’s Ebola response. Drawing on Sheikh *et al.* (2011),⁶¹⁹ these contributions can be categorised as part of the militaries’ systems hardware and systems software (although hardware and software are closely interrelated in practice). Here, the former and then the latter are described, thus informing the subsequent examination of various positive effects these contributions were perceived to have (the subsequent section will then consider potential harms). Discussed in turn, this includes the creation of an enabling environment that catalysed the intervention of civilian ERWs; a clarity of purpose that came into effect through the NERC and DERCs; a general complementarity between military and civilian skill sets; and a military-military complementarity that existed between the British Armed Forces and RSLAF.

Military systems hardware

Respondents referenced various tangible kinds of support provided by the militaries during the Ebola response. Derived inductively, these included: contributions to the hard sciences; medical services; technical support; logistics, resources, and personnel; and engineering (Figure 4). Also—controversially, alongside the police, and limited to RSLAF—respondents referenced security to ERWs and the enforcement of public health measures including quarantine as a contribution. Further detailing each of these systems hardware contributions is beyond the scope of this chapter (they are also described elsewhere in the literature),^{16,20,656} but they were nevertheless referenced frequently by respondents and collectively represent an important component of the militaries’ intervention in Sierra Leone’s Ebola response.

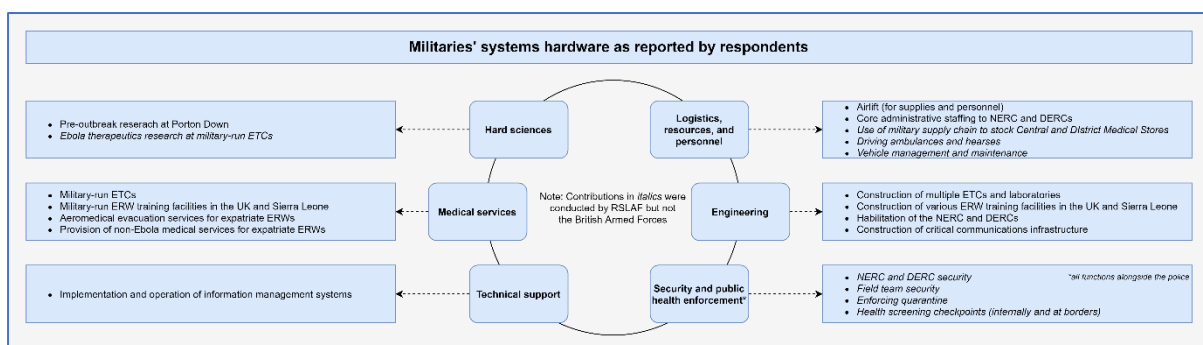


Figure 4: Content of role and support provided by militaries to the Sierra Leone Ebola response as reported by respondents (Source: author)

Military systems software

In addition to these forms of tangible support, various respondents also noted several positive aspects of the militaries’ intervention which were related to a way of working and organisational culture, including an agreeable military manner, mindset, and *modus operandi*—i.e., the militaries’ systems software (also derived inductively, Table 2, page 126). In other words, most respondents noted that the militaries delivered not

just goods and services, but also embodied (and, as examined in subsequent chapters, in some ways acculturated) a certain way of working that many found compelling under the urgent circumstances.

Table 2: Militaries' systems software as reported by respondents	
Description of the military form that was perceived by respondents to represent a positive contribution	Frequency (/110)
Compatibility with civilian ERW working culture; positive and complementary civil-military relationships (CMRel)	96
General sense of professionalism; technical expertise	56
Making others feel safe and secure (as distinct from providing security <i>per se</i>)	43
An apolitical nature (note: while 11 represents a small proportion of the overall number of respondents, it is significant, due to the fact that 55 respondents specifically criticised various civilian ERWs for prioritising politics or business interests over containing the outbreak, or, for being engaged in some kind of corrupt practice. This is despite the fact that respondents were not explicitly asked to speak to civilian ERW limitations. Therein, this finding contrasts significantly with how respondents often characterised civilian ERWs)	11
Exhibiting friendliness, humanity, and empathy	49
Flexibility	19
Skills in C2; organisation; planning; preparedness	85
Acculturating discipline; efficiency, time management, and focus; a hard-working attitude; and 'just getting on with it'	71

Table 2: Militaries' systems software as reported by respondents

Creation of an enabling environment

The militaries' systems hardware and systems software contributions were perceived by respondents to have various important and positive effects on the Ebola response. Of significant note—particularly amongst respondents who were present in the outbreak's earlier days, i.e., before and during the transition to the military-led NERC and DERCS—is the way the militaries were felt to create an enabling environment in which civilian ERWs could more safely, significantly, and effectively intervene.

This was particularly the case for the Ebola and non-Ebola medical backstop the militaries provided to national and expatriate ERWs (with some services reserved for the latter): the British Armed Forces deployed a casualty receiving ship, the Royal Fleet Auxiliary (RFA) Argus, to provide non-Ebola medical care to expatriate ERWs (HMG-C-D-2); built and staffed the Kerry Town Treatment Unit (KTTU) to provide Ebola medical care to national and expatriate ERWs (HMG-M-N-6); and made the Royal Air Force's (RAF's) Deployable Biohazard Air Isolator (DAIT) available for the evacuation of the latter to Britain for tertiary care (HMG-C-N-13). Taken together, these services ensured the provision of both Ebola and non-Ebola medical care to ERWs (for expatriate ERWs in particular), which in Sierra Leone, was not otherwise dependable or of high quality. Without these guarantees, recalled an HMG civilian

respondent, “the reality was it was a real struggle to get NGOs to come and operate” in response to the Ebola outbreak in Sierra Leone (HMG-C-N-14).

The most significant effect of these specific interventions was not, *per se*, for the delivery of healthcare services directly (for example, only a small number of ERWs were eventually treated in KTTU (USG-C-I-5), and almost none received care at RFA Argus (USG-C-N-3)). Rather (and as to be examined at length), it was for the assurance—both psychologically and logistically—that the availability of these services was perceived to effect. Many civilian ERW respondents who were either present in Sierra Leone in the autumn of 2014 or considering deploying to the response around this time echoed this notion (especially expatriate respondents, because as above, many of these military-supported healthcare services were reserved for them; further, they had considerably more choice over whether to intervene in the Ebola response when compared with national healthcare workers). For example, an (I)NGO respondent recalled how

...even if the British didn't do anything, the very fact that they were there... had a psychological effect on international agencies who suddenly felt a lot more confident and safe... For me, personally, it probably was quite significant... Suddenly... it felt like the cavalry had arrived, and if things got really bad, there would be someone there who had my back... That probably made me more confident and more willing to take on more things... So, I think there's... a psychological element... And the KTTU [UK] MoD unit... [was] part of that (NGO-C-N-10).

In other words, even if the services were never used, the simple presence of the British Armed Forces was felt by this respondent to contribute to a sense of security, so that if and when the situation deteriorated (as it plausibly could), an institution was present that was empowered to support them as needed. This was echoed by another (senior) USG civilian respondent who was responsible for approving the deployment of their agency's staff to Sierra Leone:

The role of militaries... at [KTTU]... was a good idea... I was talking to my friends and... to my staff, and saying, I'd like you to do this [i.e., to deploy to Sierra Leone]. Would you be willing? Let's have a serious conversation right now. There's Ebola transmission happening in the community, and you have to take that into account when you're making your decision. You might be exposed, even if you do everything cautiously and carefully... There was a real risk to our deployers... Being able to say that there's a level of medical care that is higher than what you generally expect... to be run [in-country]... for people that [are]... proactively putting themselves in the line of fire? That was a really important element... that was very useful and important to the success of the response because... [of] that reassurance (USG-C-I-5).

To this respondent helping decide whether or not to deploy their staff to Sierra Leone, therefore, this sense of assurance was very significant, as it was to many other civilian ERW respondents. Importantly, it was also an intentional effect of the British Armed Forces' intervention, made to encourage (primarily international) NGOs—many of which (as above) had either evacuated their staff from Sierra Leone, or had not yet intervened in response to the crisis—to consider deploying. “That is what the plan was” said a British Armed Forces respondent involved in initial high-level planning meetings, who continued:

The backstopping [of the] international community, to say, 'you can all come and help, all you humanitarians, come and do your job, we will make sure [that] if the worst comes to worst, we will look after it'. Not just Brits, but Italians, Spanish, and Germans and Dutch and whatever... That was the military goal... [and] contribution, to safeguard the UK interest and ensure that all [the] NGOs will continue working, because we would backstop [their] primary healthcare and [their] Ebola healthcare... That's why DfID said 'it's worth it, otherwise we are not going to get these other people' [to come] (HMG-M-N-5).

Various other high-level respondents involved in the decision to deploy RFA Argus, establish KTTU, and commit the DAIT agreed that the primary effect these contributions were intended to have was not the provision of care itself, but a guarantee to civilian ERWs that it was available to them were it to be required (HMG-M-N-6; HMG-C-N-13; HMG-C-N-14; USG-C-N-3; HMG-M-I-1; HMG-M-D-4; HMG-C-I-9; USG-M-I-1). For example, as recalled by a senior HMG civilian respondent with responsibility for helping to secure HMG funds for these military interventions,

...you couldn't have confidence that any other international actor including NGOs would stick with it, without a guarantee... [that] a government as a sovereign state actor would ultimately underwrite [the risks] (HMG-C-I-9).

It was, put simply by a British Armed Forces respondent, a military

...mission... that [they] made explicit... to boost international confidence so that more people would come and fight Ebola, and... be prepared to get into it and get their hands dirty with it, with confidence that we would look after them (HMG-M-N-6).

In addition to these assurances, both militaries provided important training to ERWs. For example, in the autumn of 2014, medics from both RSLAF and the British Armed Forces established an Ebola Training Academy at the University of Sierra Leone's College of Medical and Health Sciences (COMAHS). Over the course of several weeks at this (and one other) centre, military personnel trained 4,200 Sierra Leoneans in biohazard protections to fill roles across the burgeoning Ebola response (GoSL-C-D-1; GoSL-C-N-20; NGO-C-N-6; NGO-C-N-10). Meanwhile, in the UK, the British Armed Forces built mock-up ETCs within their Medical Services Training Centre, where they then trained the various civilian emergency medical teams preparing to deploy to Sierra Leone (NGO-C-N-6).

These trainings were primarily focused on the appropriate use of personal protective equipment (PPE) and infection prevention, which did draw some criticism from a small number of respondents for the ways that guidance to ETC healthcare workers (HCWs) was focused on avoiding contact with patients. For example, one (I)NGO respondent recalled how the militaries

...were training something called no-touch care, in which they were basically telling health professionals not to touch patients. And this caused a huge amount of upset amongst Sierra Leonean health professionals, who were saying 'These are our community members, these are our families, what do you mean don't to touch them? We want to give them IVs [i.e., intravenous therapy], we want to... care for them'... [The military trainers] didn't do any training in providing clinical care, it was all about how to take on and take off your gear and not get exposed (NGO-C-N-10).

However, for the thousands of other ERWs that were to perform non-healthcare roles that nevertheless required PPE—such as ETC hygienists, decontamination workers, ambulance drivers, and burial team workers—this military-supported training was crucial (civilian ERW respondents noted other forms of training they received from military personnel, such as one who received training in both information technology and vehicle fleet management (GoSL-C-N-20), and another who received training in geographic information systems (USG-C-N-3)). These newly trained ERWs were made available to staff the ETCs being built throughout the country by the British Armed Forces’ Corps of Royal Engineers, which were opened to Ebola patients towards the end of 2014 and the beginning of 2015 (HMG-M-N-5).

Taken together, over the first few months of their intervention, the militaries put in place Ebola and non-Ebola healthcare infrastructure for ERWs (facilitating their intervention); built a number of ETCs for the care of Sierra Leonean civilians; and established and ran training programmes so the latter could be more robustly and safely staffed. As summed up by an HMG civilian respondent, this was

...quite catalytic to [the] broader response... [which therefore] had a disproportionate impact in terms of enabling the rest of the response (HMG-C-N-13).

An enabling environment was thus created, in which ERWs could more concertedly and safely intervene.

Effecting a clarity of purpose

Thereafter, one of the most cited positive effects of the militaries’ intervention coalesced around the notion that they worked in a way which was different—in some ways preferably so—to many civilian ERWs. Some respondents had difficulty putting this intangible effect into words, such as an (I)NGO respondent who stated:

*I can’t really say like, ‘oh, here are the pieces of [why the militaries’ intervention was so important]’, but essentially, it’s just really small things that made the operations more efficient. Just like, a different mindset, you know? Just like... stronger, pragmatic operations that are based on efficiency and getting sh*t to work (NGO-C-D-12).*

In other words, this respondent felt that the military “mindset” represented a different way of working to civilian ERWs, that they thought strengthened day-to-day Ebola response activities through better aligning and operationalising them (NGO-C-D-12) (Chapter 7, pages 145–175, examines how civilian and military ERWs were able to effectively collaborate). Many respondents recalled this positive shift as resulting from a clarity of purpose that was effected through the application of the militaries’ mindset, which was not felt to have characterised the Ebola response prior to their intervention. For example, one (I)NGO respondent (notably, one that was atypically critical of the militaries’ intervention in much of their interview) recalled how the EOC-led response was characterised by

...political meddling... [and] corruption... [The militaries] came in and created a kind of rules-based system... Up until that point, it was complete smoke and mirrors (NGO-C-N-10).

One UN respondent described it simply as “*refreshing [to have] predictability and reliability and accountability*” that they felt had not been present before (UN-C-N-3). As above (Table 2, page 126), while a small number of respondents explicitly cited an apolitical nature as a positive attribute of the intervening militaries (n=11), a large number (across all respondent groupings) specifically criticised the way that some civilian ERWs prioritised political, business, and other personal interests over the objective of containing the outbreak (n=55). This was noted despite respondents not being asked to speak to the limitations of civilian actors during interviews.

One HMG civilian respondent argued that this difference between civilian ERWs and the involved militaries was because, for the militaries,

...there was no... political imperative other than ‘how do you help stop this potentially ravaging outbreak as quickly as possible?’... It was simple as that (HMG-C-N-14).

They suggest, in other words, that the militaries’ focus was on their given (and civilian-defined) mission objective, which this respondent felt was relatively unambiguous: end the outbreak. Indeed, documents not in the public domain obtained under FOIA state the British Armed Forces’

...intent... [was to] provide military capacity to support the UK contribution to the control of the [Ebola] outbreak in West Africa until this can be transferred to OGDs [other government departments], NGOs, or International Agencies,... [with a] strategic end state... [that] the outbreak of [Ebola] is contained and managed by... G[o]SL and NGOs with minimal international assistance.⁶⁵²

The British Armed Forces’ military mission, therein, was focused on not only ending the outbreak as soon as possible, but doing so in a way that was—at least on paper—self-limiting of their own role. Importantly, though, the relative lack of corruption and “*political meddling*” (NGO-C-D-10) that respondents associated with the intervening militaries is not, *per se*, because the institutions or their personnel were thought to be more inherently ethical, but rather is because of incidental factors. For example, many military respondents attributed this perceived difference to the fact that their salaries did not depend on the length of the outbreak (i.e., that the militaries’ incentive structure for personnel was not designed to favour the prolonging of the crisis); further—unlike a number of UN agencies and (I)NGOs—there was also no obvious institutional benefit to the militaries if the outbreak persisted (USG-M-I-1; HMG-M-D-8; GoSL-M-D-5). Relatedly, several other respondents noted the high financial cost of the militaries’ intervention, and how this meant there was a strong interest within HMG to wind down Operations Gritrock and Octopus as expeditiously as possible (as corroborated through both documents not in the public domain obtained under FOIA and the qualitative interviews, HMG was also financing RSLAF’s Ebola response contributions) (HMG-M-N-7; HMG-M-N-9; HMG-C-D-6; HMG-C-D-7; HMG-C-D-2; HMG-C-N-13).^d On this basis, in the words of one senior military respondent, as

^d Several respondents nuanced the idea that the militaries’ intervention was very expensive, suggesting instead that when one considers the inestimable financial benefit of the enabling environment that was created, the high costs associated with the militaries’ intervention may have actually been economical.

soon as a military is deployed, “*they automatically start planning their exodus*” (USG-M-I-1), which in this case meant accomplishing their mission objective of containing the outbreak as efficiently as possible.

Civil-military complementarity

Findings show that the militaries were felt by many respondents to help effect a clarity of purpose, which was applied structurally within the new NERC and DERCs (as is further examined in Chapter 7, pages 145–175, and Chapter 8, pages 176–213): regular meetings were instituted, as were SOPs and delineated scopes of work; further, lines of accountability were made explicit, previously fractured information systems were harmonised, and focal points were identified for the growing number of workstreams constituting the response’s bespoke ‘pillar system’. Through the NERC and DERCs, in other words, the militaries were felt to “*put all these elements together*” (HMG-C-D-6) under necessary accountability mechanisms. Perceived efficiency rose considerably (a closer examination of perceived weaknesses in civilian ERWs—more typical stewards in response to a public health emergency of this kind—is given in subsequent chapters).

Through their interventions within and leadership over these structures, the militaries were felt by a significant majority of respondents (n=96) to complement, rather than usurp, the interventions of their civilian counterparts, especially through the application of their perceived strengths in C2, organisation, preparedness, and planning (n=85) (though there are several important dissenting views, which are addressed later in this chapter and also in subsequent ones). For example, a senior UN respondent recalled being in a high-level meeting with military personnel where the strategic plan to contain the Ebola outbreak in Sierra Leone was being developed:

And then it hit me... What everybody forgets about military is that they bring in planners... So, [I was talking with] these [military] guys [in the room and outlining a strategic plan]... their faces lit up, and they were laughing, and I said, ‘so guys, like, what stupid thing did I just say?’ They said, ‘well, you’re the first [civilian] that sounds like us, and we understand what you’re saying.’ It was very funny, [and] then we started talking about what... the response needed to look like (UN-C-I-13).

This convivial civil-military exchange evidences how—unlike the intervening militaries as above—civilian ERWs were not thought by some to have particular strengths in planning, which was corroborated by a majority of respondents (n=59) across all groupings.

Accordingly, military ERWs often prided themselves on their relative capacity for the “*operationalisation of... [civilian ERWs] nebulous ideas into day-to-day actions*” (USG-M-I-1); and civilian ERWs often appreciated them for it, because they could effectively “*turn a [civilian ERW’s] policy into an implementation plan*” (NGO-C-N-7). Regardless of research grouping, most agreed, such as one British Armed Forces respondent who recalled how the DERC’s military personnel

...would lead... [but] try to do so in a way where everybody in the [DERC evening brief’s] audience knew that they were playing a part, and that they [were] a part of the decision making process... And... [then they would work to] just bring... together every brilliant idea and put it into a plan (HMG-M-D-4).

In other words, the DERCs' military personnel were generally perceived to be able to bring different ideas and areas of expertise together and align them in a collaborative way (another British Armed Forces respondent echoed this catalysing notion in a more cynical way, when they stated that “*where the military really added benefit was to stop people navel gazing about how to respond and just to get on and respond*” (HMG-M-N-2)).

One military respondent used Plato's Allegory of the Cave to nuance this idea, describing how they felt that military ERWs were not only effective planners, but were also able to help civilian ERWs to move past their

...very focused way of looking at the world... [by] forc[ing] them to step out of the cave and not just look at the shadows... [which] help[ed] build that... common operating picture (USG-M-I-1).

In other words, this respondent felt that the intervening military personnel were able to complement civilian ERWs' technical and medical expertise (being applied within specific pillars) by ensuring interventions considered other important operational and logistical factors. This was variously described by civilian and military respondents alike as military “*muscle*” (GoSL-C-N-17) and “*logistics*” (GoSL-C-N-26) as a counterpart to civilian “*brain*” (GoSL-C-N-17; NGO-C-N-6), “*expertise*” (NGO-C-N-7), and “*technical knowhow*” (GoSL-C-N-26). The way in which this civil-military complementarity was perceived to facilitate civilian ERW interventions was effectively captured by a GoSL civilian respondent (notably, a high-level stakeholder and member of the response's leadership), who stated:

I find it quite hypocritical and frankly endlessly condescending to say to me that in my country, when we had 163 doctors for a population of 6 million people... that we shouldn't bring in the military to help us organise and plan... Let us not forget that the army... just helped us [civilians] to organise and plan... with a kind of coherence... Before [the military arrived], doctors were up at 3:00am trying to find fuel to put in an ambulance... [We] didn't want [our] doctors to be worrying about where fuel was going to come from for the ambulance to take their patients. I just want[ed] the doctors to say, 'This patient should be taken to [the ETC]' (GoSL-C-N-17).

The militaries, therefore, were felt to take on and address a number of the logistical problems that were consuming the time and attention of medical experts who could otherwise have focused on case management and patient care (this argument also applies to any other health or public health expert who was limited by these same constraints; a later chapter, Chapter 8, pages 176–213, will discuss how this complementarity was also extended to more local actors). A British Armed Forces respondent also noted how

...civilian organisations [also] recognised the ability of the... military to organise and create that structure within which they could do their job (HMG-M-D-4)

A further key point (and as examined in Chapter 8, pages 176–213) is how a majority of military respondents recognised their own weaknesses in responding to the Ebola outbreak (i.e., the ways this civil-military complementarity was reciprocal in nature). For example, the same British Armed Forces respondent acknowledged that civilian ERWs “*have medical expertise and the humanitarian knowledge*” that

military personnel do not, but that the militaries' superior organisational skills could be “*combine[d and applied together] for the greater good*” (HMG-M-D-4). The analysis thus suggests the plausibility of closer alignment between military and medical approaches than might be typically assumed.

Military-military complementarity

A smaller number of respondents—primarily military respondents, because they were more directly affected and also more aware of the relevant history—also referenced how valuable they found not only civil-military complementarity, but also military-military complementarity resulting from relationships which were built between the British Armed Forces and RSLAF through the post-civil war ISAT programme. Respondents usually characterised this military-military complementarity as less reciprocal in nature than civil-military complementarity (i.e., that it was felt to be most valuable for the ways that RSLAF was a better civil-military partner for the presence of the British Armed Forces, rather than also the other way around).

For example, several non-Sierra Leonean respondents felt that the presence of the British Armed Forces alongside RSLAF meant that concerns related to the latter's role in the Ebola response could be more efficiently and effectively addressed (HMG-M-N-5; HMG-C-I-9; HMG-C-D-6; UN-C-I-13), with one HMG civilian respondent recalling how there was the

...ability for an officer from the British military to basically go and close the door and say to a senior commander in the RSLAF 'this is wrong'... You [were] sort of leveraging this kind of traditional respect for the British military [in the country]... That is the stuff that would be hard to contract out (HMG-C-I-9).

In other words, the respondent felt that the close history between the two militaries meant the British Armed Forces was able to hold RSLAF to account, in a way that could not have easily been delegated to a civilian agency or other partner. On this basis, one senior UN respondent said the British Armed Forces was

...the bridge that [was]... critical to make this response work... The degree of [military-military] integration was completely different [when compared with the other Ebola-affected countries]... There was a professional military-to-military respect... and none of the arrogance... that I sense elsewhere (UN-C-I-13).

The depth of the British Armed Forces' relationship with RSLAF meant HMG civilians also felt they could “*hold [RSLAF] to account*” as an extension of this military-military relationship (HMG-C-D-6) (though this presumably also resulted from the fact that, as referenced above, HMG bankrolled RSLAF's Ebola response contributions).

Notably, the RSLAF staff assigned to DERCs were not high-ranking generals, but rather lower-ranking majors and captains. Very few, therefore, would have participated in the 1991–2002 Sierra Leone Civil War, as they would have been too young. Transitively, all had entered a newly professionalised military

and had gone through training by the British Armed Forces as part of the ISAT programme where they were “*trained by the British with a very strong hand*” (HMG-M-N-5). Therefore, RSLAF personnel had not only close working relationships with the British Armed Forces, but also a professionalism in the DERCs that was—in the opinion of an ISAT-affiliated British Armed Forces respondent—“*a pure product of post-civil war British trained officers*” (HMG-M-N-5).

This is somewhat unique to Sierra Leone, and also incidental to the Ebola response: continued the respondent, “*you can’t [realise that professionalism] in a month, a week, a year... You know, that’s a generation of officers*” in the DERCs that had a calibre of sustained training not replicated elsewhere by HMG (HMG-M-N-5). Because of this, in the words of an HMG civilian respondent, the Sierra Leonean military were “*better organised, better trained, and more respected [than] some of the shambles that go on [elsewhere]*” (HMG-C-D-1). In short, the military-military collaboration found in the ISAT programme, as well as its incidental timing (i.e., that it was put in place and operated over the roughly fifteen years preceding the Ebola outbreak), was perceived by many to be fundamental to the overall success of RSLAF in their contributions to the civil-military Ebola response.

The thoroughly civil-military nature of the response in Sierra Leone means that specifically evaluating the epidemiological impact of the militaries’ contributions is not possible. Nevertheless, through the civil-military coalescence that occurred and the many military contributions that were made—including through the delivery of both systems hardware and systems software assets, which helped to create an enabling environment; effect a clarity of purpose; and realise a complementarity with both civilian and other military ERWs—the outbreak did subside. By the autumn of 2015—one year after the deployment of Operation Gritrock and the creation of the civil-military Ebola response architecture—the epidemic was largely over in Sierra Leone, and Operation Gritrock was stood down. On January 1st, 2016, the NERC and the DERCs also closed, with leadership of remaining Ebola response functions transitioned back to the MoHS. Just two further Ebola cases were identified in Sierra Leone, and the country was declared Ebola-free on March 17th, 2016.

Military maleffect

While a majority of respondents (across different respondent groups) expressed an overall positive association with the militaries’ intervention in Sierra Leone’s Ebola response, a small but significant minority (n=13) felt otherwise. Relatedly, a majority of others expressed an overall positive association, but referenced particular negative elements.

Criticism ranged from the use of militarised terminology (n=19), to a cumbersome and inflexible military bureaucracy (n=15), to feelings that the militaries should have intervened sooner (n=18). The five most frequently discussed criticisms, though, related to: instances of coercion; military force protection requirements hindering response work; a lack of relevant expertise; the duplication of work being done

(or that could have been done) by civilian ERWs; and CMRel problems either defined generically, or as resulting from incompatible ways of working with civilian ERWs, or being specific instances of harshness or dismissiveness with civilian ERWs (Table 3).

Three key themes were identified: a dismissive military attitude towards civilian ERWs; their interventions' limited inclusion of local actors; and the obstruction of capacity building amongst public institutions and local actors that could have been enabled were the response organised differently.

Table 3: Most frequently cited negative associations with the intervening militaries	
Description of the military form that was perceived by respondents to represent a negative contribution	Frequency (/110)
Coercive approaches or attitudes	33
Unnecessary work, waste, or expense	57
Generic problems with CMRel (n=43); different or incompatible ways of working with civilian ERWs (n=32); specific instances of harshness or dismissiveness with civilian ERWs (n=43)	70
Lack of a technical public health perspective or relevant expertise	45
Force protection requirements hindering response work	34

Table 3: Militaries' drawbacks and other negative associations as reported by respondents

Dismissive military attitude

As above (Table 3), during the course of the Ebola outbreak, a number of civilian ERW respondents (n=43) noted instances when their military colleagues were dismissive or unnecessarily harsh with either them or other civilian ERWs. A similar number (n=32) described how a military approach was different to a civilian approach in a way that caused some difficulty. Taken together with other problems (defined generically) with CMRel (n=43), a majority of respondents (n=70) felt there were times when CMRel were imperfect.^e

One GoSL civilian respondent working for the MoHS, for example, suggested that the militaries' intervention was akin to someone telling you how to clean your own house (i.e., that to be told how to effectively manage one's domain was deeply patronising) (GoSL-C-N-26). Further, the respondent also described how the military C2 approach that was like forcing a child to eat boiling rice that destroys their nostrils and creates sores (GoSL-C-N-26)—it was felt to be not only demeaning, therefore, but also actively harmful.

^e This is not summative, as there is a significant overlap between respondents; further and as above, while a majority expressed instances of imperfect CMRel, a more significant majority nevertheless believed the militaries' intervention was overall positive in nature and effect.

At times, respondents noted (sometimes in a positive way) how this amounted to an undemocratic approach. For example, one GoSL civilian respondent stated that

When you are dealing with civilians...they would always have to talk about democracy. 'Oh, let us do this', 'no, [let us do that]', you know?... During the time of emergency, you have to give up your own personal individual right as a matter of expedience. So, you cannot come and argue, because it is an emergency (GoSL-C-D-16).

Notably, therein, the militaries' approach was often felt to eschew a consensus-based approach (in this case, and as to be further examined in subsequent chapters, a perceived-to-be positive effect for the sake of efficiency in response to the emergency at hand). An RSLAF respondent echoed this, stating:

People would say 'democracy!'. Yes, democracy, but, if you don't enforce certain rules, it will not work properly, you see? (GoSL-M-N-16).

The way in which dissent was suppressed by the militaries' approach extended to their enforcement of public health measures including militarised quarantines, wherein military personnel were placed outside of households to ensure that quarantined contacts remained *in situ* throughout the virus' 21-day incubation period. While a large number of respondents felt this was inappropriate or potentially harmful (n=35)—indeed, a small number (n=11) recalled instances where militaries threatened to use force against or allegedly abused civilian populations—a similar but larger number (n=41) felt this was a necessary and helpful intervention.

The insufficient inclusion of local actors

When the militaries intervened in the autumn of 2014, they helped to establish the NERC and DERCs. This had many effects, a number of which were perceived to be positive (as previously described, and as further examined in subsequent chapters). However, it was also perceived to have some negative effects, including for the way that the new civil-military architecture did not sufficiently consider or systematically include important local actors. In other words, the militaries' dismissive attitude that civilian ERWs sometimes perceived (as above) also extended to a kind of structural dismissiveness inherent in the civil-military command centres that were established, in that many individuals and groups with potentially valuable contributions to make were not adequately incorporated. One GoSL civilian respondent summarised this effectively, stating that

...before the coming of the DERC and even before the involvement of a lot of partners, Sierra Leoneans opted to do [Ebola interventions] on their own... At the village level, town level, [and] section level, we [had] volunteers that were doing it free of charge to save lives and to save people. But when... the command centre came and they started... institutionalising these things... [and] recruiting these people... the problem comes out... [The DERCs] employed other new people... For those people that were in the villages [and] the towns that were doing these things for nothing—those people know their people, [and] they were left out... And the people never accepted them, and they said, 'we were doing it for nothing, and now that employment came, you have forgotten [all that we have done]' (GoSL-C-D-13).

In other words, while these informal responses to the Ebola outbreak were important interventions that mitigated the Ebola outbreak in Sierra Leone, this respondent felt they were never fully understood, incorporated, or capacitated within the militarised NERC and DERCs that were later established (a phenomenon which other scholars have noted).^{37,84,264,285} In short, the militaries' intervention was perceived by some respondents to have “*side-lined and forgot about the experts who were [already] there*” (GoSL-C-N-26).

Notably, all Paramount Chiefs that were interviewed (n=6) described feeling insufficiently supported in some way during the Ebola response, despite being compelled by the national government to intervene. Half (n=3) specifically stated that this undermined their local authority, especially for the way that the government expected them to police Ebola bylaws (PC-C-C-1; PC-C-C-2; PC-C-C-6). This included the requirement that Paramount Chiefs issue significant financial penalties to (usually vulnerable and poor) chiefdom constituents that were thought to have contravened the bylaws, which aggravated them (other scholars have noted how the Ebola response misunderstood and homogenised conceptions of local legitimacy;^{43,53,89} reconfigured local forms of power;²⁸⁵ and perhaps changed the very nature of local citizenship in Sierra Leone).^{55,251} Paramount Chief respondents also noted the relative lack of funding they were provided to run Ebola response task forces and to conduct other Ebola response interventions (PC-C-C-1; PC-C-C-2), despite the significant sums afforded elsewhere (HMG-M-N-5). Accordingly, one Paramount Chief summed up their time responding to the Ebola outbreak as a sub-district local authority (i.e., below the level that might be fully incorporated within the DERCs) by stating that “*the experience of [being a] Paramount Chief in this Ebola [response] was very pathetic*” (PC-C-C-1) (conversely, the DERCs were also found to be empowering of these and other local actors in some ways, a phenomenon which is examined in Chapter 8, pages 176–213).

Civilian disempowerment

A number of respondents felt the militaries and their (style of) intervention could be dismissive in both attitude and effect to civilian ERWs and other local actors seeking to participate in the Ebola response. Importantly and as above, this meant these actors were sometimes side-lined (e.g., the MoHS in the transition to the NERC and DERC system; and local actors that were not compensated to perform day-to-day interventions or considered for employment in the first place). As explicitly raised by some respondents, this, in turn, meant that an opportunity to build capacity within public institutions and amongst local actors was missed. Several respondents, for example, acknowledged that they felt the militaries' intervention had probably saved lives, but in removing MoHS leadership over the response, left the institution un(der)empowered and un(der)prepared for future public health crises (i.e., in the state it was in prior to the outbreak) (NGO-C-N-10; NGO-C-N-7; GoSL-M-N-6; USG-C-N-3). For example, a GoSL civilian respondent (an MoHS employee, specifically) described how the outbreak was

...like you found yourself in an ocean in a little canoe, and there are waves and a hurricane, and you are lucky to escape. Now [that] I know [it] is a hurricane, I would use a bigger boat, and I would [then know] everything that is involved [in surviving]. And I would go against the hurricane and be... self-reliant. And [we would have] a system you can be proud of, that the health system in this country can handle issues on [its] own (GoSL-C-N-26).

The respondent's statement acknowledges that the MoHS ("a little canoe") was overwhelmed by the Ebola outbreak ("a hurricane"), but that through the experience of responding to the Ebola outbreak, there was the opportunity to learn (that they "would [then know] everything that is involved [in surviving]") (GoSL-C-N-26). Had that occurred, the health system would be stronger, more resilient, and empowered (it would be able to "handle issues on [its] own") (GoSL-C-N-26). However, the respondent did not feel this had occurred:

The military is a military and anything that is health related should be in health, you understand me? You cannot mix water and oil. [GoSL political leaders] should bring every [health] component within the [MoHS] sector, and they should be able to respond to things. Because... now we have military interference in the public health emergency management... To be honest, what I believe is [that] the military is a separate institution on its own. You cannot... amalgamate it with other institutions like the [MoHS]... We don't need the military any longer... I should have confidence and I should be restoring confidence in my medical teams (GoSL-C-N-26).

Essentially, the respondent suggests that the militaries' intervention in the Ebola response was an incursion on the MoHS' professional territory (as to be examined at length in Chapter 7, pages 145–175), and therein, confidence was not built amongst the institution's civilian employees. This and related issues with the militaries' intervention were cited frequently by respondents, regardless of their research grouping: many (n=57) thought the militaries performed activities that were either being done or could have been done by civilian actors, which a smaller number (n=6) characterised as representing military mission-creep (one UN respondent recognised the difficulty of getting the "right balance between the national authorities" and military actors in the response, but also said of national actors that "when they're kind of lollygagging and not really helping... [then they should] get the fuck out of the way" (UN-C-N-3)).

Importantly, "mission creep" (NGO-C-N-6) is something that was perceived to have occurred even after the outbreak had concluded. For example, in Sierra Leone, military roles were never fully divorced from post-outbreak response architecture, such as in the country's post-epidemic infectious disease response team that is equally comprised of MoHS staff and RSLAF personnel (GoSL-M-N-15). In the UK, meanwhile, documents not in the public domain obtained under FOIA suggest some in the UK MoD consider the British Armed Forces' intervention as not just

...unique in many ways... [but also] hugely successful... [It provides] an exemplar for future inter agency operations... the cross-HMG capability to mount [civilian-military] Inter Agency operations [is now proven, and there is]... considerable utility in the use of military force within [civilian-military] Inter Agency operations such as, but not restricted to, humanitarian and disaster relief... The military delivery of [C2]... to a [civilian-military] Inter Agency force can be crucial to the success of an operation... OGD partners do not naturally have the capability to deliver [C2] platforms or

procedures... [Ultimately, as evidenced by the Sierra Leone experience] there is significant utility of [using] military force in some humanitarian environments... [and that] the use of such capabilities should always be considered.¹²

In other words, the UK MoD argues (at least internally and on paper) that the British Armed Forces' intervention in Sierra Leone—specifically their contributions to C2—was sufficiently unique and efficacious to the overall HMG mission that their deployment should “always be considered”.^{12,f} While some respondents identified and criticised this phenomenon—for example, one HMG civilian respondent said training the British Armed Forces to work in this capacity would be “*a little bit like painting the Forth Bridge*” (HMG-C-I-11), inasmuch as the structure of the military means those trained would be quickly cycled into different positions—others acknowledged the dilemma that was represented by the MoHS' failure to contain the Ebola epidemic and the underlying need for life-saving assistance regardless of how problematic the nature of it happened to be. A GoSL civilian respondent (and senior response decision maker) effectively captured this when they asked:

When you are in a crisis and people are dying, what are you going to say to that mother who lost her child?... I would like some of these arrogant and ignorant commentators to put themselves in the shoes of a mother whose child is dying, and four of her other children are already dead, her husband is dead, six of her extended family are dead... I would like these people who talked about the militarisation of the Ebola response to go and tell that woman ‘Your child is going to die because the only person who can help is a soldier, but we do not want to send a soldier’ (GoSL-C-N-17).

This point indicates that others may find the militaries' intervention to have been problematic, but that perhaps for many Sierra Leoneans, these concerns were insignificant when compared with potentially life-saving assistance.

Discussion

This chapter sought to understand the political process leading up to the militaries' intervention in Sierra Leone's Ebola epidemic and also to examine civilian and military ERW perceptions of the militaries' contributions to the Ebola response that followed.

The militaries' intervention was found to largely result from the advocacy of a small group of individuals in Freetown, alongside private and public discussions occurring at the international level. This resulted in the deployment of the British Armed Forces under Operation Gritrock in September, 2014 (to work alongside RSLAF), and the transfer of Ebola response authority from the MoHS- and WHO-led EOC to the new NERC and DERC architecture the following month (other scholars have previously described how medical humanitarian organisations were largely excluded from helping to plan this process, as the outbreak started as a global health crisis that only later became a humanitarian one).²⁵⁵

^f This is something which has occurred in the COVID-19 pandemic.^{38,39}

Respondents typically characterised the militaries' intervention within these civil-military centres as positive in both nature and effect (noting, as to be discussed in the limitations, that field research sites were affected later in the epidemic after lessons had been learned and incorporated into the Ebola response). This included the enabling environment the militaries were perceived to put in place; a clarity of purpose and mission focus that was engendered through their intervention; and an overall civil-military and military-military complementarity that was manifested.

These positive associations with the militaries' intervention, though, are predicated on there having been an overwhelming public health crisis for the militaries to respond to (i.e., simply, that the militaries' intervention in Sierra Leone only occurred because a crisis arose, so without the crisis, there would have been no praise to give). As previously discussed, in the Sierra Leone case, the risk of Ebola emerging and escalating into an overwhelming outbreak resulted from a number of pre-existing factors. These factors—exacerbated by neoliberal reforms—include the un(der)empowerment of the health system and the weakening of other public institutions; systemic poverty; and a historical distrust in public authority.^{30,37,43,259,264,335,465} As corroborated by other scholars, these factors make a country vulnerable to not only a heightened risk of a zoonotic leap, but also to the poor ability to contain an outbreak that follows.^{240,275,280,281,375,527} Accordingly, following the emergence of Ebola in West Africa, Sierra Leone's health system became quickly overwhelmed,^{258,325} national and international institutions failed to mount an adequate response,^{8,15,20,325} and local groups had little-to-no recognised capacities and were thus excluded from it.^{37,264,335}

However, in Sierra Leone, these developed weaknesses were not found in all national sectors: as previously described, following the 1991–2002 Sierra Leone Civil War, HMG—believing that a strong and professional national army was the only way to prevent another slide into civil war—assisted Sierra Leone with the post-war reformation of the country's armed services. The army was disbanded, rebuilt, financed, and professionalised.¹³ Taken together, this represented “a comprehensive transformation” of the country's armed forces (rebranded RSLAF), which was made sustainable through the HMG-funded and British Armed Forces-supported ISAT programme.¹³ Indeed, the HMG-supported reform of Sierra Leone's national army was considered so successful that it “is frequently seen as *the* example of SSR” (emphasis in original).¹³

The ISAT programme was central to the contextualisation and examination of the data in this chapter because it ensured the continuous presence of British Armed Forces personnel in Sierra Leone in the years preceding the 2013–2016 West Africa Ebola Epidemic, which significantly bolstered bilateral and military-military relationships between the two countries. This meant that ISAT personnel were on hand when the Ebola outbreak escalated in Sierra Leone (i.e., as part of the small group that re-designed the country's Ebola response architecture), and also meant that the British Armed Forces were better able to hold RSLAF to account as needed during their performance of Ebola response activities alongside civilian

ERWs. Meanwhile (as noted by other scholars), over a similar period of time to the weakening of Sierra Leone's health system and strengthening of its national army, the field of humanitarianism and public health has been increasingly securitised.^{167,176,178,243,321,322,326,497,529,657,658} Therefore, while the decision to deploy militaries to Sierra Leone's Ebola epidemic may have appeared unusual, it was arguably normative in its origin (both for the foreseeable escalation of the crisis, and for key stakeholders' selection of military actors as an expedient and viable last resort).

Further, as related to this political and economic history in Sierra Leone, the militaries' intervention was not only normative in its origin, but was—to an extent—in its nature and effect as well: as seen in the data, public institutions and local actors were seen to fail (and at times, had their authority taken away); these institutions and actors did not then have their capacity built up during the response; and their authority over (public) health issues affecting Sierra Leone was not comprehensively returned thereafter (e.g., as seen in the equally mixed civil-military outbreak response team that was established after the epidemic). Both the British Armed Forces and RSLAF, meanwhile, were seen as strong and effective partners in the Ebola response. Further, they learned important lessons, and subsequently (and successfully) expanded their roles in subsequent public health emergency responses (for example as seen in both countries' responses to the COVID-19 pandemic).^{38,659,660}

In other words, while the lack of investment in public and civilian (infra)structures in Sierra Leone prior to the Ebola outbreak was itself an exacerbating factor that contributed to the origin of the outbreak (as is also highlighted by other scholars),^{30,37,43,235,264,335,465} the data presented in this chapter reveals how the militarised response and decision making structures that were put in place by the intervening militaries—including for the various negative effects that respondents perceived in the way the militaries worked—were felt by some respondents to both maintain and contribute to perpetuation of these public sector weaknesses.

Nevertheless, despite these perceived harms, a significant majority of respondents felt that the militaries' intervention in Sierra Leone's Ebola response represented life-saving assistance. Furthermore, if one argues—as most respondents did—that this assistance helped to shorten the overall duration of the outbreak (though this received wisdom is contested by some academics), the positive effects of the militaries' intervention are further compounded. For example, shortening the outbreak (if this did indeed occur) would have conceivably helped to facilitate a return of childhood education, health services, and other public health campaigns that had been temporarily cancelled; removed various disruptions to personal and community livelihoods and thus re-opened economies; ended background stress, fear, stigma, and anxiety caused by the ongoing outbreak; and permitted billions of dollars of aid money committed to the Ebola response to be diverted to other public health causes (as was done for the subsequent Zika virus epidemic in Central and South America).⁶⁶¹

Again, however, the fact the militaries' intervention was required also underlines how such intervention can have deleterious long-term effects, if and when it is not structured in such a way that it builds capacities within public institutions and local actors, and/or is not followed by robust investment in health systems once the crisis has been contained (i.e., if the underlying status quo and vulnerabilities are allowed to remain intact). In short, a history of weakened public institutions and insufficient promotion of local populations in Sierra Leone was, to some extent, reiterated in and reinforced through the limited empowerment and inclusion of these actors within the militarised Ebola response.

Taken together, this concept amounts to a paradox this chapter argues should be termed the 'political economy of expedience': the particular political and economic context that facilitates a given crisis; informs the ways it (and the response to it) are politically prioritised; results in the selection and manifestation of an expedient form of response (which delivers life-saving assistance while also exacerbating structural harms, the overall balance of which is unclear); and that finally, serves to further normalise or perpetuate the political economy that facilitated the crisis in the first place (Figure 5).

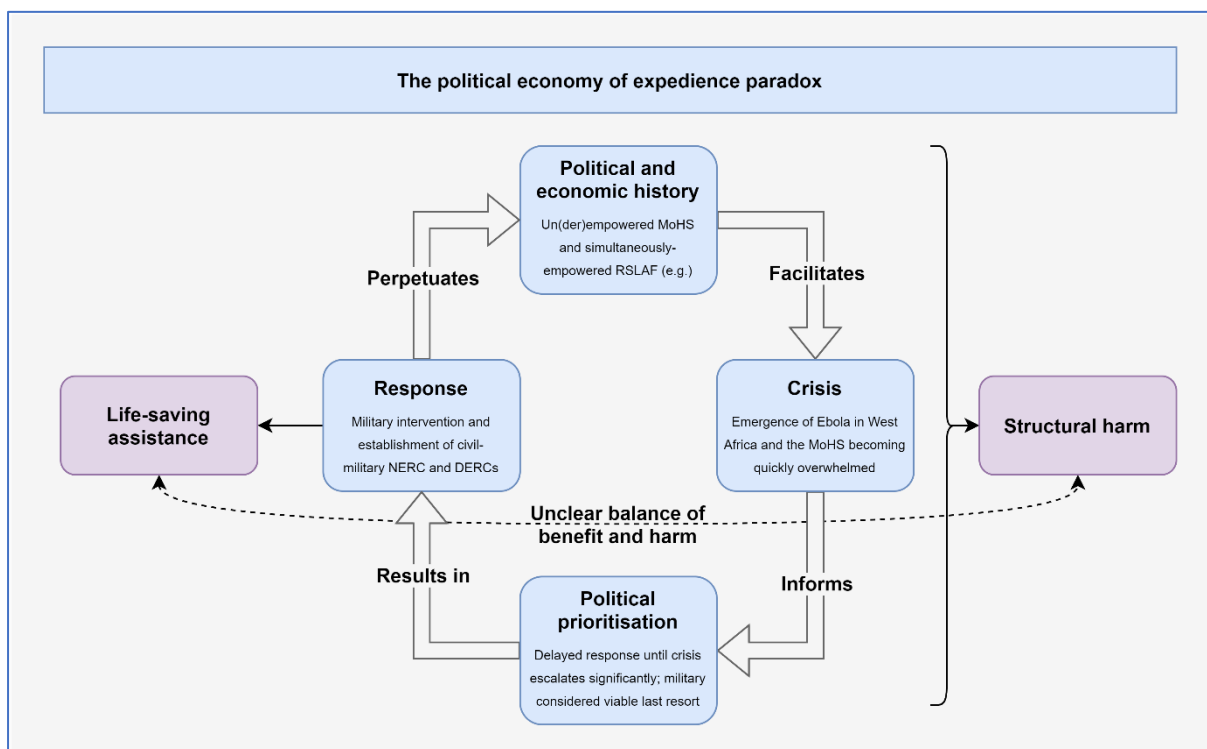


Figure 5: The political economy of expedience paradox as seen in the militarised response to Sierra Leone's Ebola epidemic (Source: author)

Summary and conclusion

By the late summer of 2014, the 2013–2016 West Africa Ebola Epidemic had reached Freetown, and cases in the country were rising exponentially. One consequential (and macabre) issue was the growing number of infectious corpses, many of which were left to deteriorate on Freetown's streets. In response—and despite the existence of the MoHS- and WHO-led EOC—a small group of civilian and military advocates convened privately to design and establish a militarised command centre to oversee dead body

management. This intervention was seen to be efficient and successful. Therefore and thereafter, the small group of advocates convinced Sierra Leone's President to fold all other Ebola response functions into a new civil-military architecture: the NERC, overseeing a constituent network of DERCs.

This change removed the EOC's civilian authority over the Ebola response and effected changes that were considered by a wide array of both civilian and military respondents to be very valuable. More specifically, respondents noted the delivery of tangible systems hardware assets; intangible systems software assets; and ultimately, the creation of an enabling environment (especially through the medical backstop that was put in place), a clarity of purpose that was effected, and an overall complementarity with civilian and military ERWs. Taken together, this was felt to significantly facilitate day-to-day interventions. Therein, the military contributions were varied and substantial, and therefore (at least as part of the wider effort), lives were undoubtably saved.

However, the perceived value and efficacy of this militarised assistance was consequent to the apparent inability of the MoHS to effectively perform their core mandate (i.e., respond to and contain the outbreak). The weakness of Sierra Leone's (public) health system is not surprising given historic un(der)development of the country's health system (exacerbated by the 1991–2002 Sierra Leone Civil War), and also given the strengthening of the national army that occurred thereafter. Furthermore, the militaries' deployment to the Ebola response contributed to these same vulnerabilities: public institutions were undermined and capacity building hindered; the militaries were empowered to be (and also seen as effective) public health emergency responders; and once deployed, many Ebola-affected community members were unable to exercise their own more local forms of public authority in response to what was, ultimately, their crisis. In other words, the militaries may have been admirable firefighters in Sierra Leone's Ebola response, but their legacy is as ones who left embers behind.

This chapter has argued that this paradox—wherein the militaries were felt to provide life-saving assistance through their intervention in Sierra Leone's Ebola response, but did so in a way that also caused (or at least insufficiently addressed) structural harm—be termed the 'political economy of expedience'. This concept is an important contribution to the analysis of public health emergency response and resilience building that could inform the design of future responses so as to maximise the benefits and minimise the harms of exogenous interventions, therein mitigating the paradox.

Limitations

Each of the limitations resulting from site and respondent selection were mitigated through the large number of respondents and their diversity (helping ensure sectional interests were not artificially highlighted); the confidentiality of participation and anonymisation of statements provided (encouraging transparency); and reflexive best practice (limiting the influence of any researcher biases).

Site selection was limited to the Western Area Urban, Port Loko, and Kambia districts of Sierra Leone. This was due to STB's past experience working in these areas as an ERW during the Ebola epidemic, which facilitated access to these territories as well as to relevant respondents. This does, however, possibly introduce limitations. Namely, these areas were affected later in the Ebola outbreak, after lessons had been learned and incorporated into the response, and more resources had been made available. Respondents' perception of the Ebola response broadly—including the militaries' contributions to it—may therefore be more positive than might be found elsewhere in the country (especially in the more marginalised east). This also introduces the possibility of courtesy bias, as many respondents were known to (and prior colleagues of) STB.

Respondent selection presents several additional limitations. For example, Paramount Chiefs were spoken to as not only local ERWs, but also as representatives of Ebola-affected communities. However, their authority—and therefore their positionality as effective representatives—is fluid and contested.⁴¹ Further, only a small number (n=6) were interviewed (though, as Kambia District is relatively small, this does represent a significant majority of those targeted for interview. Paramount Chiefs were not targeted in Port Loko District due to STB's inability to situate themselves in that district during this study's data collection phase). Other limitations include the under-representation of female respondents (21.8%) across all respondent groupings, which while reflecting the general skew of those who had worked in the NERC and DERCs, may nevertheless limit the generalisability of findings. Further, many governmental respondents were still employed at the time data was collected, which—due to the sensitive nature of the research topic, especially questions about closed-door conversations and the legitimacy and efficacy of military actors—may have circumscribed the full transparency of statements provided. Finally, as described, local actors made significant ad-hoc contributions to Sierra Leone's Ebola response (i.e., as organised informally outside the purview of the NERC and DERCs),³⁷ but the perspectives of these actors were not systematically documented for this study (i.e., respondent selection was limited to those who had worked in the formally organised response).

Regarding the FOIA documents, many that were requested were not provided, or were provided but with significant redactions. Several were nevertheless given to STB by others with access to them, which mitigated this specific limitation. Further, while official sensitive documents were provided by both DfID and the UK MoD, no documents of a higher security classification were offered (though their existence can be presumed). As documents not in the public domain obtained under FOIA were only intended to complement qualitative interviews, the effect of these limitations on research findings is minimal.

RESEARCH PAPER COVER SHEET

Please note that a cover sheet must be completed for each research paper included within a thesis.

SECTION A – Student details

Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone's Ebola Response		
Primary Supervisor	Dina Balabanova		

If the Research Paper has previously been published please complete Section B, if not please move to Section C.

SECTION B – Paper already published

Where was the work published?	N.A.		
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SECTION E

Student Signature	
Date	31/01/2022

Supervisor Signature	
Date	28/02/2022

Enmity and empathy between civilian and military Ebola responders in Sierra Leone's National and District Ebola Response Centres

Key messages

- Many people see military actors as ideologically opposed to humanitarian and public health actors, which helps to explain how and why civilian and military Ebola Response Workers (ERWs) faced initial challenges to their civil-military interaction (CMI) during the response to the 2013–2016 West Africa Ebola Epidemic in Sierra Leone;
- However, civilian and military ERWs are found to be similarly hierarchical in organisation, which helps to explain how and why they were nevertheless able to cooperate and collaborate effectively later in the outbreak response;
- This civil-military cooperation and collaboration was particularly possible for the way the adjacent hierarchies were, through their interaction, self-moderating (i.e., that military ERWs became less hierarchical in approach) and therefore complementary and co-constitutive;
- This also elucidates how civilian ERWs—and the broader architecture of public health emergency response that was manifested in Sierra Leone—are implicated in the ‘political economy of expedience’, a central public health paradox.

Abstract

On September 2nd, 2014, with the 2013–2016 West Africa Ebola Epidemic spiralling beyond control, the then-International President of Médecins Sans Frontières (MSF) made an unprecedented call for military assistance. Shortly thereafter, the United Kingdom (UK) announced Operation Gritrock, a bespoke military mission to support (and in some ways lead) numerous functions across the Ebola Virus Disease (Ebola) response. To examine the nature and effect of the civil-military relationships (CMRel) that subsequently developed between the civilian and military Ebola Response Workers (ERWs) involved in the National and District Ebola Response Centres (NERC and DERCS, respectively), 110 interviews were conducted amongst them, which were then analysed by drawing on neo-Durkheimian theory of organisations. This chapter finds that the popular perception of ideological opposition between civilian and military ERWs, and the associated extent of the former's professional territorialisation, helps to explain how and why they faced initial cooperative and collaborative challenges. However, these actors were also found to be similar in the hierarchical manifestation of their organisation, which helps to explain how and why they were later able to cooperate and collaborate effectively. Ultimately, this also elucidates how not only military but also civilian ERWs intervening in Sierra Leone's Ebola response contributed to the ‘political economy of expedience’, a central public health paradox.

Introduction and background

By the late summer of 2014, the Ebola Virus Disease (Ebola) crisis in West Africa was escalating rapidly. Containment measures were overwhelmed, and cases were proliferating in several countries. In August, the World Health Organisation (WHO) declared a Public Health Emergency of International Concern (PHEIC), and shortly thereafter, the United States' (US) Centers for Disease Control and Prevention (CDC) published an epidemiological model that suggested as many as 1.4 million people could become infected with the virus within six months without an international intervention of unprecedented scope and scale.^{1,9,641}

On September 2nd, then-International President of Médecins Sans Frontières (MSF) Dr. Joanne Liu issued a seemingly unorthodox statement calling for a militarised intervention in response to the crisis.¹¹ In Sierra Leone, international military mobilisation followed very shortly thereafter: by the month's end, the first tranche of an eventual 1,300 British Armed Forces personnel arrived in the capital Freetown as part of the United Kingdom (UK) Ministry of Defence (MoD)-led Ebola response mission named Operation Gritrock.^a British Armed Forces personnel got to work in a number of significant ways, including through putting in place both Ebola and non-Ebola medical services for intervening international non-governmental organisation ((I)NGO) staff. This created an environment which enabled the intervention of a large number of Ebola Response Workers (ERWs) (as examined in Chapter 6, pages 111–144).^b

In addition to these contributions focused on providing a medical backstop to (primarily expatriate) ERWs, British Armed Forces personnel worked alongside RSLAF to help design and establish a new and bespoke National Ebola Response Centre (NERC). The NERC—as decided by Sierra Leone's President at the time—was to be headed by the country's then-Minister of Defence in the new role of NERC Chief Executive Officer (CEO), rather than by personnel from the Ministry of Health and Sanitation (MoHS). The NERC CEO was also given the ultimate responsibility for a constituent network of civil-military District Ebola Response Centres (DERCs), which were established in each of the country's district capitals.¹⁵ As in the NERC, the DERCs removed prior authority over the Ebola response from the MoHS, as District Medical Officers (DMOs) were made part of a wider civil-military DERC Command Team.

In other words and taken together, the British Armed Forces and RSLAF played a key role in reshaping the landscape that facilitated the arrival of civilian ERWs (particularly expatriate ones), and also

^a This far outnumbered the number of UK government (HMG) civilians who were eventually deployed to the crisis through the Department for International Development (DfID)—now part of the Foreign, Commonwealth, and Development Office (FCDO)—and other HMG agencies.^{12,78}

^b Notably, this did not include the kind of interventions that Dr. Liu anticipated, namely, military medical services with biohazard experience providing medical care to local Ebola cases. While the British Armed Forces did provide such care to a small number of international ERWs in the Kerry Town Treatment Unit (KTTU), they did not staff other Ebola Treatment Centres (ETCs). The Republic of Sierra Leone Armed Forces (RSLAF) military medical services, on the other hand, did provide direct Ebola medical care to civilian populations. The majority of Sierra Leone's ETCs were operated by (I)NGOs and staffed by national and international civilian ERWs.

established the structures and helped to manage the mechanisms for organising them once in-country. Within the civil-military NERC and DERCs, these military actors worked intimately alongside—and often led—their civilian ERW colleagues.

Box 1: Defining ‘classical response actors’

The humanitarian aid and public health emergency response sector is broad and often poorly defined. Hereafter, the term ‘classical response actors’ will be used to mean the civilian (I)NGOs, transnational organisations, and state institutions that typically intervene in response to humanitarian crises and public health emergencies (such as but not limited to MSF, the International Federation of the Red Cross and Red Crescent Societies (ICRC), UN agencies, or a relevant national health authority). Despite important differences between these groups of actors, they are nevertheless the normative institutions involved and hence are grouped together (i.e., they exemplify an established and often dominant norm). The diversity of constituent actors within this broad grouping is addressed in the thesis’ discussion (Chapter 9, pages 214–236).

This model and depth of civil-military integration was controversial and unusual. Indeed, classical response actors (Box 1) and military actors often see each other as ideological foes.^c This perceived difference is characterised as one of divergent objectives (i.e., life-saving humanitarian intervention versus armed conflict), and also one of divergent methods of organisation: on one hand, militaries are characterised as “hierarchical and output-driven”;³⁴ meanwhile, classical response actors are characterised as “a loosely configured system or network of actors which coalesce around... voluntary standards, without an effective chain of command” within and between them.³⁴ Some critics argue these distinctions present “major challenges” to effective civil-military interaction (CMI),³⁴ which are generally “characterised by avoidance or antagonism”.²²¹ Others go so far as to argue these distinctions amount to classical response actors and militaries being “inherently different types of organizations”,³⁷⁴ wherein classical response actors “form the nucleus of an international civil society whose *esprit de corps* distrusts national military structures”.²²¹

One way this difference is emphasised by classical response actors is through the Humanitarian Principles of neutrality, impartiality, humanity, and independence.⁶⁶² They are frequently considered the mainstay of classical response actors’ global humanitarian activity, and are sacrosanct to its practitioners (some critics go so far as to argue that adherence to the principles, rather than the intervention itself, is what defines an activity as humanitarian).^{189,191,662} Militaries, on the other hand, are fundamentally political institutions: they are tools and implementing agencies of the state, with a mandate to assure national security interests through the threat or use of force if necessary. Therefore, while the performance of humanitarian-like work by militaries (such as disaster relief) may be humane in effect, it cannot adhere to the Humanitarian Principles, and by extension, is not considered by some critics to be humanitarian at all.^{196–198,376} This distinction between classical response actors and militaries is carefully cultivated, particularly by classical

^c Anders (2013), for example, writes that the latter see the former as “tree huggers”, and the former see the latter as “baby killers”;¹³⁵ Winslow (2002) writes that “some NGOs [describe military personnel] as ‘boys with toys’, rigid, authoritarian, conservative, impatient, arrogant, civilian phobic, homophobic, excessively security conscious, and so forth... [whereas] NGOs [are seen by military personnel] as ‘non-guided organisations’... ‘Children of the ‘60s’, flaky do-gooders, permissive, unpunctual, obstructionist, anarchic, undisciplined, self-righteous, anti-military, and so forth”.²²¹

response actors, and is also a principle of CMI detailed in international civil-military guiding documents (some limitations of these guiding documents in their application during public health emergencies are examined in Appendix A-6, pages 363–372).^{374,657}

However, the characterisation of classical response actors and militaries as dichotomous does not consider several important similarities. Notably, this includes a culture of interventionism underpinned by neoliberal power and the manifestation of hierarchical organisation (something which is specifically relevant to the Sierra Leone case study). Classical response actors therefore can—in some specific contexts—share in both objective and method with military actors.

Some scholars have pointed to these similarities in the literature. For example, many contemporary critics argue that neoliberal reforms during the 20th and 21st centuries downsized the state and its provision of public services, thus limiting their resilience to crises.^{241,530,663} In turn, states rely on classical response actors to intervene when crises do occur, thus mitigating demand for robust structural changes to the underlying political economy. Indeed, some critics argue that, as non-state organisations that can gap-fill poorly resourced and vulnerable public institutions (such as those found in Sierra Leone),^{241,530,663} classical response actors have become a “favoured” tool of the neoliberal state.²³² This became especially true following the Cold War, when a culture of interventionism rested on classical response actors was developed by elite actors in the Global North (such as seen in the Blair Doctrine, for example) to address various global crises.^{66,242,326,466,473,d} This burgeoning culture of interventionism (specifically that which was focused on health-related issues) was reinforced further still vis-à-vis the contemporaneous coupling of global health as an issue of security in the 1990s and 2000s, including through initiatives such as the 2014 Global Health Security Agenda (GHSAs).^{176,664,665} This, in turn, further encouraged intervention by classical response actors during public health emergencies (at least for high consequence infectious diseases (HCIDs) that could plausibly affect the Global North).^{176,e} Notably, this has included civil-military interventionism specifically, something which was identified in a civil-military typology (Appendix A-4, pages 340–350). The typology was subsequently validated—see Appendix A-5, pages 351–362).

In short, since the 1990s, a historical norm of non-intervention has been “if not replaced, at least displaced by the principle of intervention”.³²¹ While such interventionism by classical response actors may support crisis-affected communities, it nevertheless—and like military intervention—reflects and serves to realise the West’s dominant modes of power, interest, and preferences, and does not empower local groups who are generally excluded from this dynamic (though this does not always align with rhetoric on the need for the localisation of interventions).^{71,176,189} While many argue that the nature of this culture of

^d This presents an interesting paradox, wherein state building and stabilisation agendas occurred concurrently with neoliberal efforts to maintain the small state.

^e To some extent, this culture was codified through two UN member state-endorsed documents: the 2005 Responsibility to Protect (R2P), and the 2005 revision of the International Health Regulations (IHR). The former (global commitment) serves to “transform... this urge [to intervene] into a liberal will to govern”;³²² and the latter (international law) significantly expanded the acceptable criteria for public health-related intervention.⁶⁶⁶

interventionism should be criticised on this basis,^{215,243,326,658,667} it is a paradigm shift welcomed by many governments as well as classical response actors, who rely on it to justify their purpose and secure funding.^{64,189,191,321,326,374,496,668} Meanwhile (and as described in Chapter 6, pages 111–144), many of the same global processes significantly weakened the resilience of Sierra Leone’s public institutions over the past decades, which were further weakened by the 1991–2002 Sierra Leone Civil War. Over this period of time, the national military was also reformed, resourced, and professionalised, largely with the support and under the direction of the HMG. No such overhaul of the MoHS occurred, and in the years preceding the Ebola outbreak, Sierra Leone’s health system remained largely unimproved.^f

In sum, while militaries and classical response actors often see each other as opposed, there are a number of important similarities between them that can be identified. As this chapter intends to illustrate, a significant degree of civil-military cooperation and collaboration was therefore made possible in Sierra Leone’s Ebola response. However, despite its import during one of the most significant public health emergencies of the 21st century, there is as yet little peer-reviewed analysis of these civil-military relationships (CMRel) and their effects with a view to generating lessons learned for future public health emergency responses (though in 2017, a Chatham House roundtable event was convened to landscape these considerations. The meeting is analysed in Appendix A-7, pages 373–384). Accordingly, the aim of this chapter is to examine the manifestation and effect of CMRel that developed and evolved in the NERC and DERCs between these seemingly disparate actors in Sierra Leone’s Ebola response.

Framework

This chapter draws on the neo-Durkheimian theories of Mary Douglas (which are collectively referred to hereafter as Douglasian Theory). This body of theory was selected for its consideration of the conflict that arises between differently organised and differently ordered actors—especially hierarchical ones such as militaries and medical, public health, and (many) humanitarian actors. It is therefore relevant and useful for the examination and explanation of the CMRel that transpired between civilian and military ERWs in Sierra Leone’s Ebola response.

According to Douglasian Theory, different institutions are manifestations of one (or a mix) of four elementary forms of ‘social organisation’ that exist on a two-dimensional plane of social regulation and social integration (Figure 1, page 152).^{620,621}

^f For example, in Sierra Leone’s 2013 budget (the most recent comparative data available at the time of writing), the MoHS received approximately one third of the funding that the national army did, despite the country being at peace and in dire need of a more resilient health service.⁶⁶⁹

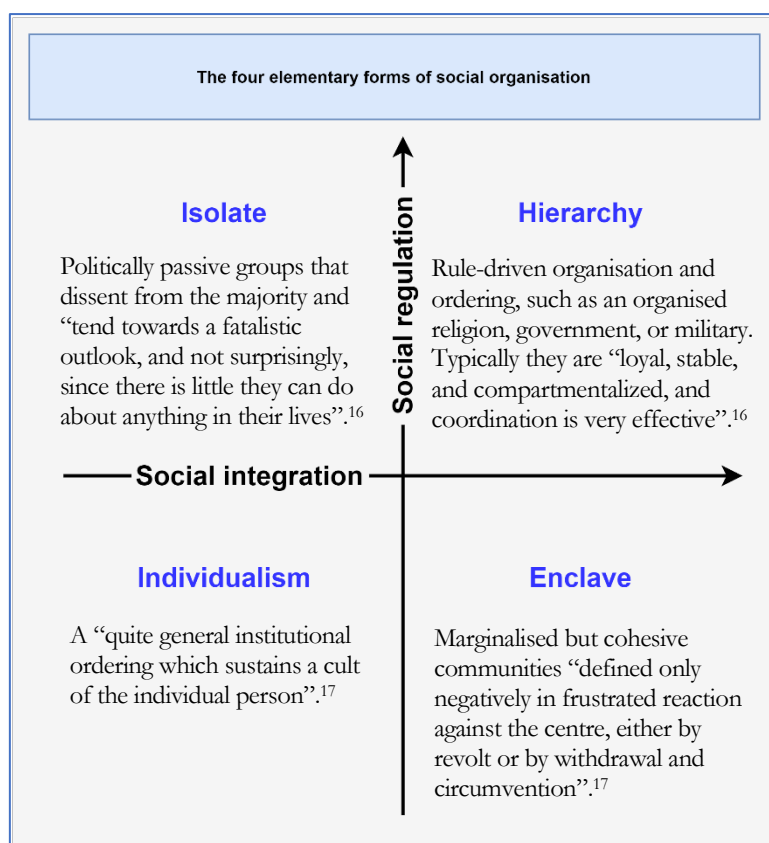


Figure 1: The four elementary forms and their extreme manifestations (Source: author, adapted from 6 and Richards, 2017)⁶²⁰

Douglasian Theory argues that these forms of social organisation are enacted through the daily routine and interaction of their participants which, over time, become sufficiently normalised as day-to-day behaviours that a ‘thought style’ is cultivated. This, in turn, reinforces the underlying social organisation. Taken together, this feedback loop represents the causal mechanism of Douglasian Theory, whereby “we dance our social organisation into institutionalisation and the structure or ‘dances’ in turn reflect the social organisation that they reinforce”.⁶²⁰ For example, a military’s stereotypically hierarchical social organisation is enacted by its members when they (inter)act like military personnel on a day-to-day basis (e.g., in a rules-based, top-down, and cohesive manner). This, in turn, cultivates a militarised hierarchical way of thinking, which conforms to, confirms, and emboldens the military’s hierarchical social organisation, thereby perpetuating the self-reinforcing cycle (Figure 2, page 153).⁸

Assemblage Theory—a bottom-up ontological framework developed in 1980 by Gilles Deleuze and Félix Guattari developed to analyse social complexity—adds nuance to this concept (Figure 3, page 153).²⁸⁵ In short, it asserts that any given ‘assemblage’ is comprised of unstable relational components which can be understood as a system. Assemblages deliberately ‘territorialise’ by defining a space of comfort and

⁸ This is a stereotypical characterisation of a military and its hierarchy, which is used as an example for simplicity and clarity. As referenced above and discussed later, social organisations (including militaries) are capable of and usually do manifest as a blend of the different forms.

security in which to operate, which is often done by emphasising differences from other assemblages.^{623,h} Douglasian Theory echoes this territorialising dynamic in its causal feedback mechanism (Figure 2) wherein social organisations are defined and reinforced, a kind of boundary-setting that the theory posits is integral to all four elementary forms of social organisation (Figure 1, page 152).⁶²⁰ Coherence, strength, and resilience within a given social organisation is thus encouraged and protected through this territorialisation, and in doing so, identity is created and maintained.

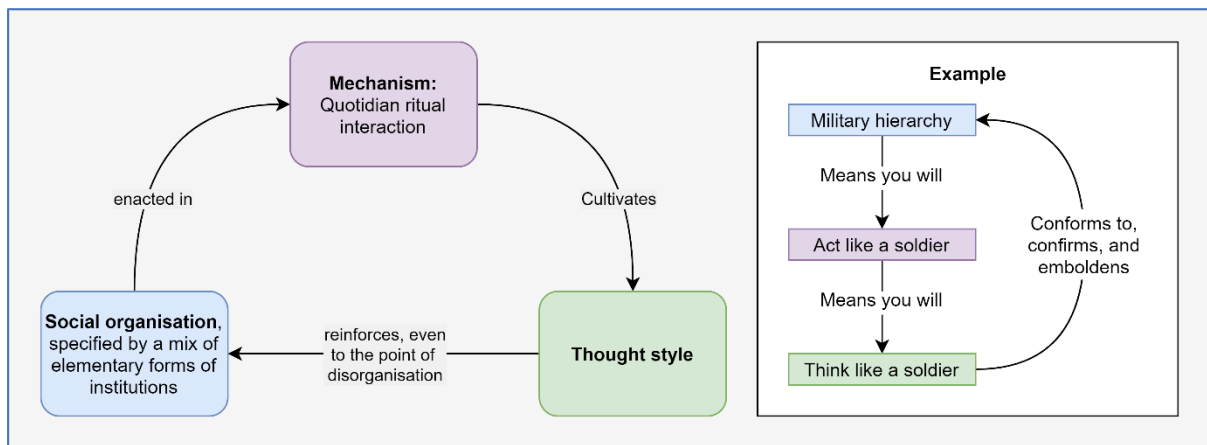


Figure 2: The causal mechanism in Douglasian Theory: a two-phase feedback loop (Source: author, adapted from 6 and Richards, 2017)⁶²⁰

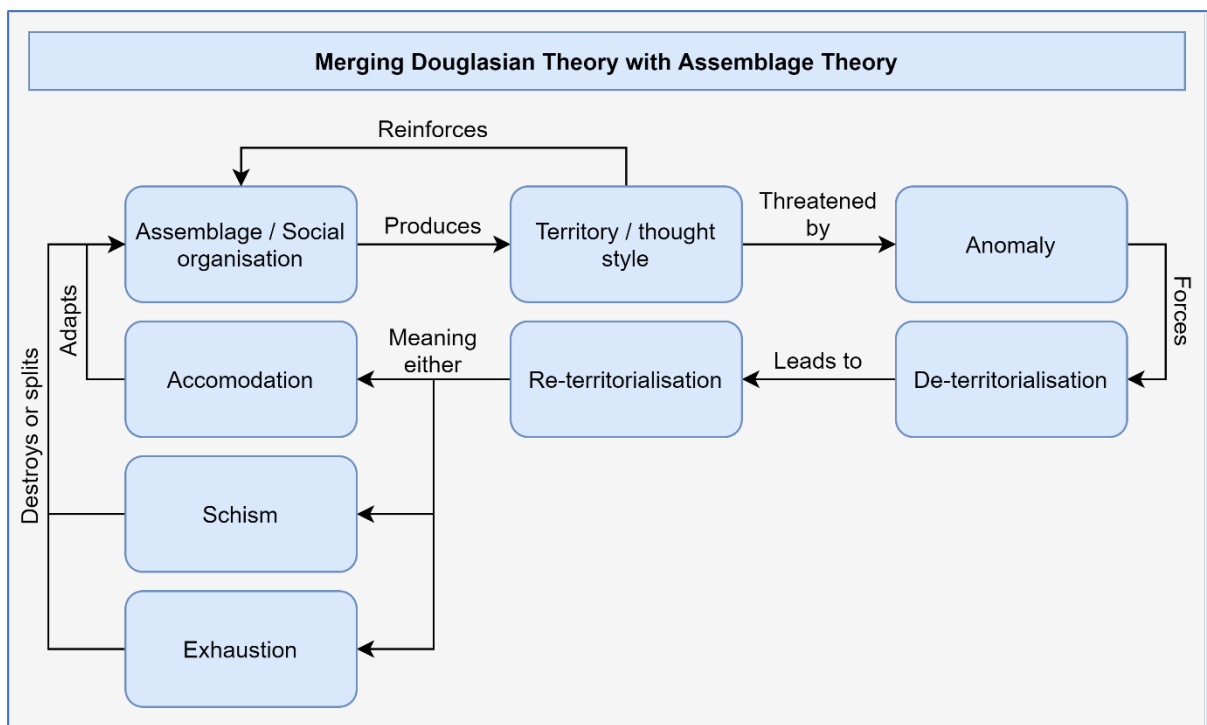


Figure 3: Merging Douglasian Theory with Assemblage Theory (Source: author)

^h This is not dissimilar from boundary work, i.e., “those acts and structures that create, maintain, and break down the boundaries between knowledge units”.⁶⁷⁰

Douglasian Theory also provides the useful concept of ‘anomaly’, that is, something which threatens a social organisation, ultimately requiring accommodation or otherwise leading to exhaustion or schism within the group (Figure 3, page 153).⁶²⁰ This is related to the concept of territorialisation, inasmuch as the reorganisation and ‘re-territorialisation’—i.e., the expressive side of a given assemblage—can likewise result in negative coping mechanisms if a process of ‘de-territorialisation’ occurs by force of crisis (i.e., an anomaly, such as an Ebola outbreak and an unprecedentedly militarised response to it).⁶²³ Douglasian Theory posits that conflict both within and between different social organisations is not only predictable but actually inevitable as a result of this continuous process of territorial (re)negotiation, especially when a group perceives their professional territory is being encroached upon and enters the “adversarial mode”.⁶²⁰

Crucially, though, Douglasian Theory not only explains the mechanism by which groups of actors inevitably conflict, but also the mechanisms of ‘conflict attenuation’ through which such conflict can be mitigated and resolved. Namely, Douglasian Theory argues that hierarchical forms of social organisation have the unique capacity to accommodate other forms of social organisation within ‘rule-bound niches’, whereby they can practice their self-reinforcing causal mechanism (Figure 2, page 153) without threatening the broader hierarchical scheme within which they are encapsulated.⁶²⁰ This conflict attenuation is further possible through the use of ‘neutral zones’ (where different forms of social organisation can peacefully exist); ‘co-dependence’ (where they depend on one another to some extent); and ‘hybridity’ (where the constitution of a social organisation blurs into or borrows from another form).⁶²⁰

Taken together and as applied to the primary data collected for this study, Douglasian Theory helps to examine both the ways that conflict inevitably arose within and between civilian and military ERWs (and their respective social organisations), and the forms of re-territorialisation, conflict attenuation, and accommodation that then transpired between them.

Methods

This study primarily relies on the collection and evaluation of semi-structured qualitative interviews. Inclusion criteria were purposefully broad given the number of actors in the response and the diverse nature of their involvement, and used key stakeholder identification based the Chatham House event, as well as a snowball technique. A total of 110 interviews were conducted with a range of civilian (n=84) and military/security (n=26) ERWs at the chiefdom (n=6), district (n=43), national (n=45), and international (n=16) levels of Sierra Leone’s Ebola response (Figure 4, page 155). Respondents were designated with a unique identifier (ID) as explained in Figure 4 (page 155).

Effort was made to identify respondents who had worked in or had responsibility for the Western Area Urban (i.e., Freetown), Port Loko, and Kambia districts, especially at the NERC and respective DERCs. Western Area Urban District was chosen in order to collect NERC- and national-level perspectives, while

Port Loko and Kambia districts were chosen to collect DERC- and district-level perspectives. The latter two districts were selected because lead author (STB) worked there extensively during the 2013–2016 West Africa Ebola Epidemic. This facilitated access (both geographically and to specific personnel), though it also possibly introduces limitations (which are discussed at the end of this chapter).

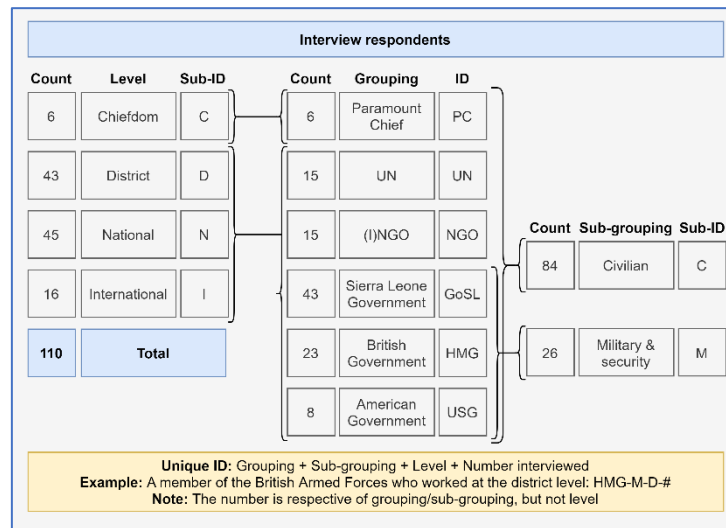


Figure 4: Interview respondents (Source: author)

Interviews were conducted during extended field visits to Sierra Leone in 2017 and 2018, with further interviews conducted either remotely or in person at various sites internationally (which was required for international respondents and those who were no longer in-country at the time of data collection). All were conducted by STB with the use of an interview guide. The guide drew on civil-military literature and theory, but was continually refined (i.e., themes were incorporated iteratively as they arose during data collection). Consideration was also given to *a priori* themes drawn from the previously mentioned Chatham House roundtable on the role and perception of British Armed Forces interventions in Sierra Leone’s Ebola response.²⁷¹

Primary data were organised and processed using framework analysis. Familiarisation was accomplished through the central role of STB throughout each phase of the research process. A code frame was developed using NVivo, incorporating both the *a priori* and *a posteriori* themes from the interview guide. All qualitative interviews were coded using this method, after which the code frame and associated nodes were then re-evaluated and exploded, consolidated, or removed where appropriate. Interpretation of the coded data was conducted with consideration of Douglasian Theory as previously discussed.

Ethics approval was sought and granted from the Sierra Leone MoHS Office of the Sierra Leone Ethics and Scientific Review Committee (no reference number; approved 28 August 2017 and amended 15 February 2018) as well as the London School of Hygiene & Tropical Medicine (LSHTM) Research Ethics

Committee (reference #14424). All research was conducted according to accepted norms for ethical research.

Results

The aim of this chapter is to examine the CMRel that were established in Sierra Leone, as well as how they changed over time. Accordingly, this chapter will use the data to first examine the ways in which classical response actors in Sierra Leone's Ebola response initially felt their territories were encroached upon. It will then discuss how classical response actors later felt not conflict or consternation with their military counterparts, but rather collaboration and cooperation. Drawing on the data, the chapter will explain this seemingly unorthodox pivot as resulting from the ways classical response actors and militaries share in not only their *raison d'être* as previously described (i.e., their cultures of interventionism), but also in their hierarchical forms of social organisation and thought style, which permitted an evident degree of mutual learning and complementarity between the two groups.

Military meddling

This section first examines how many classical response actors initially perceived the militaries' intervention in and leadership of Sierra Leone's Ebola response to be an anomaly. Thereafter, the section examines how this resulted in de-territorialisation and negative coping amongst many classical response actors, in that they felt the anomaly threatened their social organisation. The section concludes by describing the extent to which this conflict and consternation was later overcome (thereby transitioning into the following section, which will examine how and why this change occurred).

Anomaly and the adversarial mode

When militaries were first deployed to Sierra Leone's Ebola response to design and lead new, bespoke, and military-led coordination centres, they replaced the Ebola Operations Centre (EOC), which was the civilian response organ previously established and led by the WHO and MoHS (as examined in Chapter 6, pages 111–144). One UN respondent noted how unusual this was:

I think of course [the militaries' intervention was] off-putting, especially to humanitarian partners who are used to working in opposition to the military,... [or] in spite of the military, not with the military (UN-C-N-3).

Importantly, this significant change in how the response was coordinated (and by whom) was done without the knowledge or consent of the MoHS; one (I)NGO respondent (who was broadly supportive of this change) called it a “*coup*” (NGO-C-N-7) (how this “*coup*” was designed and actioned without the involvement of most classical response actors is examined in Chapter 6, pages 111–144). As such, the establishment of the NERC and network of constituent DERCs was perceived by many classical response actors to encroach upon or even expropriate their professional territory, especially as many were removed from positions of authority over an issue they considered within their mandate and area of expertise.

Taken together, this represented an anomaly to many classical response actors, and therein, evoked a degree of consternation amongst them. Said one (I)NGO respondent of the British Armed Forces, for example:

I do not think that the British [Armed Forces] are optimally designed to perform in any form of humanitarian crisis, because they're so expensive, they're not trained for this kind of work, and they're so risk averse... So, for that reason, I do not think the British [Armed Forces] should ever be a first or second thought to respond to humanitarian crisis... It should never have happened (NGO-C-N-10).

In other words, this respondent—who, unlike many (I)NGO respondents, was present at the time of the “*coup*” (NGO-C-N-7)—felt that the cost of deploying the British Armed Forces to Sierra Leone’s Ebola response was not justifiable; that their risk tolerance was too low (i.e., that they would not provide direct medical care as Dr. Liu had anticipated when calling for military support, with the exception of the small KITU);^b and that they did not have the appropriate training (and therefore expertise) for the type of emergency at hand (i.e., a public health one)

The lack of public health expertise, in particular, was a commonly held perception amongst classical response actors (n=84): about half (n=45) cited the militaries’ lack of technical expertise in health and public health matters as a primary concern;ⁱ about a third (n=32) cited some kind of incompatibility in working with civilian ERWs (generally defined), despite this being unavoidable in the response to a public health emergency; and about a quarter (n=20) cited a general lack of understanding of the public health emergency at hand. Tellingly, 56 civilian and military respondents—just over half of the total number interviewed (n=110)—suggested at least some component of the militaries’ anomalous intervention was unnecessary or duplicative of work already being planned or actioned by classical response actors (such as training to national health workers and other applications of health and public health expertise, or filling administrative and logistical roles that could have been performed by civilian ERWs).

The resulting dismay felt by many classical response actors was evident, and many entered into the ‘adversarial mode’. One (I)NGO respondent, for example, recalled how they would “*get into shouting matches*” with military personnel at the DERC (NGO-C-D-12), and an HMG civilian respondent recalled how many in their organisation simply “*refused to talk*” to military personnel (HMG-C-I-10). According to one (I)NGO respondent, there “*was the clash of attitude... even to the extent of confrontation between the military and civilians*” which was “*a principal... [and] very serious challenge*” (NGO-C-D-5), one that a UN respondent “*found... really quite upsetting*” (UN-C-N-2). Accordingly, a number of classical response actor respondents (n=84) felt that military actors could be dismissive (n=20) or inflexible (n=17), and/or had specific negative interactions with them (n=24).

ⁱ A smaller number (n=39) of the whole (n=110) thought the militaries did evidence public health and other relevant technical expertise during the response.

This abjection felt by classical response actors was also evident to many British Armed Forces respondents, with one recalling how

...a lot of [classical response actors] spent a lot of time trying to prove to us they were the experts in what they were doing, and that we should all bugger off and leave them alone (HMG-M-D-8).

This vying for authority and the recognition of institutional competency by classical response actors occurred, the military respondent suggested, instead of “*just getting on with working together*”—stating colourfully that this dynamic of contestation amounted to a “*willy waving contest*” (HMG-M-D-8).

This is perhaps unsurprising due to frequently perceived core differences in the characterisation of classical response actors and military institutions. For example, 44 respondents (of the 110 total) said that the militaries’ presence in an operational space typically reserved for classical response actors felt out of place. This perspective was most widely shared by international-level respondents (both civilian and military ones), who conceivably have more comparative examples from their careers to draw from; adhere more closely to the Humanitarian Principles and international civil-military guiding documents; and are less accustomed to the foregrounded role of military as seen in Sierra Leone (at least in their home country). Sierra Leonean actors were less likely to identify the militaries’ centrality as improper, relatively speaking, which is perhaps explained by the more evident presence and role of RSLAF in Sierra Leonean society pre-outbreak as well as the immediacy of the emergency at hand, making it less incompatible with both prior and contemporaneous experiences (this is complicated by the fact that data were collected after the outbreak response had concluded, and therefore after the militaries’ very concrete and apparent supporting role had been somewhat normalised. International respondents, particularly those who never deployed to Sierra Leone, therefore spoke on a more theoretical basis than national respondents).

De-territorialisation

Classical response actors’ common criticism of the Ebola response’s military actors went further than feeling that they were the wrong actors for the job and/or were intrinsically out of place: normative manifestations of classical response actors’ professional territory were confronted, challenged, and encroached upon by the anomalous military intervention, and therein, many of these actors felt their core professional identity was threatened, ultimately producing a feeling of abjection in many.

This was particularly true for national health actors in the MoHS, who had been dispossessed of leadership over the Ebola outbreak affecting their own country. One GoSL civilian respondent evoked the following analogy to describe the militaries’ arrival and allegedly domineering attitude within the Ebola response’s reconstituted coordination centres:

I have my house, and I know what is in my home, I know what is in my compound, and for somebody to come and tell me that you should be cleaning here, you should be doing this, you should be taking

care of that, to me, that is an insult. We were not used to command systems... In disease prevention, there are step by step protocols. You cannot give a child hot rice and expect the child to be swallowing the hot rice, otherwise it destroys the nostrils and... create sores (GoSL-C-N-26).

In other words, to this respondent, the attitude and method of military actors was insulting and belittling and therein harmful (especially as the encroachment occurred in a space that was deemed so intimate, sacrosanct, and inviolable as to evoke the analogy of a home). To dictate and insist on certain methods, this respondent's statement suggests, is harmful if the demand is made of somebody unused to and therefore unprepared to utilise those methods.

Despite the potential harm that this respondent felt could result from the foisting of such hierarchical and militarised methods on those (supposedly) unequipped to easily or effectively navigate them, several members of the British Armed Forces accepted and embraced this as an anticipated outcome, with one respondent stating that

...once we are released, you've got to accept [that] we will work to our own rules. And we are not going to work to UN rules or NGO rules or whatever. So, you know... we can do a lot, but once we're there, we are going to do it our way (HMG-M-N-5).

Classical response actors, they continued, “*threw their teddies out of the pram because... they felt their legs were chopped away [by this], which they were*” (HMG-M-N-5). Therein, this British Armed Forces respondent acknowledged (but seemed somewhat indifferent to) how the militaries' intervention and expropriation of the MoHS' leadership function was reacted to with a degree of indignation.

However, classical response actors considered the militaries' intervention problematic for more than their perceived lack of public health expertise; incompatible ways of working with civilian ERWs; duplication of others' work; or for the way (albeit at President Koroma's direction) they assumed leadership of the Ebola response, thus stripping this role from the national health authorities (or even, notably, for perceived risks to human rights abuses against vulnerable civilian populations, which while frequently cited in both the grey and academic literature, came up in only 7 of 110 interviews; other concerns with the militaries' intervention have been described in the prior and subsequent chapters).

Furthermore, the militaries' intervention was considered by many respondents to be most troubling for the ways that it was felt to deepen classical response actors' insecurity, particularly for the ways that it evidenced significant gaps in the MoHS' capacities and capabilities. In the words of one (I)NGO respondent, classical response actors in the MoHS “*were emasculated*” by the militaries' intervention and leadership in the NERC and DERCS, something which they considered “*the big overarching issue that happened with the [MoHS]*” (NGO-C-N-14). A USG civilian respondent suggested much the same when they said that the militaries' interventions evidenced the MoHS' “*emasculating failure*” (USG-C-N-6) in their efforts to contain the Ebola outbreak in the spring, summer, and early autumn of 2014. That these respondents used the term ‘emasculating’ is perhaps notable for the way it describes not just power that is

questioned or taken away, but specifically, power that is questioned or taken away from an entity that understands itself as imbued with a degree of it (i.e., in this case, the MoHS and the hegemonic power of the state and its public institutions). Either way, the effect that the militaries' intervention had on the MoHS and its staff was not just one that produced anger or consternation, but also one that, to many, outwardly demonstrated the MoHS' bungling of the response. For this, the militaries' intervention produced a sense of humiliation amongst many (especially within the MoHS).

One GoSL civilian respondent nuanced this dynamic, stating that

...the huge amount of workers and resources [the militaries] have, with helicopters flying here and there... showed a power that was [in and of itself] very disempowering for the national team (GoSL-C-N-25).

Therein, MoHS respondents were upset not so much by a military 'show of force', but rather a military 'show of resource' which made evident the historic and systemic long-term defunding of Sierra Leone's public institutions (as exacerbated by the civil war). This resource surfeit is true of both financial resources and personnel: militaries, including RSLAF and the British Armed Forces, were able to reposition personnel to the Ebola response, not limited to those with specific roles in the planning of operations who were important players in the NERC and DERCs (as examined in Chapter 6, pages 111–144). Many institutions, including the MoHS, were and remain chronically understaffed, so if and when an emergency arises, civilian personnel become double-tasked and are more quickly overwhelmed. Accordingly, a large number of respondents (n=36) flagged a lack of capacity amongst classical response actors (including government actors and (I)NGOs) as a major concern. An even larger number (n=44), though, noted this was a particular strength of the involved militaries, as well as (relatedly) their ability to fill resource and coordination gaps left by overwhelmed civilian institutions such as what occurred through their intervention in Sierra Leone (n=67).

In short, these military strengths laid bare structural weaknesses in the MoHS and a lack of core competencies amongst those who were specifically mandated to take responsibility for responding to the Ebola outbreak. Said one GoSL civilian respondent:

The [MoHS] failed to discharge its duty under the constitution. It is their job, and nobody should have done it for them. They were able to do the job, but they didn't have the resources, so it is unfair to compare the [MoHS] and NERC... When the tide goes out, we find out who has been swimming naked (GoSL-C-N-17).

In other words, when the Ebola outbreak emerged and escalated into a public health emergency (i.e., "when the tide [went] out"), it plainly evidenced a lack of preparedness and necessary resources amongst those who ought to have been equipped to handle the crisis (i.e., "who [had] been swimming naked") (GoSL-C-N-17).

Thus and taken together, with militaries intervening to establish and help lead national and district Ebola response coordination centres (a role normatively reserved for classical response actors such as national and transnational health authorities and (I)NGOs), the very mechanism through which the MoHS and other side-lined classical response actors would normally interact, justify their *raison d'être*, and reproduce their social organisation—i.e., by responding to one of the 21st century's most important public health emergencies—was made insecure. This, in turn, was felt to threaten classical response actors' very identity, especially when conjoined with how this encroachment also evidenced various weaknesses in classical response actors' capability to perform their core mandate (which was, transitively, evidenced further by the apparent ease and relative strengths in the militaries' capability to do so in their place, even if this capability rested on inequitable access to resources).

An unorthodox pivot

While various respondents experienced challenges in CMRel in the weeks following the militaries' initial intervention, over time, CMRel and the dynamics that existed between classical response actors and militaries markedly improved.

Chapter 6 (pages 111–144) provides some insights into how and why this may have occurred. For example, while the militaries' intervention may indeed have encroached upon some classical response actors' roles—in particular the MoHS and WHO from their overall leadership of the response—it also facilitated the arrival of other classical response actors that were previously unable or unwilling to intervene due to the lack of an enabling environment. Therein—and as further examined in chapters 6 and 8 (pages 111–144 and 176–213, respectively)—the structure of the NERC and DERCs did not necessarily usurp classical response actors to the extent that had been feared (many classical response actors maintained central roles in the response, including leadership functions). Further, the numerous contributions made by the militaries became increasingly evident over the course of the outbreak and—however threatening the militaries' intervention might have felt to some classical response actors—many found these contributions to be invaluable to the ultimate (and shared) objective of containing the epidemic.

Notably, by the end of the outbreak, CMRel were not just non-confrontational on these grounds: they were often decidedly positive, even to the point of friendship. For example, one (I)NGO respondent said that “*working with the military actually helped [them] become a better humanitarian*” (NGO-C-D-12); one GoSL civilian respondent (notably, one working for the demoted MoHS) concluded their interview by saying “*I want to say bravo to [the militaries]*” (GoSL-C-N-15); one RSLAF respondent said “*we became like family at the end* (GoSL-M-D-4); and one Paramount Chief respondent said that “[the military] *were able to console us, talk to us, and persuade us to have faith within ourselves*” (PC-C-C-4). Ultimately, among civilian respondents (n=84), a majority (n=49) cited military ERWs' humanity, dignity, friendliness, or empathy; almost all (n=72) cited a positive generic association with or personal impression of military ERWs; and more still (n=73) described something specifically positive about the civil-military dynamic and CMRel that arose. In

interviews, some national, UN, and (I)NGO classical response actors (n=33) even wondered how to replicate or expand the militaries' role in the response to future public health emergencies (which has in many ways come to pass as a result of the COVID-19 pandemic).³⁸

According to the popular characterisation of classical response actors and militaries as ideological foes and the extent to which respondents noted the former's professional territory was encroached upon in a way that was humiliating (as examined above), this turn from civil-military conflict and consternation to civil-military cooperation and collaboration may seem unprecedented.

However, the typical characterisation of these actors as philosophically and ideologically opposed requires some reconsideration: as previously described and examined further in the discussion, classical response actors and militaries are not dissimilar in their related cultures of intervention and the political economy underlying them. Further, a deeper analysis of the data in the subsequent sections evidences that, in Sierra Leone, these actors also shared a hierarchical form of social organisation. This hierarchical form shaped quotidian ritual interactions and thought styles (albeit to different degrees) within these supposedly opposed organisations. Taken together, similarities in hierarchical ordering help to explain the seemingly unorthodox pivot taken by classical response actors in Sierra Leone's Ebola response, wherein they abandoned the adversarial mode and instead robustly cooperated and collaborated with military ERWs.

Civil-military collegiality

Taking Douglasian Theory and Assemblage Theory together (Figure 3, page 153) and as previously described, the militaries' intervention in and subsequent leadership over the Ebola response was considered anomalous, as typically, responding to this kind of public health emergency would fall within the domain of classical response actors' professional territory. This forced a degree of de-territorialisation and negative coping by some classical response actors (i.e., some became adversarial). Both Douglasian Theory and Assemblage Theory provide grounds for expecting that de-territorialisation will, in turn, lead to a process of re-territorialisation, wherein a social organisation reacting to anomaly either accommodates the anomaly and therein exits the adversarial mode; schisms (i.e., splits in a way that removes confrontation), or exhausts itself through incessant and disruptive (in)fighting in attempts to reject it (and thus collapses).

Douglasian Theory argues that the accommodation of anomaly—the least disruptive outcome—can occur through the application of conflict attenuating factors, to be examined at length in Chapter 8 (pages 176–213).

Importantly, Douglasian Theory discerns that a conflict-to-cooperation and collaboration process—like that seen in classical response actors' seemingly unorthodox pivot in the Sierra Leone case—is actually inevitable, if and when the interaction that occurs between two adjacent hierarchies is taken into account:

Hierarchical ordering within one set of socially integrated boundaries will always be in tension with any adjacent hierarchy... Clashing hierarchies will [therefore] lead to general disarray followed by periods of greater accommodation, thus cycling from generalised conflict amplification to containment.⁶²⁰

Therefore, the previously described conflict between classical response actors and their military colleagues can be found to arise not from fundamental differences or incompatibilities between them (as is often characterised), but because of uncomfortable and perhaps disquieting similarities in their hierarchical social organisation and thought style. While this initially resulted in conflict amplification (as previously described), shared thought style led to the containment of this conflict, and thus helps explain the unanticipated capacity for classical response and military actors to effectively cooperate and collaborate in Sierra Leone's Ebola response.

Accordingly, this section first examines how, in time, the similarity in hierarchical type was recognised by many civilian and military ERWs. It then examines how a process of re-territorialisation—specifically accommodation—developed over time within and between both groups of actors. Specifically examined is how this accommodation—i.e., the mutual moderation and partial merging of adjacent hierarchies—was complementary and co-constitutive, in that it largely served to reinforce (rather than threaten) the social organisation of the various actors.

Recognising key similarities in personnel and institutions

Many military respondents, in particular, felt there were important similarities in the personality of military personnel and classical response actors (especially those working for (I)NGOs and other international institutions. As to be argued, these similarities in personality result from shared organisational properties that cultivate a common thought style). For example, one British Armed Forces respondent suggested that

...it takes a very specific person to either join the military and be prepared to leave life, family, everything, whatever, to go away on operations and do the job that we do, in the same way it takes a very specific person to go and work for MSF or to be prepared to give up your life for six months and go and work in a foreign country... to do... all of that kind of disaster relief type work. Like, it really is a specific personality that thinks that that is an okay thing to do. And I think with that comes certain things in your character... There is a specific type of personality that gets involved in that kind of situation. I don't think it's military or 'civvy', so to speak, I just think everyone just has an outlet for that part of their personality. And then you put all of those people in a room together and shit happens (HMG-M-D-8).

In other words, to this respondent, the person(ality) that chooses to join the military is not dissimilar from the person(ality) that chooses to become a classical response actor (or, in this instance, a humanitarian aid worker): both are willing to leave the comfort of their home and opt to work for an organisation that intervenes in response to urgent (and sometimes life-threatening) crises.

On this basis, another British Armed Forces respondent remembered how for “*many military... officers... it was a tough spot between joining the military or joining MSF... Nobody's quite prepared to admit how close those people are*” (HMG-M-N-6); one American military respondent evoked siblinghood to describe how similar they felt military and classical response actors could be, arguing that

...the reality is that many of us [crisis responders] come from those same environments. I come from a family of [many] kids. I have brothers and sisters... I live in the world in a different way than they live in the world. But [through important and in this case intimate similarities], I'm able to see the world that way (USG-M-I-1).

In other words, this respondent did not, *per se*, feel that classical response actors and military personnel are exactly alike, but did argue that they are sufficiently so such that mutual understanding is relatively straightforward (notably, in the analogy used, that they have the same origins).

Another British Armed Forces respondent further nuanced this when they acknowledged that, in their view, the personal objective—that is, saving lives—of most classical response actors and many military personnel is closely aligned:

I think [Operation] Gritrock allowed the 'other side' to come out of all of us. You know, the compassionate side... because of the work that we were doing. The military do often get a difficult name, and the thing is, it's the politicians that send us into places. But actually, generally, if you asked me, you may have the odd [military] person who's a bit odd, but if you ask 99 percent of the army, they just want to go and do some good. They want to help people. And [Operation] Gritrock allowed us to do that. And everyone [in the British Armed Forces] came away feeling really satisfied for the job that we'd done and quite proud of what we'd done and who we'd met (HMG-M-D-4).

Therefore, at least as argued by this British Armed Forces respondent (and the majority of their military colleagues that were interviewed for this study), the individual justification for joining the military is much the same as the individual justification for joining a classical response actor organisation (at least an international one): they “*just want to do some good*” (HMG-M-D-4). Notably, this was not only a military perspective: several classical response actors agreed, such as one GoSL civilian respondent who said they “*had wanted to be a military officer because... they are people who face fire when everybody is running*” (GoSL-C-D-2) but decided to become a health professional instead, seeing this as similar.

However, the similarities between civilian and military ERWs (which both groups of respondents therefore expressed) went beyond the characteristics of individual actors: many also spoke to the various ways that similarities extended to the *modus operandi* of the different organisations. For example (and referencing the popular characterisation of ideological distinction that was previously described), one member of the British Armed Forces also said that while

...MSF and the military couldn't be further apart in some ways ideologically, in other ways,... both MSF and the military are working in a very disciplined, straightforward, [and] clear way (HMG-M-N-5).

Therein, to this respondent, the similarity between classical response actors and the involved militaries also extends to their hierarchical social organisation (and therefore thought style) characterised by discipline and rule-bound structures. One HMG civilian respondent went on to state—on the basis of these similarly hierarchical ways of working they also felt was evidenced in and by Sierra Leone's Ebola response—that DfID and the British Armed Forces are highly compatible and collaborative partners:

What DfID has done on the back of this [event]... [is that] we've joined up with the military as a consequence of Ebola. It's one of the strongest partnerships that we now have. I mean, we have a very good relationship, and we always will with the military, because DfID and the military, you know, it's kind of funny to say, but we are actually very similar in terms of how we do things. We like to get things done, rather than just talk about them. And that's why we get on very well with the military (HMG-C-N-12).

In essence, as suggested by this respondent, while DfID and the British Armed Forces may be distinct institutions, the way their employees perceive themselves to organise and operate can be compatible for their shared hierarchy (and also complementary: the same respondent then continued to discuss how DfID has a strength in debating options, and the British Armed Forces has a strength in taking instruction and implementing the choice that is eventually made). Further reinforcing this similarity between DfID and the British Armed Forces specifically, according to one member of the British Armed Forces, was the fact that DfID's Ebola response personnel “*might be humanitarians now, but they're all ex-army*” (HMG-M-N-9)—transitively, one British civilian respondent observed that many younger British Armed Forces personnel, unlike the

...more old school and more ingrained sort [have]...done overseas stints with NGOs or that sort of thing, and they were much more able to work on a level-pegging with civilian counterparts and with NGOs” (HMG-C-N-13).

While military respondents were most likely to discuss the ways they felt military personnel and the institution itself are quite similar to classical response actors (especially HMG and other international organisations like the WHO and other (I)NGOs), a number of classical response actors—including national ones—felt the same. One GoSL civilian respondent, for example, noted how militaries

...[are] trained to fight war. But I think Ebola is a war, and if you don't bring someone who is very skilful—and I think they used their skills, their military training—they used [these skills] to fight Ebola as an enemy, because we saw it as an enemy (GoSL-C-D-6).

In other words, this respondent felt that the militaries' training and skillset developed around preparing for war was highly applicable to a large-scale public health emergency (relatedly, national classical response actors were also most likely to see the military as a necessary complement for their role in controlling 'resistant' populations). A UN respondent said much the same (echoing the British Armed Forces' previous comment about MSF), noting how the approach that the British Armed Forces took within the NERC and DERCs was not distinct from the approach that MSF would have taken had they been in this coordinating role:

I saw [the military] more as a technical partner, a very field-oriented, practical, efficient partner, which [was] great. But, if they had been MSF instead of the British military, I think they would have employed the same strategy (UN-C-D-4).

Therein, the particular (and hierarchical) approach engendered by the institutions of both civilian and military ERWs working at the NERC and DERCs was evident to many respondents, regardless of their grouping.

Re-territorialisation and accommodation

However, importantly, most respondents did acknowledge there was an important degree of difference in the hierarchical approach of the different actors (i.e., the military approach was generally felt to be more hierarchical than that of their civilian colleagues). This was a relatively consistent observation amongst respondents, and as such, is something that was often referenced in the data. For example, many classical response actors (n=84) appreciated militaries for their general hard working (n=19), efficient (n=47), and disciplined (n=45) manner that amounted to a particular strength in command and control (C2) (n=51); transitively, many respondents (including classical response actors) felt that the approach taken by classical response actors evidenced a particular weakness in C2 (n=21) and/or efficiency, time management, and discipline (n=37).

In other words—as to be detailed in this section—what was frequently valued in the militaries by classical response actors were the components of the militaries’ approach that were most hierarchical relative to classical response actors’. While this might be especially notable when one considers the frequent characterisation of classical response actors as opposing (often vehemently) this kind of *modus operandi* as previously described, it is compatible with Douglasian Theory’s argument that adjacent hierarchies will invariably cycle from conflict amplification to containment.⁶²⁰ In the Sierra Leone case, therefore, this appreciation of hierarchy and the containment of conflict can be explained by the ways the adjacent hierarchies of classical response actors and the militaries were eventually seen to be moderating of one another, complementary, and co-constitutive, rather than mutually exclusive, incompatible, or generally characterised by contestation. Militaries were thus accommodated by classical response actors. In other words, both—but particularly the latter—were able to exit the adversarial mode through re-territorialisation, alleviating the risk of schism or exhaustion and collapse.

As previously described, this change from CMRel conflict to its containment occurred over time, partly as classical response actors came to understand that their military colleagues were responding to the same problem (i.e., that their objective, like classical response actors, was to contain and end the Ebola outbreak). One UN respondent felt this was a fairly natural realignment for military personnel:

It’s not hard for them to get out of the mindset of like, ‘let’s go kill people in other countries’, and, you know, let’s instead help people in other countries. I think as long as the [military] people... step out of that role quickly, then it’s not a problem. And I think that a lot of people in the military do... espouse that dual role, and so it’s usually okay (UN-C-N-3).

In other words, this respondent felt that the militaries were able to pivot from their role responding to one kind of crisis (i.e., war) to another (i.e., a public health emergency).

However, as recalled by an (I)NGO respondent, the shift towards more positive CMRel was not limited to the recognition of a shared objective, but also the result of different actors becoming more accustomed to the others’ particular kind of approach towards reaching that objective:

You... had your differences at that initial stage. But as time passes by and as [the militaries] spent time [in the response alongside classical response actors], they would understand each other's attitude and manner of approach... You got to understand each other, and those confrontations... would just die out naturally as you continued the work (NGO-C-D-5).

Therefore, while there may have been initial “confrontations” (NGO-C-D-5), these fell away over time as both civilian and military actors spent time working alongside one another. To this (I)NGO respondent, this meant that

...after a week at the command centre, I realised [the military personnel] were only men in uniform, because they were working with us as any other ordinary civilian who... [was there] to help in the fight against Ebola. And they demonstrated modesty, and they were able at least to rid themselves of their military clothes in their minds, thoughts, and action... as ordinary men collaborating with civilians (NGO-C-D-5).

Notably, this respondent's perspective corresponds with many military actors', who—as previously examined—felt their personal and institutional justification to primarily coalesce around the objective of helping (rather than harming) other people.

Very importantly, though, it also speaks to an important moderating of the military's more hierarchical mindset, wherein “in their minds, thoughts, and action”, military actors seemed, to this respondent, to become like “ordinary [i.e., civilian] men” (NGO-C-D-5) (note, there were female military personnel in both RSLAF and the British Armed Forces, but very few, relatively speaking). This was frequently referenced in the data by classical response actors. As put by another GoSL civilian respondent:

At first, [the military personnel] started doing things as if they were in the barracks. You know... policies [applied] in the barracks should be different to [those applied to] us. So, when they came in, people were not happy [with] the way they were doing things. But at the end of the day... everybody got used to each other... Everything was okay with them, and they were doing things fine for us. So, we accepted it (GoSL-C-D-1).

In other words, over time, classical response actors came to accept the presence of military actors more readily as the latter's initially overbearing approach (to classical response actors, at least) became somewhat qualified. Notably, in the Kambia DERC, this included the removal (by RSLAF leadership) of a member of RSLAF who was felt to be too harsh and unaccommodating of their civilian colleagues (USG-C-D-2; GoSL-M-D-5; GoSL-M-D-8). This phenomenon of palliative adaptation was further spoken to by another GoSL civilian respondent, including the ways: this meant that classical response and military actors were therefore able to learn best practices from one another; which evidenced a degree of mutual respect; which in turn, broke down barriers between the groups. Said a GoSL civilian respondent:

We came to realise that no one person is one hundred percent correct, that we have to listen to each other, and we have to understand that not [in] all situations [did] the military rule play [i.e., apply], because there are certain areas where you have to listen to the civilians, irrespective of your command, because your commander may not have all the knowledge in Ebola emergency response [that is required]... We came to harmonise all these differences [and then] things work[ed] smoothly... When we all came together, most of their command was... Well, I will not say was put aside, but, when we were all

together, we all talked like civilians, not like military... We discuss[ed] things purely about the response. We [thus] felt such relief [when] we [were] interacting. So... that relationship, has [changed] for me... I have no barrier at all with the military guys we have in the district. We call each other, even their commander. We discuss, we meet, we sit, [and] we chat freely (GoSL-C-D-2).

This moderation of the militaries' strongly hierarchal thought style—which was facilitated by the NERC and DERC's conflict attenuating factors, which are further examined in Chapter 8 (pages 176–213)—therefore helps to further explain the seemingly unorthodox pivot taken by classical response actors towards civil-military cooperation and collaboration. As recalled by a GoSL civilian, “*mixing people [in these structures] broke down barriers*” (GoSL-C-N-17), in that—and in line with the prior respondent's statement—a deference to the others' approach represented a kind of mutual respect, as well as a kind of mutual learning. It

...encouraged people to learn from each other. So as soon as they started working together, the civilians started appreciating the fact that the military did things so rigorously, and they very quickly picked that up. So, by the end of the [Ebola epidemic]... civilian staff were just as punctual and became just as organised and strategic as the military mind. And the military learnt to be more compassionate, learnt to be less rigid, learnt to debate things... [and] learnt to work with local communities better... Learning from each other, mixing together, and most importantly, building a camaraderie... That helped people to coalesce together (GoSL-C-N-17).

Crucially, this statement also suggests that, while the military may have become somewhat less hierarchical than their typical *modus operandi* through their interactions with classical response actors in the NERC and DERCs, equally, classical response actors became more so. This was corroborated by another GoSL civilian respondent, who explicitly referenced the kind of co-option of approach that came with sharing space:

If you are working with someone who is disciplined and looks focused, you are also going to dance to that tune... is that not so? So, we cop[ied] from them what we thought was very good in terms of discipline... so that we can save the lives of people (GoSL-C-D-6).

In other words, by working alongside and thereby routinely observing a group characterised by discipline and focus, this classical response actor felt these attributes became cultivated and acculturated amongst the NERC and DERCs' less thoroughly hierarchical actors. Therein, as stated by a British Armed Forces respondent, the militaries' intervention and presence within the NERC and DERCs was not intended to be an encroachment or replacement of classical response actors (in some ways, this is most simply evidenced by the fact that the NERC and DERCs were thoroughly mixed civil-military centres), but was rather “*just about speeding things up*” (HMG-M-N-2).

Taken together, in response to the anomaly of military intervention in and partial leadership over a public health emergency, classical response actors and militaries alike re-territorialised and “*came up with a middle ground*” (HMG-M-N-5), wherein they compromised their approaches so as to meet in a kind of hierarchical centre. In Douglasian terms, in the NERC and DERCs, they created a ‘hybrid’ and ‘co-dependent’ hierarchical social organisation (one that, therein, further attenuated conflict arising from the adversarial mode for the ways this evidenced and developed civil-military partnership).⁶²⁰ The

underpinning of this convergence was an appreciation—once the spectre of an institutional martinet had been removed—of the basic organisational logic of hierarchy: that senior and junior ranks are mutually supportive, and do not ultimately serve to undermine one another.

Adapting and cultivating this hybridity did require some time. However, because classical response actors and militaries are self-organised in similarly hierarchical ways (as examined above), this did not require a fundamental reconstitution of either actors' social organisation (e.g., and as further examined in the prior and subsequent chapters, where classical response actors initially established a top-down EOC in response to the outbreak, military actors replaced it with a more top-down NERC and network of constituent DERCs). Thus, while the militaries' intervention in Sierra Leone may have usurped the power of specific individuals (such as the Minister of Health and the country's DMOs), it did not usurp the underlying form of that power. Indeed, one respondent put this aptly when they described how the DERC

...comprises military as well as the Ministry of Health [and Sanitation] personnel. You know, big tough guys. They come together, they hang their heads, they make decisions. Not in the context of the military, but in the context of the response (GoSL-C-D-2).

Therein, either way, hierarchy was the underlying social organisation of the NERC and DERC centres, which were comprised of primarily hierarchical actors (be they military or civilian).

Therefore, while the militaries' intervention was somewhat anomalous for both sets of actors (i.e., each was made to work with the other in an atypically integrated way), through the moderation of their approaches, both (hierarchical) groups were able to find ways to seek out and enact their respective thought style within the NERC and DERC organising spaces. Taken together, you did not have one hierarchy overpowering and replacing another, but rather you “ended up with the difference between a technical and functional hierarchy” (HMG-C-D-6). A GoSL civilian respondent echoed this, saying:

Well, to me, there was no confusion [working together] as such. No challenges. You see, [military personnel] have their own way of doing things, you know, ... they have their own language. And we cannot change that from their training. We as civilians, everybody in [their] own field of specialty knows our own language. So, we cannot change that. But with this understanding with me, I didn't quarrel with any military officer. They were my friends ... They respect[ed] me as a technical worker, and I also respect[ed] them as military officers (GoSL-C-D-12).

As corroborated by an (I)NGO civilian respondent, these were not “bipolar approaches” but were instead “a whirlpool of grey” (NGO-C-N-10), and it is the confluence of these complementary hierarchies which enabled such an unusual degree of robust cooperation and collaboration in Sierra Leone. The technical expertise of classical response actors (and the validation of their role and identity as public health emergency responders) was thus respected and facilitated (not threatened) by the operational expertise and structures put in place by the militaries (who were respected for their role and identity as effective operational and coordinating actors). Therefore, while a minority of those interviewed referenced challenges in learning to work together (n=39), approximately two thirds (n=25) of this sub-group went

on to specifically reference how initial difficulties and concerns fell away over time as it became clear how the boundaries between actors were more artifice than bona fide (with military and non-Sierra Leonean respondents predominantly constituting the remainder. A further unique grouping (n=23) referenced positive changes in CMRel over the course of the outbreak, independent of a particular CMRel challenge that was later overcome).

That these actors are, on this basis, not necessarily as opposed ideologically as some suggest is not to say that conflict between these groups is therefore unprecedented or even unusual. Rather, it is due to the difference-by-degree in their respective hierarchies that conflict is especially predictable. Accordingly (and as previously referenced), Douglasian Theory explains that the hierarchical containment of conflict begins with its amplification.⁶²⁰ In this instance, the militaries' anomalous intervention and fears of encroachment produced by the unorthodox and suddenly adjacent hierarchies explains classical response actors' entrance into the adversarial mode. However, it also explains how, over time, this was replaced with an understanding amongst classical response actors that the militaries' similarly hierarchical social organisation and thought style could serve to strengthen both groups. This was possible through both military and classical response actors' re-territorialisation as facilitated by hierarchical conflict attenuating factors, which in turn, helped to avoid schism or exhaustion within the groups' respective social organisations. Therein and taken together, in the Sierra Leone case, the interventionism that characterises both military and classical response actors acted in concert, not competition. Through mutual moderation, the militaries' functional hierarchy (i.e., their operational and coordinating strengths) provided an enabling environment which facilitated the classical response actors' technical hierarchy (i.e., their medical and public health expertise).

In short, different degrees and manifestations of hierarchy can (and in this case did) accommodate one another through re-territorialisation. This served not to diminish or usurp one group at the expense of the other, but rather, to expand and strengthen both through cooperation and collaboration as co-constitutive partners.

Discussion

The 2013–2016 West Africa Ebola Epidemic was and remains the largest outbreak of Ebola to date. By September of 2014, classical response actors were overwhelmed, and MSF therefore called for militarised assistance. In Sierra Leone, this militarised assistance arrived quickly, and the interventions were thorough.

This sudden arrival and the subsequent centrality of military personnel alongside (and often over) classical response actors was considered by many to be highly controversial. Indeed, many conceive of classical response actors and military actors as ideologically opposed. For example, some argue that militaries represent the quintessential antithesis to classical response actors' closely guarded Humanitarian

Principles, while others argue that the latter's form of organisation is incompatible with military hierarchy. Indeed, Byman *et al.* state that classical response actors are

...very different from... the military... [in that they are] managed in a highly decentralised manner... [and] prefer to work by consensus rather than responding to direction. Rather than being hierarchical... [the] structure is usually egalitarian, with much debate required before a consensus-based decision [is made]... Accustomed to this autonomy, many [classical response actors] have little patience with military hierarchies.⁶⁵

For those accustomed to such characterisations, the militaries' intervention in Sierra Leone was perceived to be a significant anomaly, in and through which classical response actors felt abjection from their professional territory. This explains the latter's entrance into the adversarial mode and much of the consternation they initially felt.

However, analysis of 110 semi-structured qualitative interviews with civilian and military ERWs in Sierra Leone suggests that the former's feelings of abjection and entrance into the adversarial mode were largely mitigated over time. Indeed, by the end of the outbreak, initial adversity in CMRel became surprising and perhaps unorthodox civil-military cooperation and collaboration. Further analysis of these interviews evidences how and why this pivot was not unexpected, as classical response actors and militaries were found in this case to share in their hierarchical forms of social organisation and thought style. In other words, in Sierra Leone, they were highly compatible organisations for the response's hierarchical ordering, rather than fundamentally incompatible on the basis of military hierarchy as scholars like Byman *et al.* have argued as above.

Therefore, even though the CMRel that transpired in Sierra Leone are often characterised as atypical in nature, they had an arguably normative effect. Accordingly, in this instance, the extent of initial consternation that arose between civilian and military ERWs should not be considered the result of some kind of fundamental incompatibility. Rather, it was closer to the frustration and conflict that arises between those who perceive themselves to be uncomfortably similar in nature and objective, yet are made to co-exist and cooperate.^j Further, both groups rely on a culture of interventionism, and in this instance—however anomalous it may have been thought to be—the intervention of one group did not disrupt but rather facilitated and reinforced the intervention of the other.

Indeed, the classical response actors' and militaries' adjacent hierarchies were highly complementary through not only the enabling environment that was put in place by the latter, but also through the differentiation of roles within the NERC and DERCS. According to Buchanan, a scholar of Assemblage Theory, this boundary-setting maximises the inclusivity of a given assemblage through the creation of specialist roles.⁶²³ Therein, on realising the complementarity rather than competition presented by the

^j Akin to the tension and eventual hybridity that was seen between HMG departments under New Labour's partnership model in the mid-2000s.⁶⁷¹

militaries' seemingly anomalous intervention, classical response actors were able to re-territorialise and accommodate their military colleagues, circumventing the schism or exhaustion that might have otherwise occurred within their social organisation (Figure 3, page 153). Ultimately, in the Sierra Leone case, classical response actors and the involved militaries were similarly top-down, 'expert'-led, and internationally sanctioned.

This represents a significant and somewhat disruptive reconceptualisation of classical response actors. While their typical characterisation as highly distinct from militaries may speak to a genuine difference in the groups' respective degree of hierarchy, it belies the fact that classical response actors (like militaries) sometimes see themselves as similarly exclusive in nature, and are therefore not entirely distinct. This is despite 'distinction' between civilian and military actors being a core recommendation of global guiding documents (other limitations of the global guiding documents that can arise during public health emergencies were examined in Appendix A-6, pages 363–372).^{353,356,357} This exclusivity includes not only (I)NGOs, governments, and their national health authorities as institutions, but also governmental and non-governmental medical staff and other civilian 'experts' that anticipate compliance from those they consider unskilled and therefore subordinate (diversity within this group is addressed in Chapter 9, pages 214–236). This is an important hypocrisy in how classical response actors often self-identify (and/or are characterised in the literature, as previously described): while many celebrate themselves and their organisations as democratic and consensus-based,^{34,35,374} this is not always reflected in practice. Rather, as seen in Sierra Leone, this can be limited, only nominally ensuring the robust inclusion of crisis-affected communities and other marginalised voices.³⁷ Classical response actors in Sierra Leone interacted with locals, but often only on their own terms. The NERC and DERCs remained primarily occupied and led by dominant forms of institutions (be they civilian or military) rather than by locally affected populations, who may well have organised, interacted, and reproduced their social organisation very differently. Other scholars, for example, have argued these more local arrangements did occur elsewhere in the country, and included a better focus on local concerns and relied more centrally on the leadership of local but non-'expert' actors.^{37,43,264,285}

This chapter has argued, in short, that these seemingly opposed classical response and military actors should be reconceptualised as aligned in their cultures of interventionism and (relatedly) in their complementary hierarchical natures, and can thus be understood as ideologically co-constitutive and self-reinforcing organisations (this is similar to arguments by other scholars who have identified the synergy between containment and engagement approaches that were taken in Sierra Leone).⁷¹

Ultimately, their relative capabilities, hierarchies, cultures of interventionism, and *raison d'être* have foundations in the same historical inequities that limited the resilience of key civilian institutions in Sierra Leone. This rested in power from which affected populations have been systematically excluded, which also meant those populations were neither prepared for nor included in the response to what was

ultimately their public health emergency. Further and finally, this also served to undermine the status of affected populations, which limited capacity building amongst them, and thus, partially disabled their ability to effectively respond to future crises. The latter point is particularly true for the reason that classical response actors' and militaries' ultimately successful intervention—i.e., meaning simply that the outbreak was eventually contained after appeals to crisis and urgency had been made—mitigated robust public demand for more fundamental structural changes in the country's health system and the underlying political economy.⁷¹

Interestingly, this troublesome effect of humanitarian intervention is not only one that was anticipated when humanitarianism was first developed in the 19th century, but was so specifically for the civil-military nature of its inception.

The origin of the ICRC arose from civil-military coordination (CMCoord) following the Battle of Solferino in 1859.³⁷⁴ There, Henry Dunant—generally credited as ICRC's founder—rallied the local population to provide aid to wounded soldiers without discrimination.³⁷⁴ He later explicitly advocated for the creation of national voluntary relief organisations to do the same during wartime (this is generally understood to be the origin of contemporary humanitarianism).³⁷⁴

On considering Dunant's proposal, Florence Nightingale wrote:

Such a society would take upon itself duties which ought to be performed by the Government of each country and so would relieve them of responsibilities which really belong to them and which they can only properly discharge and being relieved of would make war more easy.⁶⁷²

In other words (and despite the yet to be defined Humanitarian Principles), Nightingale anticipated that humanitarian activity could serve explicitly political purposes, such as subsidising military medical services and lowering the cost of conflict. Importantly, she also identified that humanitarian activity could mitigate demand for public services by gap-filling where necessary.⁶⁷³

When contextualising CMI during the Ebola response as part of a broader global process in this way, it is found to further the hierarchical and neoliberal ordering of society as part of a vicious cycle and paradox previously termed the 'political economy of expedience' (Chapter 6, Figure 5, page 142), wherein a neoliberal political economy facilitates crises and simultaneously empowers specific hierarchical groups to respond to them. Those responding groups do save lives, but do so by manifesting a thought style that can facilitate various longer-term harms including the marginalisation of local groups; the reproduction of a culture of interventionism; and ultimately, the reinforcement of a neoliberal political economy.

However—as to be discussed in the subsequent chapter (Chapter 8, pages 176–213)—the effective and thorough integration of classical response and military actors that was found in Sierra Leone's NERC and DERCs also provides an invaluable example of the mobilisation of resources, technical expertise, and

lessons learned for the decentralisation to more local actors during future public health emergency responses.

Conclusion

Chapter 6 (pages 111–144) used the political economy of expedience paradox to critique the militaries' interventions in Sierra Leone's Ebola response. Through the application of Douglasian Theory and the reconceptualisation of classical response actors and militaries as co-constitutive and self-reinforcing organisations, this chapter reframes and broadens the paradox to argue that classical response actors are also participant in the paradox. The chapter that follows (Chapter 8, pages 176–213) will further examine the civil-military dynamics of Sierra Leone's Ebola response, with a view to learning lessons for the decentralisation of coordination during future public health emergency responses that may serve to mitigate the paradox while also maintaining the life-saving contributions of such exogenous interventions.

Limitations

Respondent selection presents several limitations to this study. For example, participation skews heavily male, with only 24 women out of 110 respondents (although this reflects the fact that the Ebola response was generally dominated by men, itself reflecting pre-existing biases). Additionally, Paramount Chiefs were included, in part, as representative of Ebola-affected communities, but their positionality in this regard is complex and debatable. This is partly because the chiefs' authority was historically empowered by the British colonial administration.^{43,71} Further, government respondents (particularly those in the military) may have been circumspect in any criticism of their or another government. Finally, significant actions were taken by Ebola-affected communities throughout the epidemic that fell outside the formal response organised within the NERC and DERCs. While some of these perspectives were captured, respondent selection did not explicitly include this grouping as it instead focused on documenting the perspectives of those operating within the formal response structures.

Site selection was generally limited to the Western Area Urban, Port Loko, and Kambia districts of Sierra Leone, which presents additional limitations. For example, these areas are generally considered more politically privileged than the country's more marginalised east (being adjacent to the national capital, and also the political stronghold of the party and president in contemporaneous power). These areas were also affected somewhat later in the outbreak, when many lessons learned had been incorporated into the Ebola response. Collectively, it is therefore plausible that respondents in these areas most vividly remember and have more positive associations with civilian and military ERWs than those elsewhere in the country (especially in the country's more marginalised east).

Courtesy biases should also be considered, as STB worked in Sierra Leone's Ebola response for 10 months at the research sites, and routinely interacted with civilian and military ERWs associated with the NERC and respective DERCs that were the focus of data collection for this study.

Each of these limitations was mitigated through: the large number and diversity of respondents, as well as the continuation of data collection until research saturation was met; the confidentiality of participation and anonymisation of research data (which helped to facilitate openness from respondents); and efforts by STB to ensure that reflexivity was practiced throughout the research process, so as to mitigate personal biases including those arising from prior work in the Ebola response.

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Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone's Ebola Response		
Primary Supervisor	Dina Balabanova		

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SECTION E

Student Signature	
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Date	28/02/2022

Beyond the ethical imperative: examining the militarised hierarchy of Sierra Leone's Ebola response and implications for inclusive and efficient decision making during public health emergencies

Key messages

- Sierra Leone's hierarchical National and District Ebola Response Centres (the NERC and DERCs, respectively) employed rules-based boundaries and procedures that secured neutral spaces for constructive negotiation, learning, and co-dependence among diverse (but relatively elite) members, amounting to unorthodox but robust civil-military cooperation and collaboration;
- Therein, the NERC and DERC structures facilitated a degree of decentralisation and localisation of response activities to a larger number and greater diversity of civilian Ebola Response Workers (ERWs) than might have been otherwise possible, which, in turn, helped to enable a larger, more efficient, and more effective Ebola response;
- The centres also facilitated a degree of decentralisation and localisation of response activities to a number of more local actors, thereby not only helping to further increase the scale, efficiency, and efficacy of the response, but perhaps also helping to mitigate the 'political economy of expedience' paradox;
- There is the potential to extend decentralisation and localisation during future outbreak responses so as to better include typically marginalised actors through 'inclusive hierarchical coordination' that engages the strengths of hierarchical efficiency and also inclusivity, thereby interrupting the paradox.

Abstract

In September, 2014, Médecins Sans Frontières (MSF) called for militarised assistance in response to the rapidly escalating West Africa Ebola Epidemic. Consequently, Britain deployed its military to Sierra Leone, which (among other contributions) helped to support the establishment of novel and military-led Ebola Virus Disease (Ebola) response centres throughout the country. To examine these civil-military structures and their effects, 110 semi-structured interviews with civilian and military Ebola Response Workers (ERWs) were conducted and analysed using neo-Durkheimian theory. The hierarchical Ebola response centres were found to be spaces of 'conflict attenuation' for their use of 'rule-bound niches', 'neutral zones', 'co-dependence', and 'hybridity', thereby not only easing civil-military relationships (CMRel), but also increasing the efficiency of their application to Ebola response interventions. Furthermore, the hierarchical response centres were also found to be inclusive spaces that further increased efficiency through the decentralisation and localisation of these interventions and daily decision making, albeit for mostly privileged groups and in limited ways. This demonstrates how hierarchy and localisation can (and perhaps should) go hand-in-hand during future public health emergency responses as a strategy for more robustly including typically marginalised local actors, while also improving necessary efficiency—in other words, an 'inclusive hierarchical coordination' that is both operationally viable and an ethical imperative for the interruption of the 'political economy of expedience' paradox.

Introduction and background

By the late summer of 2014, the 2013–2016 West Africa Ebola Epidemic in Sierra Leone was overwhelming health systems and showed no signs of abatement. Consequently, in September, 2014, Médecins Sans Frontières (MSF) called for a militarised intervention in response to the escalating crisis.¹¹ Shortly thereafter—as examined in Chapter 6 (pages 111–144)—the United Kingdom (UK) government (HMG) announced Operation Gritrock, a bespoke military mission to support Sierra Leone’s Ebola Virus Disease (Ebola) response across a number of domains alongside the Republic of Sierra Leone Armed Forces (RSLAF).

Until this point, the coordination of Sierra Leone’s Ebola response was led by the Ministry of Health and Sanitation (MoHS) and the World Health Organisation (WHO).¹⁵ However, following the arrival of Operation Gritrock, this was not to last: in mid-October, the Sierra Leonean President placed his then-Minister of Defence in charge of an entirely new coordination structure, the National Ebola Response Centre (NERC).¹⁵ The NERC was to oversee a complementary network of District Ebola Response Centres (DERCs), each of which contained a number of ‘pillars’ of siloed response activities. Supervised by a civil-military Command Team, the DERCs also shifted responsibility for day-to-day district response activities away from District Medical Officers (DMOs) and their respective District Health Management Teams (DHMTs).¹⁵ ‘Classical response actors’—defined here as civilian United Nations (UN); international and national non-governmental organisations ((I)NGOs); and national health actors—were thus placed directly alongside (and often under the direction of) British and Sierra Leonean military personnel in the daily management and operation of Ebola response activities within the militarised hierarchy of the NERC and DERCs (as was further examined in Chapters 6, pages 111–144, and Chapter 7, pages 145–175. Note, the thesis’ discussion, Chapter 9, pages 214–236, addresses the diversity found within this civilian group).

Chapter 7 (pages 145–175) argued for the ways that classical response actors felt their professional territories were therefore encroached upon. This, in turn, created a number of challenges to civil-military relationships (CMRel), which are often conceptualised and explained as resulting from this seemingly atypical civil-military coalescence. However, as was further argued in the prior chapter, the civil-military nature of Sierra Leone’s Ebola response did not challenge the humanitarian and public health status quo, but rather conformed to and reinforced it. Militarisation was perceived by most practitioners—including classical response actors—to bring numerous benefits to the Ebola response through, for example, the creation of an enabling environment, the acculturation of discipline and efficiency across response actors, and a general *modus operandi* of command and control (C2). In other words, classical response actors felt the intervening militaries provided an operational platform on which they could exercise their technical interventions, creating a civil-military response that was greater than the sum of its parts. Accordingly, the prior chapter found that what began as consternation between classical response actors and the involved militaries eventually became robust civil-military cooperation and collaboration.

Therein, the deployment of militaries and classical response actors to the response was ultimately found to contribute to the ‘political economy of expedience’ paradox. This concept was developed in Chapter 6 (pages 111–144) and refined in Chapter 7 (pages 145–175) to describe the ways in which the deployment of militaries and classical response actors to Sierra Leone’s Ebola response was valuable for the life-saving assistance that was provided, but also detrimental for the ways it simultaneously facilitated various harms (i.e., that it reinforced the neoliberal social and political context that limited the resilience of Sierra Leone’s public institutions; which resulted in them being overwhelmed by the outbreak of Ebola; which led to the perceived need for military intervention; which, vis-à-vis the successful containment of the virus, mitigated demand for robust changes to the underlying political economy).

Importantly, structural harms resulting from the deployment of militaries and classical response actors to Sierra Leone’s Ebola response also included the exclusion of many Ebola-affected communities from the response itself.^{37,264,335} Local groups were substantively involved in responding to the Ebola outbreak within their communities,⁶²⁰ especially in the outbreak’s earlier days before the significant influx of military and classical response actors in the autumn of 2014. These community-level contributions are often un(der)recognised, but were significant in their nature and, arguably, effect.^{37,285,297–299} However, rather than systematically folding these local groups and their capacities into the formal response being organised by the Sierra Leonean government (GoSL) and the international community, these groups were usually excluded from it: the NERC and DERCs were certainly inter-agency spaces, but they were not always fully democratic ones, as: routine participation was generally limited to classical response actors and militaries; doors were usually locked for meetings; and compound gates were often guarded by military personnel. As examined in Chapter 7 (pages 145–175), operational efficiency, after all, was felt by both classical response actors and the involved militaries to benefit from a hierarchical and top-down response.

6 (*vis*) and Richards use the example of Ebola treatment centres (ETCs) to underline this point, though the argument applies equally to the NERC and DERCs:

The international response was dominated by large-scale and hierarchically ordered [ETCs], generating many local myths about their true purpose... [Localised alternatives]... were very controversial. One view among some medical professionals was that they were a recipe for further spreading the disease... Here the institution was talking, and in negative terms.⁶²⁰

Ultimately, through the militarised Ebola response and the political economy of expedience paradox, the marginalised status of these local communities was (re)legated to the subordinate. Furthermore, in reproducing these structural harms, the Ebola response was less effective for it, as robust community engagement is often cited as one of the most important factors in successfully responding to an epidemic of this nature.²⁵⁹

While the prior chapters advance new knowledge of the origin, nature, and effect of military deployments to Sierra Leone’s Ebola response—with the first outlining the political economy of expedience paradox

and examining the militaries' contributions to it, and the second demonstrating how the actions of classical response actors also facilitated its vicious cycle of concurrent benefit and harm—neither chapter proposed mechanisms for resolving the paradox.

To fill this gap, this chapter considers the structure and operation of the NERC and DERCs with a view to identifying mechanisms through which the political economy of expedience paradox can, at the least, be mitigated. It first examines the ways in which the development, reinforcement, and sustainability of CMRel in Sierra Leone were facilitated by the hierarchical structuring of the response centres within which these actors interacted, specifically focusing on how conflict between these actors was attenuated over time. It then examines how a degree of decentralisation, localisation, and inclusivity were actually made possible (rather than challenged) by this dynamic, including in ways not solely limited to classical response actors. Taken together, this chapter seeks to evidence how hierarchy (organised in a conflict attenuating way) can support decentralisation to and the involvement of typically marginalised local actors during the response to public health emergencies in a way that makes the response not only more efficient and effective, but also more ethical.

Framework

This chapter draws on the neo-Durkheimian theories of Mary Douglas (hereafter referred to as Douglasian Theory), which was chosen for its focus on understanding the way conflict inevitably arises between different groups of actors, as well as the ways this conflict can then be moderated. Douglasian Theory posits that there are four elementary forms of 'social organisation'—individualism, isolate, enclave, and hierarchical ordering—distinguished by their varying degrees of social regulation and social integration. Each, therefore, occupies a different quadrant of a two-dimensional plane (blue, Figure 1, page 182). However, the forms are not mutually exclusive. In fact, many real-world social organisations exist as a blend of multiple forms representing an often lengthy and complex process of mutual accommodation.⁶²¹ Importantly, the four elementary forms of social organisation can describe not only specific groups, but also the external organising spaces in which interactions between different groups occur and relationships manifest.⁶²⁰

A given form of social organisation is enacted in the mechanism of quotidian ritual interaction (that is, daily routine and interaction), which cultivates a 'thought style'.⁶²⁰ The thought style, in turn, reinforces the social organisation that produced it, which is the final step in Douglasian Theory's causal mechanism (green, Figure 1, page 182). In other words,

...we dance our social organisation into institutionalisation and the structure or 'dances' in turn reflect the social organisation that they reinforce".⁶²⁰

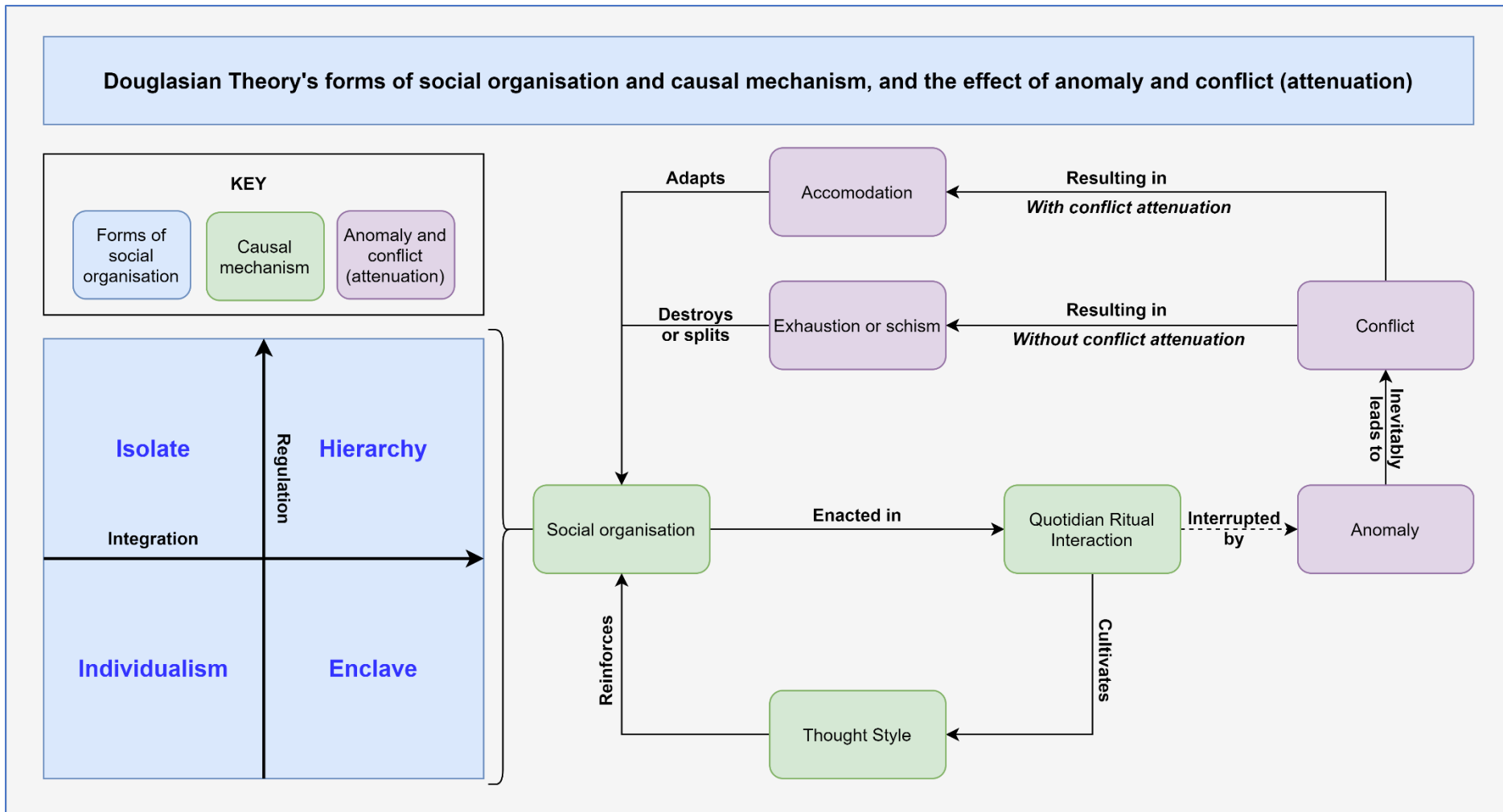


Figure 1: Douglasian social organisation; causal mechanism; and conflict (attenuation) (Source: author)

In its extreme form, this can actually be a disorganising rather than reinforcing process, where the social organisation fails to accommodate internal and external pressures or ‘anomaly’, leading to exhaustion or schism.⁶²⁰ Douglasian Theory posits that conflict within and between groups is inevitable for precisely this reason (purple, Figure 1, page 182).⁶²⁰

However and crucially, the theory also identifies four specific mechanisms of hierarchical ‘conflict attenuation’ that can disrupt (or at least mitigate) this process, leading instead to the eventual accommodation of anomaly by enabling quotidian ritual interaction to continue in an adapted way (Table 1). Conflict attenuation can therefore also serve to improve deconfliction and facilitate cooperation and collaboration between different actors (even across the four forms of social organisation).

Table 1: The four mechanisms of hierarchical conflict attenuation		
Conflict attenuating mechanism	Description	Relevance to this study (illustrative examples)
‘Rule-bound niches’	The permitted presence of another social organisation, provided it observes hierarchically defined boundaries and only operates within its authorised or sanctioned space	Different groups having different and delineated scopes of work/activities within the NERC and DERCs’ pillar system, such as the WHO overseeing surveillance or an (I)NGO overseeing the alerts desk, such that no one group conflicted with or overrode another
‘Neutral zones’	Agreed spaces in which different social organisations can co-exist without threatening the existence of another	The NERC and DERC meeting spaces where different groups could come together to discuss daily activities and resolve challenges collectively
‘Co-dependence’	When different social organisations are interdependent and mutually co-constitutive	Civilian and military Ebola Response Workers (ERWs) that had to work together with the shared objective of containing the Ebola outbreak
‘Hybridity’	Where the constitution of a given social organisation imbricates with another	Civilian ERWs becoming more hierarchical and military ERWs becoming less so, making them more like the other

Table 1: The four mechanisms of hierarchical conflict attenuation

While each form of social organisation is capable of conflict attenuation, hierarchical social organisation is the best described, and Douglasian Theory is plain about its unique ability to accommodate other forms of social organisation using the four conflict attenuating mechanisms outlined above.^{620,a}

For example, Douglasian Theory posits that hierarchical ordering has a “peculiar capacity” to attenuate conflict for its ability to “find internally distinguished rule-bound statuses and roles for a variety of

^a That is not to say that the hierarchical form is the only form of social organisation capable of conflict attenuation, only that it is most apt at the methods of conflict attenuation which are described. Mary Douglas died before she had the opportunity to describe how other forms of social organisation might navigate or (re)negotiate in response to conflict.⁶²⁰

activities”.⁶²⁰ Essentially, an organisation that is grounded in its adherence to defined rules (i.e., a hierarchical one) is capable of delineating exceptional spaces within its domain, as long as those spaces remain rule-bound. According to Douglasian Theory,

...hierarchy [thus] integrates by accommodating, in constrained rule-based tension and complementarity... rival principles... are each given their appropriate place and role.⁶²⁰

As rule-bound spaces for negotiation, neutral zones are a conceptually similar mechanism, wherein interaction and negotiation can occur without coercion, ultimatum, or the risk of being forcefully compelled. Taken together, hierarchy helps to attenuate conflict by defining ritual practices as specialist affairs and creating neutral spaces for their interaction, which permits the accommodation of those willing to take a more moderate and niche position within the overarching hierarchical scheme.⁶²⁰

Hybridity and co-dependence—as posited by Douglasian Theory—are also essential mechanisms for attenuating conflict. The former is when a social organisation borrows elements of and therefore blends into another’s. The latter is when mutual dependencies are developed between them (i.e., when the reproduction of a social organisation requires the existence of and interaction with another). Hybridity and co-dependence are significantly facilitated by the robust “coupling of shared interests” that evidence the interlinkages between differently ordered and co-dependent groups, thus ensuring that each has a space to operate and reproduce their social organisation.⁶²⁰ Accordingly, an

...organisation that recognises, celebrates and integrates difference and dissimilarity among people, as they classify each other, must rest on creating mutual dependencies among the institutions that make for that dissimilarity.⁶²⁰

The attenuation of conflict using these four mechanisms and the coupling of shared interests are fundamental to Douglasian Theory. Indeed, Douglasian Theory is so powerful for the very reason that it

...provides a method by which to diagnose how far the process of ritual self-reinforcement of thought styles in each of these forms has gone in any situation, and conversely, what capacities and capabilities in performance and thought style are being cultivated, or have ritually been left to atrophy, in performing the attenuation of conflict.⁶²⁰

In other words, Douglasian Theory permits the examination of not only conflict, but also the extent of peace-making that is evident within and between social organisations.

The application of the Douglasian Theory in prior chapters has demonstrated that, while civilian and military actors are popularly conceptualised as very distinct in nature, they actually share (to differing degrees) in their hierarchical social organisation. This eased the CMRel that transpired in Sierra Leone’s Ebola response. In this chapter, Douglasian Theory will be utilised to further examine the way Sierra Leone’s hierarchical Ebola response centres were conflict attenuating spaces that generally led to accommodation (rather than exhaustion or schism) between different organisations. It will ultimately

show how the use of hierarchical conflict attenuation can elicit important lessons for how to concurrently achieve operational efficacy and efficiency during the response to public health emergencies alongside—and through—the robust inclusion of typically excluded and marginalised groups (itself an ethical imperative).

Methods

This chapter relies on the analysis of 110 semi-structured qualitative interviews conducted by the PhD candidate (STB) with various respondents: civilian (n=84) and military (n=26) ERWs at the chiefdom (n=6), district (n=43), national (n=45), and international (n=16) levels between 2017 and 2018 (Figure 2). Site selection included Western Area Urban District (i.e., Freetown) so as to collect national-level perspectives; and Port Loko and Kambia districts, so as to collect (sub-)district-level perspectives.^b These districts were chosen due to STB’s extensive experience working in the districts during the 2013–2016 West Africa Ebola Epidemic, which helped to facilitate access during the data collection process (this site selection has limitations which are described later in this chapter). Further interviews were conducted elsewhere as required (e.g., to collect international-level perspectives, or where a respondent had relocated following the epidemic).

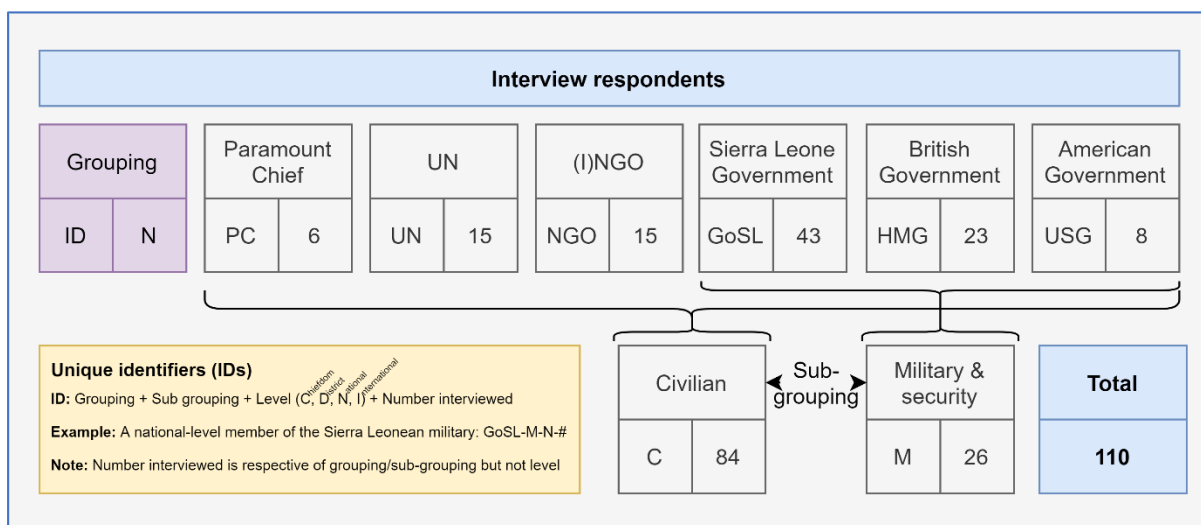


Figure 2: Interview respondents (Source: author)

Subject selection was purposefully broad so as to reach saturation. It included anyone who was involved in the Ebola response at these research sites who was either affiliated with the NERC and DERCS or with the activities being coordinated within. A specific focus was given to maximising the diversity of respondents’ organisations, agencies, or departments (n=41). As detailed in Figure 2, each respondent was assigned a unique identifier (ID) according to the respondent’s grouping; sub-grouping (i.e., whether the respondent was a civilian or a member of the military or security services); level; and finally, a number

^b Primarily, district-level perspectives were drawn from Kambia District, owing to the fact that STB was based there and unable to secure accommodation in Port Loko District. Therefore, Port Loko District was used to complement the data from Kambia District where saturation had not been met for a particular grouping of respondents.

according to the chronological order of interviews conducted within the respondent's (sub)grouping (irrespective of level).

An interview guide was developed and utilised for all interviews, which were semi-structured and open-ended in nature. The guide was developed in a primarily inductive manner, with themes incorporated iteratively as they arose through the interview process. Some *a priori* themes from the literature and a 2017 Chatham House roundtable event were also considered.²⁷¹

Initial organisation of the data drew on framework analysis: familiarisation was accomplished through the central role of STB in all aspects of this study; data was inductively coded in NVivo; nodes were then reviewed, aggregated, and disaggregated where appropriate; and data were then charted and mapped for patterns within and between respondent groupings. As previously described, Douglasian Theory (which was chosen after data collection and coding had concluded) was then applied to the data in order to interpret the findings.

Ethics approval was granted by both the London School of Hygiene & Tropical Medicine (LSHTM) Research Ethics Committee (reference #14424) and the Sierra Leone MoHS Office of the Ethics and Scientific Review Committee (no reference number provided; approved August 28th, 2017 and amended February 15th, 2018). All research was conducted according to accepted norms for ethical research.

Results

The findings fall into three main areas, presented in separate sections. Drawing on national and district-level perspectives, the first section examines how co-dependence (a conflict attenuating mechanism defined above) was purposefully established within the NERC and DERCs by military actors in order to facilitate the arrival and Ebola response interventions of classical response actors. The subsequent section examines how other conflict attenuating mechanisms were then used within the NERC and DERCs to ensure the intervening classical response actors were able to practice their quotidian ritual interaction and reinforce their social organisation in a way that accommodated the perceived anomaly presented by a civil-military response to a public health emergency. The final section (primarily drawing on sub-district perspectives) examines how, taken together, this became a virtuous and inclusive cycle: as more actors became involved and organised in a conflict attenuating way, oversight and accountability structures were made more robust. This, in turn, helped enable the Ebola response to be scaled to even more actors, including thousands of local actors.

Developing civil-military co-dependence

This section first examines how classical response actors are frequently characterised by respondents as having various weaknesses (e.g., disorganisation, a lack of accountability, and inefficiency) that were felt to be detrimental to successfully containing Sierra Leone's Ebola outbreak in its early months. Thereafter,

the section examines how military actors nevertheless took proactive steps to incorporate classical response actors in the NERC and DERCs, because they felt that classical response actors had other important strengths. The section then examines how, to address the perceived weaknesses of the involved classical response actors, militaries put oversight and accountability mechanisms in place which were realised through the hierarchical NERC and DERC structures. The section concludes by examining how, taken together, this represents an important co-dependence that was developed between classical response and military actors within (and as facilitated by) the hierarchical NERC and DERCs.

Perceived classical response actor weaknesses

Before the intervention of RSLAF and the British Armed Forces (specifically in their support to the overhaul of national and sub-national Ebola coordination centres), “*it was complete smoke and mirrors*”, recalled an (I)NGO respondent (NGO-C-N-10). Indeed, as was further examined in the prior chapters, respondents who were present in the Ebola response’s early days consistently recalled a fraught sense of lethargy, incoherence, and disorganisation in the MoHS and WHO-led Ebola Operation Centre (EOC) responsible for coordinating the country’s national response. District-level respondents often noted the same concerns in the DMO-led DHMTs organising the country’s various district responses. According to an (I)NGO respondent (implicitly referencing the forthcoming change in national and district coordination):

We went from a world where the EOC meeting would happen in the DMOs office with the WHO sitting there scratching their heads, and the burial team lead saying ‘we buried eight people today’—and I’m not joking—everybody giving [them] a round of applause, and then everyone moving onto the next subject. And I would say, hold on, hold on, but how many bodies were reported? And they’d say, ‘oh we don’t know’ (NGO-C-N-7).

To this respondent, the “*completely inadequate*” lack of accountability (in this case around dead body management) was a serious concern (NGO-C-N-7): reporting on the number of people successfully buried tells one very little about the success of the burial system in place, unless one knows and includes the relevant denominator (which, with bodies frequently lying to rot on the streets at this time as described in Chapter 6 (pages 111–144), was unknown but plausibly quite high). This perceived disorganisation was congruous with the perspective of a GoSL civilian respondent, who—despite working for the MoHS—suggested that

...when you look at the setup of our [state] ministries, in terms of the way operational activities are taken, you see a lot of delays. You see a lot of lethargy. People don’t meet timelines (GoSL-C-N-20).

This important difference between classical response actors and military actors was illustrated by a senior (and ex-military) HMG civilian respondent who theorised about the root causes of the differences:

The truth is, different kinds of people go into different kinds of professions. They have different ways of operating, and they have a different understanding of how the decision can and should be made... If you have a public health person, you can spend a lot of time discussing things, and they want everybody to

have their say and to come to a joint consensus. That takes an extremely long time, and usually none of them are prepared to take the ultimate responsibility of making a decision and getting on with it. Military people are trained in a very simple way... The people in the military are trained to take responsibility, and then to act on it. That makes a big difference (HMG-C-I-4).

In other words, to this respondent, the less hierarchical approach that generally characterises classical response actors represented a significant difference when compared with a more militarised one (a difference that in their mind was something to criticise, in that they considered the classical response actor approach to be relatively slow, cumbersome, and ineffectual). In the Sierra Leone context specifically, this perspective was widely shared across all respondent groupings (albeit often with less forceful disapproval). Classical response actors were frequently characterised in the data as being less efficient and less disciplined (particularly with regards to time management) than their military colleagues.

Accordingly, while respondents were not specifically asked to comment on what they perceived the weaknesses of classical response actors to be, relevant insights nevertheless emerged during some interviews. For example, many respondents noted issues such as inadequate efficiency, time management, and focus (n=37), which was the second most common criticism after a lack of preparedness (n=43). There was little differentiation between respondents' grouping or level. Along with insufficient capacity (n=36), classical response actors were also frequently perceived to manifest weak coordination (n=21). This was a particularly problematic gap, as in the summer and early autumn of 2014, an increasing number of classical response actors were planning and preparing to deploy in response to the escalating crisis.

Both military and classical response actor respondents pointed to the weaknesses they perceived in classical response actors, which—as further examined in Chapter 6 (pages 111–144)—were ultimately one of the stated impetuses for the NERC's replacement of the EOC (as well as the associated removal of MoHS staff from direct leadership over the Ebola response).

The militaries' proactive incorporation of classical response actors

However, despite these perceived key differences—importantly, ones that military respondents often criticised—classical response actors would be not only integral to daily Ebola response operations, but integral in a way that largely resulted from the planning of several key personnel (including military actors) at the national level.

An (I)NGO respondent (who was one of the key figures involved in developing the NERC and DERC system) recalled being in a meeting where the centres were being conceptualised. Along with representatives from the British Armed Forces and RSLAF, they were

...drawing... things like roles and responsibilities... on whiteboards, [and deciding] where we would put different organisations... We drew out all the process maps, and then we got them printed on to big pieces of paper... We made sense of the chaos... We'd been plotting and scheming for two weeks,

mapping and planning, getting all the resources in place, working it out with RSLAF... [We] had the Red Cross ready, we needed Concern Worldwide... we needed others ready... So, we told [all these groups] 'you report to the [new] command centre from tomorrow morning', and they just came! (NGO-C-N-7).

This suggests that the small civil-military team that set up the NERC and DERCs designed roles for and then delegated responsibilities to classical response actors. Indeed, as also examined in the prior chapters, the intervention of the militaries and the creation of the NERC and DERCs had the specific objective of facilitating the deployment of classical response actors to the Ebola response. This is because military actors generally understood that classical response actors were integral to the process and ability of getting large-scale response activities up and running in a short period of time (a capacity that the militaries did not have). A national-level British Armed Forces respondent recalled:

That is what the plan was. The backstopping [of the] international community, to say, 'you can all come and help, all you humanitarians, come and do your job.... And the point is, it was 200 million [Great British] Pounds that guaranteed the international and NGO [presence]. So, when you weigh those [financial costs], DFID obviously said 'it's worth it!' Otherwise, [the UK is] not going to get these other [non-military] people. And the military can't fill all of these other roles, or won't. They won't run six hospitals, they won't do coordination with social mobilisation, they won't do all the contact tracing, you know, we won't do that (HMG-M-N-5).

Therefore—despite their perceived weaknesses and the removal of MoHS and WHO leadership over the Ebola response—the default position of the response's key military decision makers was that classical response actors were an integral and complementary part of the NERC and DERCs' civil-military constitution (the initial development and inception of the NERC and DERCs was previously described in Chapter 6, pages 111–144, at greater length).

Importantly, the militaries' desire to proactively include classical response actors was not limited to a small number of key military decision makers at the country's national level. Indeed, military respondents across the research sites frequently expressed a degree of humility regarding their lack of relevant technical and medical expertise in response to a kind of emergency (i.e., a public health one) that they were unaccustomed to (as examined further in Chapter 7, pages 145–175). For example, according to one British Armed Forces respondent, some classical response actors spent

...a lot of time trying to prove to us that they were the experts in what they were doing and that we should all bugger off and leave them alone. But actually, that was never questioned. We were never pretending that we were better than anyone else. We were just supposed to be there to support it happening, and to try and make it happen as well as [the classical response actors] could do (HMG-M-D-8).

Accordingly, most military respondents at all levels saw their primary strength as “*the operationalisation of... [classical response actors'] nebulous ideas into day-to-day actions*” (USG-M-I-1), rather than the performance of those actions themselves. In other words, a British Armed Forces respondent stated that instead of taking over work from classical response actors, “*the military's really added benefit was to stop [them from] navel gazing about how to respond and just to get on and respond*” (HMG-M-N-2).

In short, classical response actors were recognised by most military actors for not just their capacity but also their competencies and were thus purposefully assembled and incorporated into the Ebola response's new militarised coordination centres.

The introduction of robust oversight and accountability mechanisms

The military respondents' comments (above) show a degree of understanding that the military were not going to 'run the show', but rather, that they needed to help create a structure and an enabling environment into which classical response actors could arrive and perform Ebola response activities. This structure was felt to require strong accountability and oversight mechanisms in order to mitigate the previously described perceived weaknesses of classical response actors. In doing so, it was thought that classical response actors' valuable contributions could be better realised, without risking the disorganisation and inefficiency that most respondents felt had characterised the EOC and DHMTs.

Said a British Armed Forces respondent:

There's a lot of people out there doing a lot of good things and we just [have] to make sure it's all going in the right direction and to keep the momentum going... It's almost like having a sweeping action, just sweeping behind everybody. Making sure that everyone is keeping the same direction... Somebody has got to be making sure that it's all going down the single lane, to the single point (HMG-M-D-4)

Accordingly—so as to align efforts in “*the single lane*” and focus on “*the single point*” objective of containing the Ebola outbreak (HMG-M-D-4)—in replacing the EOC and DHMTs with the military-led NERC and DERCs (respectively), the militaries “*came in and created a kind of rules-based system*” (NGO-C-N-10), in which “*the processes and the systems... [and] a series of SOPs [standard operating procedures]*” (NGO-C-N-7) for daily operations were established (in Douglasian terms, SOPs could be thought of as akin to ritual ordering). This, in turn, created a set of expectations (i.e., they identified the Ebola response's various denominators), against which classical response actors' day-to-day interventions were publicly measured at the NERC and DERCs' morning and evening briefings.

A mechanism for “*ruthless accountability*” (HMG-C-D-6), suggested an HMG civilian respondent, was therefore established within the NERC and DERCs, which helped to ensure that the centres' processes, systems, and SOPs were followed by the (increasingly various) actors operating within them (as examined in Chapter 7 (pages 145–175), this fairly sudden shift caused some challenges for classical response actors). This discipline was taken especially seriously by the NERC and DERCs' military actors. One, a senior RSLAF respondent, considered it a life-or-death matter comparable to battlefield orderliness:

You have to be really disciplined [when responding to an Ebola outbreak]. Because if you rush the process, then you might miss some of the points, and you will be infected, and you will die. In the military, if you ask me to strip and assemble a weapon, I know what comes out first, and I know what comes out second, and I know what comes out last. And I know what goes in again first when I'm assembling [it]... You do it dogmatically, so you make no mistakes. Because if you make mistakes in placing the wrong part in the wrong position with your weapon, then you are a dead man... [Therefore, in Sierra Leone] the military was able to follow procedures dogmatically... [In the NERC and

DERCs,] *we... brought that discipline to the civilian workers... [and] reduced the number of deaths... It's like a ritual, that's the right word. Like a ritual* (GoSL-M-N-11).

“To defeat Ebola”, the RSLAF respondent continued and summed up, “*was just simple discipline*” (GoSL-M-N-11), acculturated through dogmatic and ritualised procedure, which in turn, cultivated a hierarchically ordered thought style.

Importantly and accordingly, though, the DERCs’ civil-military Command Team did not enforce this discipline within the NERC and DERCs (as described later, they did not have any formal authority to do so). Rather, they put daily rituals in place that facilitated it. As recalled by an HMG civilian respondent (and Command Team member), without the NERC and DERCs,

...you wouldn't have had a morning [or evening] brief[ing]... [and therefore] you wouldn't have had a sense of urgency, and a sense of accountability... [The NERC and DERCs]... put these elements together (HMG-C-D-6).^c

In other words—through morning and evening briefings and other hierarchical processes, systems, and SOPs—it was felt that the NERC and DERCs provided the hierarchical structures within which this discipline could be cultivated and ritually acculturated amongst classical response actors.

For this, the NERC and DERCs were widely commended by respondents regardless of their grouping or level (re-noting, though, that with the exception of Paramount Chiefs, subject selection criteria as previously described meant the majority of respondents were associated with one of these centres and usually compensated for their work within). For example, a UN respondent recalled how it was “*refreshing to have predictability and reliability and accountability*” within these centres (as they felt there had previously been very little) (UN-C-N-3). An (I)NGO respondent recalled how “*people really responded to the structure and discipline*” (NGO-C-N-7) that was imparted. One RSLAF respondent even recalled how the occasional nagging and cajoling by military actors that was required to keep things moving in the DERCs quickly became such a trope that, in their memory, classical response actors and military personnel would sometimes take a step back and “*crack funs [sic] and... just joke and laugh*” about the militarised oversight (GoSL-M-D-4).

Co-dependence by (civil-)military design

The militaries’ intervention was felt by many to be significant for the enabling environment it created in the NERC and DERCs (as was further examined in the prior chapter), because within these civil-military centres, the diverse number of activities conducted by a range of actors could be better directed towards the shared objective of containing the outbreak. In other words, the British Armed Forces and RSLAF

^c It should be noted that the presence of the British Armed Forces was also felt to provide necessary oversight of not just classical response actors but also of RSLAF, as—in the words of an HMG civilian—you had “*an ability for an officer from the British [Armed Forces] to basically go and close the door and say to a senior commander in the RSLAF 'this is wrong'*” (HMG-C-I-9). One UN respondent echoed this point, saying that in Sierra Leone, there was an evident and “*professional military to military respect*” (UN-C-I-13).

proactively built co-dependence into the very design of the NERC and DERCs, even though many military actors felt that classical response actors could be cumbersome and inefficient in their decision making processes as examined above. Having these hierarchical structures and co-dependent procedures in place, recalled a GoSL civilian respondent, helped to allow for

...the NGOs, the [I]NGOs, the WHO, UNICEF, [and other classical response actors to intervene]... [and allowed for] all these organisational resources [to be] poured in. And they were swift to move, so that the response was a rapid response [that could] alleviate the situation and save lives (GoSL-C-N-26).

Moreover, once the resources were “poured in” (GoSL-C-N-26), the same structures—in the words of a British Armed Forces respondent—

...forced everybody to work together. Because we had to. And I think that in a lot of cases the civilian organisations recognised the ability of... that structure [as one] within which [they could] do their job (HMG-M-D-4).

This was further echoed by an (I)NGO respondent, who recalled:

Ebola is no friend of any of us. And this could never happen without the right knowledge and expertise. And so, you won't be able to do these things without the UN agencies, nor should we. But the military were critical sitting at the table. We needed people who were ready to move and turn a policy into an implementation plan (NGO-C-N-7).

Thus, within the hierarchical NERC and DERCs, the militaries were felt by both civilian and military respondents to provide the necessary oversight of a growing and increasingly complex, multifaceted, and multi-actor Ebola response, representing a significant degree of co-dependence between the involved military and classical response actors. Accordingly, as measured across all respondent groups, four of the most frequently cited positive attributes of military ERWs were the control (n=42); discipline (n=45); efficiency, time management, and focus (n=47); and overall strength in coordination (n=51) that they manifested within and acculturated throughout the NERC and DERCs.^d

While Chapter 7 (pages 145–175) found that some classical response actors initially found the unusually hierarchical approach and militarised nature of the NERC and DERCs difficult to navigate, the centres' other conflict attenuating mechanisms (to be subsequently examined) helped classical response actors to continue practicing their quotidian ritual interaction and thereby encouraged the accommodation of this anomaly and preservation of their social organisation.

^d Tellingly, these positive military attributes are cited by respondents either on par with or more frequently than the military contributions that are more typically recognised within the civil-military literature and global civil-military guiding documents, such as logistics and engineering (n=43); resources and capacity (n=44); and protection, safety, and security (n=43).

Other forms of hierarchical conflict attenuation in the NERC and DERCs

Focusing on the perspective of respondents situated within the NERC and DERCs, how each other conflict attenuating mechanism was employed within these centres is examined. This is done with a view to understanding how anomaly was eventually accommodated (i.e., from the perspective of the involved classical response actors, how the centres' atypically hierarchical approach and militarised constitution was eventually accommodated; and from the perspective of the involved military actors, how the centres' atypically horizontal, consensus-based, and democratic approach and civilianised constitution was eventually accommodated).

Rule-bound niches and neutral spaces

As previously described, during the development of the NERC and DERC structures, it was recognised that the Ebola response required not only the provision of medical care to infected patients, but numerous other interventions as well. A respondent involved in the design of these structures noted that

...it was only when the tyres hit the road that we looked... and went okay, so, we need burials, we need surveillance, we don't have anyone looking after quarantine [and] someone needs to be doing quarantine... Why don't we have [each] as a specialist area? (NGO-C-N-7).

Therein, it was decided that each intervention should be organised as a specialist area bounded by a specific and rule-bound scope of work. Accordingly, a bespoke structure—the pillar system—was created (Figure 3, page 194), in which each intervention formed an operationally distinct pillar within the wider system (e.g., surveillance, dead body management, and logistics, as shown in Figure 3's orange cells, page 194).

A specific classical response actor was made primarily responsible for forming, managing, and operationalising each. Some—such as the case management and security pillars—were run by medical or military actors, and were therefore quite hierarchical in nature. Others—such as the social mobilisation and psychosocial pillars—were run by (I)NGOs focusing on community engagement and a degree of local ownership, and were therefore more horizontally organised and consensus-driven. The different approaches followed from the perceived need for clear and efficient procedures in some activities (such as those which required rapid intervention to prevent onward transmission from known cases), and the perceived need for a greater degree of exchange, debate, and conversation in others (such as those which focused on slower processes of community behaviour change). Taken together, the pillar system (which comprised the NERC and DERCs) served to organise the various Ebola response interventions being managed and performed by diverse actors on a day-to-day basis. Therefore, these centres embodied the use of rule-bound niches.^e

^e Pillarisation in this manner is also arguably a good example of the parallel structures of sodality (i.e., confraternity or association) and modality (i.e., a particular way of doing something) that create robustness within a Douglassian hierarchy.⁶⁷⁴

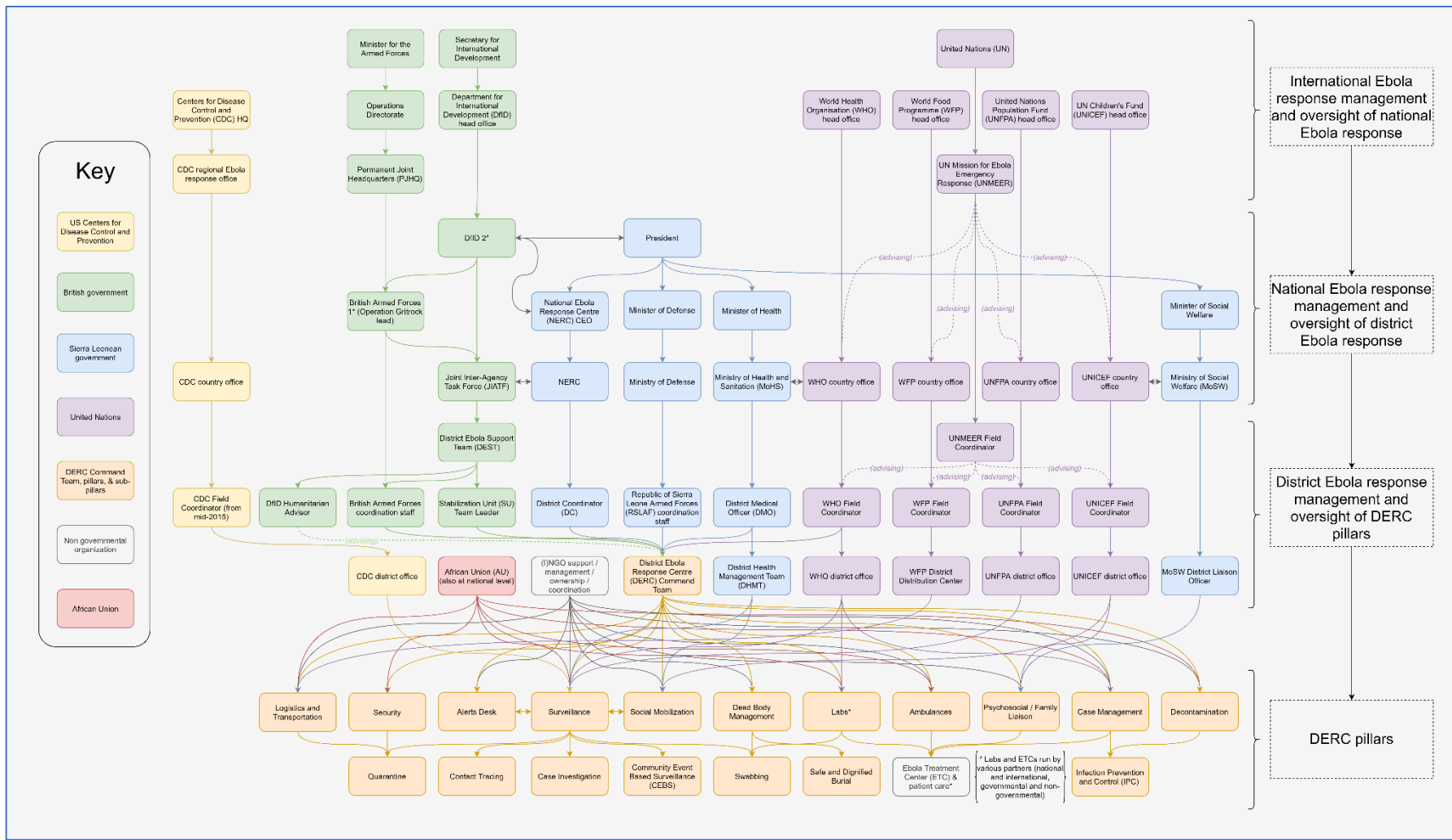


Figure 3: The DERC pillar system (orange) and its hierarchical superstructure (Source: author)

In Port Loko and Kambia districts,^f these pillars were organised underneath and coordinated by a civil-military Command Team which was comprised of six individuals: a military representative from the British Armed Forces and RSLAF; an HMG civilian from the Stabilisation Unit (SU); a Sierra Leonean District Coordinator (DC) (appointed by the President); the WHO Field Coordinator; and the DMO.^g The Command Team's mandate was to help ensure that the various pillars' work streams were effectively aligned towards the shared objective of containing the outbreak and also to up-report on daily activities, challenges, and the changing epidemiological situation to the NERC in Freetown.

The interactions that occurred between the Command Team and (rule-bound) pillar leads in the NERC and DERCs occurred within a neutral zone (defined by Douglasian Theory as a space "in which negotiations might be sustained, but where none of the forms has a power of absolute veto or insistence").⁶²⁰ During daily interactions and morning and evening briefings: the day's activities were reviewed; challenges discussed and possible resolutions offered; and the subsequent day's activities were planned and coordinated. The Command Team chaired day-to-day interactions and the evening *tour-de-table* discussions, but as described, generally maintained an oversight and accountability role. While formally this process may have imbued the Command Team with a degree of power, it did not intervene in specific pillar activities which were considered the domain of classical response actors.

Accordingly and importantly, the Command Team did not have the formal authority to direct any particular organisation (e.g., the WHO), only to advocate for recommended changes (HMG-C-D-6). In other words—despite its moniker and in line with the NERC and DERCs' constitution as neutral spaces—the Command Team role was neither to veto nor to insist. One HMG civilian respondent (and member of a Command Team) acknowledged this lack of direct control by enquiring:

How do you promote accountability across [an] organisation that you have absolutely no formal control over, when you [are] just trying to build consensus? (HMG-C-D-6).

In generic terms, the respondent did go on to describe how they felt the Command Team was able to facilitate this accountability and build consensus amongst classical response actors through aligning and focusing their work:

It was a serious situation, and I think everyone felt it was a serious situation. And... there was this certain [energised] vibe that I don't think [the Command Team] generated. I think it was self-generated amongst the people there. But we were able to corral it... and marshal it... [and make sure] that everyone was on the same page (HMG-C-D-6).

^fThis was also true for the DERC in Western Area Urban (the district comprises Freetown, and so the NERC was situated there. However, it was a distinct centre from the Western Area Urban DERC, which organised Ebola response interventions within the capital city).

^gAt the district level, HMG support was internally organised as the District Ebola Support Team (DEST) and also included humanitarian advisors from the Department for International Development (DfID). The DEST reported to HMG's civil-military Joint Inter-Agency Task Force (JIATF) which was based in Freetown (Figure 3, page 194).

More specifically—as recalled by another Command Team member from British Armed Forces—the Command Team

...would lead... [but] try to do so in a way where everybody in the audience knew that they were playing a part, and that they [were] a part of the decision making process... and... [then] just bring... together every brilliant idea and put it into a plan (HMG-M-D-4).

In doing so, the Command Team: convened classical response actors; helped to “*put [the response’s] elements together*” (HMG-C-D-6); and therein, helped “*turn [their various] polic[ies] into an implementation plan*” (NGO-C-N-7) that better aligned their collective efforts (each of which was being independently operationalised within a pillar as above, and therefore possibly at risk of dissonance without this kind of stewardship). As summarised by a GoSL civilian respondent: “*Let us not forget [that the DERCs’] military [actors in the NERC and on the DERC Command Teams] just helped us to organise and plan... with a kind of coherence*” (GoSL-C-N-17).

The extent of differentiation between roles and function was therefore significant, both between the rule-bound pillars themselves, and also between the Command Team and the pillars that they oversaw; the Command Team helped to facilitate others’ activities within their rule-bound niches and worked within the NERC and DERC’s neutral space to discuss and resolve problems that arose as well as to align interventions towards a common goal. This helped to ensure that classical response actors were able to continue practicing their interventions and, thus, continue manifesting their quotidian ritual interaction and reinforcing their social organisation.

Co-dependence, hybridity, and the coupling of shared interests

Crucially and further, by differentiating functions between classical response actors and the involved militaries through the pillar system in this way, the NERC and DERCs’ daily operation required co-dependence (which was examined at greater length in the previous section): while any given pillar represented a specific scope of work, taken together, they comprised the Ebola response. In other words, each pillar was a fundamental component of the whole, and all had to operate not only concurrently but also in concert for the Ebola response to manifest and function.

As this co-dependence demanded that diverse actors work together, a degree of hybridity (that is, a degree of “melding” or “blending” between different social organisations) was necessitated.⁶²⁰ Douglasian Theory argues that hybridity demands compromise by interacting groups, in that they must incorporate (rather than confront) each other’s thought styles.⁶²⁰ Accordingly (and as further examined in Chapter 7, pages 145–175), among a majority of both military and civilian respondents, there was an understanding that a fully militarised C2 (i.e., C2 in the way that a military might typically understand and apply it internally) was not always appropriate when engaging with classical response actors in a multi-agency and civil-military response.

Equally, however (and as previously described), it was also felt that classical response actors' perceived disorganisation and inefficiencies were unsuitable in the response to a highly dynamic and life-threatening crisis. Therefore, instead of one approach fully dominating, over time, many of the different actors in the NERC and DERCs became more alike one another. That is to say, Militaries became less hierarchical in nature, and classical response actors became more so. This was captured by a GoSL respondent who argued that

...mixing people [in these centres] broke down barriers by encouraging people to learn from each other... As soon as [civilian and military personnel] started working together, the civilians started appreciating the fact that the military did things rigorously and they very quickly picked that up. So, [over time], if [the Command Team] said six o'clock, it was six o'clock, [and the] civilian staff were there. They were punctual, and they became just as organised and strategic as the military mind is. And at the same time, the military learnt to be more compassionate, learnt to be less rigid, learnt to debate things which they don't generally do in the army [laughing]. And they learnt to work with local communities better... [as] they now underst[ood] that it is not always the case that you just give orders and then... things [get] done (GoSL-C-N-17).

Indeed, the military analogue to the DERC—that is, a place from where localised interventions are operationalised—is called a Forward Operating Base (FOB). In a military FOB, a C2 approach (including the rule of law and following orders) is a non-negotiable *modus operandi*. Therefore, from the perspective of military actors involved in Sierra Leone's Ebola response, the purposeful and proactive inclusion of classical response actors in the NERC and DERCs meant these centres were atypically consensus-driven, horizontal in organisation, democratic in function, and inclusive in nature (however, of note, the British Armed Forces was not deployed to Sierra Leone *tout corps*. Personnel—who were unarmed—included military medical staff, technical experts, engineers and logisticians, and administrators, for example. Operation Gritrock did not include combat troops, who may be more accustomed and adhere more strictly to military hierarchy).^{h,i}

A British Armed Forces respondent echoed how the civil-military inter-agency collaboration required this softening of approach, saying

...thankfully, we have politicians to balance the military alpha male with the political expediency, with the public opinion, [and] with the humanitarian workers. So, [between] all sides—you know, politics, military, lobbying, humanitarian—you... come up with a middle ground (HMG-M-N-5).

In other words (and as discerned by Douglasian Theory), classical response actors and military actors operating in isolation were prone to the reinforcement of their own social organisation and thought style. Acting in concert, though, mitigated the degree to which this occurred within a given group, as extreme forms of social organisation were moderated through hybridity in a conflict attenuating way. By becoming more hierarchical, classical response actors were able to accommodate the anomaly presented by the unusually hierarchical and civil-military Ebola response. In becoming less so, military actors were able to

^h While Chapter 7 (pages 145–175) argued for the ways that classical response actors in Sierra Leone's Ebola response were also hierarchical in nature, the degree of their hierarchy was found to be less than that of their military colleagues.

ⁱ One British Armed Forces medic noted that, in their experience, medical hierarchy supersedes military hierarchy due to the technical nature of their expertise (HMG-M-D-8).

accommodate the anomaly presented by the ways the response was atypically horizontal, consensus-driven, and inclusive of non-military actors. Hybridity thus helped more respectful relationships between involved actors to develop, wherein a degree of mutual learning enabled them to not only recognise the strengths and weaknesses of their different approaches, but to put this learning into practice within the NERC and DERCS.

According to Douglasian Theory, successful co-dependence and the kind of organisational hybridity seen in the NERC and DERCS is significantly aided by the coupling of shared interests.⁶²⁰ In the Sierra Leone case, this was straightforward: differently organised actors not only worked alongside one another, but did so while sharing the unambiguous (and bounded) objective of containing the Ebola outbreak. As stated by an HMG civilian respondent:

There was no military or political strategic imperative other than how do you help stop this potentially ravaging outbreak as quickly as possible. It was [as] simple as that (HMG-C-N-14).

In line with Douglasian Theory, one GoSL civilian respondent felt that having a shared objective in this way was of central importance to actors coming together peacefully, noting how there was

...a camaraderie which identified one enemy, Ebola. Ebola was an enemy of our country, and was killing our people. And recognising that it is us versus the virus, and [that] this is an existential threat, a do or die situation... That helped people to coalesce together (GoSL-C-N-17).

Most respondents (regardless of their grouping or level) agreed that—despite any differences between them—civilian and military ERWs were joined by the primacy of this shared objective (though a number of primarily international-level respondents raised concerns about a possible ulterior motive of military actors, in that they plausibly expanded their role in responding to the Ebola outbreak in Sierra Leone. Meanwhile, a large number of both civilian and military respondents at all levels raised concerns about the organisational and financial security afforded classical response actors by the Ebola response, representing a possible conflict of interest. Both sets of concerns have been previously examined in the prior chapters). As the NERC and DERCS were the organising spaces in which the shared objective of containing the outbreak could be focused and realised, they were foundational to the successful development of its actors' conflict attenuating co-dependence and hybridity.

Taken together, for their use of rule-bound niches, neutral zones, co-dependence, and hybridity, the NERC and DERCS can be understood as not merely hierarchical organisational structures, but as conflict attenuating ones. Clear, rules-based boundaries and procedures were established, which were manifested and negotiated within neutral spaces. This amounted to a necessary co-dependence, which in turn (and as further facilitated by the coupling of shared interests) helped to engender a degree of hybridity and interdependent learning between diverse actors. Therein, classical response actors were not usurped by the involved militaries, nor ostracised from the NERC and DERCS they established. Rather, the militaries helped to provide them an enabling environment in which to intervene, apply their technical expertise,

and implement response activities (i.e., to practice their quotidian ritual interaction and thereby sustain their social organisation in an adapted way). The centres thus facilitated the accommodation of anomaly by its actors, rather than leading them to schism or exhaustion.

Approaching the grassroots?

In this chapter's final findings section, the way in which the hierarchical and conflict attenuating NERC and DERCs facilitated a virtuous cycle of inclusivity and robust coordination is examined. First, the concept is briefly described through the examination of the ways it applied to classical response actors. Thereafter, primarily drawing on sub-district level perspectives, the way this permitted a degree of decentralisation and localisation to more local actors is examined.

The virtuous cycle of inclusivity and robust hierarchical coordination

As previously described, as the number and diversity of involved actors increased in Sierra Leone's Ebola response (as facilitated by the hierarchical NERC and DERCs' inherent co-dependence and other conflict attenuating mechanisms), so too did the perceived need for more and better oversight of those actors. This followed from the perceived need to ensure that the various actors' interventions were appropriately aligned, effectively and efficiently applied, and sufficiently accountable. The NERC and DERCs helped to resolve the perceived need they created therein, in that these centres' hierarchical structuring cultivated a culture of discipline and accountability through the C2 structure itself, in and through which the Ebola response's various components could more effectively and efficiently coalesce.ⁱ

In turn, the discipline and accountability that was imparted through the NERC and DERCs (as well as the conflict that was attenuated between its diverse actors) amplified the response, as it permitted the further safe and effective delegation of response interventions to even more classical response actors. Through scaling it, this increased the efficiency and efficacy of the Ebola response (Figure 4, page 200).

In other words, oversight and accountability created in the NERC and DERCs helped to facilitate the arrival and inclusion of classical response actors (which were comfortably able to apply their interventions due to the NERC and DERCs' conflict attenuating mechanisms). Once their activities were aligned and accountable—which required the co-constitutive strengthening of coordination—there was the capacity to include yet more classical response actors. Essentially, this follows from the notion that co-dependence—when purposefully developed and encouraged—can be understood as a kind of inclusivity. One GoSL civilian respondent (who was an Ebola response leader) alluded to this, saying:

I would disagree with anyone who suggests that the [NERC] and the military ended Ebola. No! We were not Ebola experts. It was the doctors from the [MoHS] who were the ones that led on the Ebola

ⁱ While the militaries did not command or control within the NERC and DERCs, their presence (even tacitly) did arguably have this effect on Ebola-affected populations. For example, the militaries (namely RSLAF) did have the power to enforce or coerce compliance (e.g., to enforce quarantines, health-screening checkpoints, lockdowns, and curfews).

fighting... We thought that the experts—the epidemiologists, the medical doctors, the infectious disease doctors, the social mobilisers, the people who knew what to do to stop Ebola—they were the brain. We, at the [NERC], we were the muscles (GoSL-C-N-17).

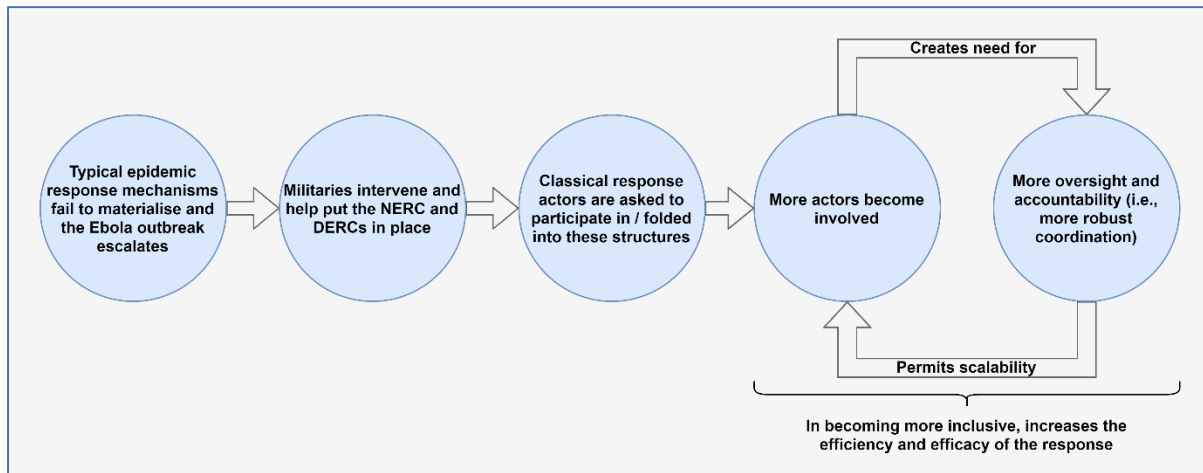


Figure 4: The virtuous cycle of inclusivity and robust hierarchical coordination (Source: author)

In other words, the NERC and DERC “*muscles*” meant the militaries could (generally) limit their role to ensuring oversight and accountability, while classical response actors could intervene and then perform a diverse array of ongoing activities within the bounds of their respective pillars by applying their “*brain*” (GoSL-C-N-17). Taken together and put simply, military and classical response actor skillsets were—in the words of a British Armed Forces respondent—felt by most respondents to “*combine for the greater good*” (HMG-M-D-4). That is to say, where the presence of each actor encouraged, facilitated, and strengthened the presence of the other.

Marginal(ising) inclusivity of more local actors

While the NERC and DERCs were therefore inclusive of some actors, these structures were found in the prior chapters to be exclusive of others, because the intervention of the centres’ military and classical response actors had a marginalising effect on some local communities affected by the epidemic (as part of the political economy of expedience paradox). However, in Sierra Leone’s Ebola response (as discussed below), a degree of localisation and empowerment of more local actors and groups did occur. Indeed, hierarchical and military decision makers proactively incorporated and supported Paramount Chiefs, District Security Committees (DISECs), (sub-)chiefdom task forces, and thousands of Sierra Leonean ERWs to become participants in the Ebola response. This, in turn, supports the proposition that conflict attenuating hierarchical structuring can permit a degree of decentralisation to and inclusion of more local groups in public health emergency responses, thereby mitigating the trend of marginalisation of community-based actors implicit in the political economy of expedience paradox.

From early on in the outbreak, Sierra Leone’s network of chiefs were co-opted into the formal Ebola response to help ensure local populations complied with Ebola-related restrictions. This inclusion did sometimes present a challenge to these traditional leaders. For example (and as examined in Chapter 6,

pages 111–144), some were frustrated by feeling made to participate in the Ebola response (especially as enforcers of public health measures), as this resulted in some animosity amongst their constituents. Others were frustrated because they felt insufficiently supported financially, despite being asked to perform activities that sometimes had cost implications. Other scholars, meanwhile, have examined how the response itself re-arranged (and in some ways challenged) local conceptions of public authority, including the chieftaincy structure.⁴³

Nevertheless, despite being relatively limited, processes of local inclusion did occur through the involvement of the Paramount Chiefs (at least in the areas of north-western Sierra Leone where data was collected. Other scholars have noted that findings might not be generalisable elsewhere in the country, especially in the east).⁶⁷⁵ A GoSL civilian respondent (and senior decision maker) recalled how

...we got to a point where... military aides [were provided] to Paramount Chiefs. We led the Paramount Chiefs to believe that the military aide was there to protect them, and to some extent, that was their job. But... their real job there was to help the chiefs be more efficient. [So] when [the chief] is calling meetings of [their] elders, when [they are] deciding what to do, when they are discussing [something], to inject that military officer into [the discussion]... that had an effect on how the chiefs organised themselves, [and] how the villages organised [them]selves. Because you just need that one planner, that one logistician, and then, pretty much, people can help themselves (GoSL-C-N-17).

In other words, NERC leadership deployed military personnel to support the various Paramount Chiefs, and the presence of the soldiers' hierarchical thought style was felt (at least to this senior decision maker) to acculturate not only an ethos of efficiency amongst the chiefs, but also to empower a degree of self-reliance for them and their communities.

The perceived need for this intervention is discerned by Douglasian Theory (in reference to hybridity), which argues that

...if we are to live together in ways that will enable us to channel our conflicts into more civilised and restrained practices, we need to dance our common time to each other's rhythms as well as our own.⁶²⁰

Accordingly, the respondent quoted above (GoSL-C-N-17) believed it was necessary to provide resources and structure to those with slower rhythms, so as to make them more efficient in response to the crisis at hand. In doing so in this instance, the complementarity of local inclusion and efficiency became not only possible but desirable, even from the perspective of one of the Ebola response's most senior decision makers (GoSL-C-N-17).

Paramount Chiefs largely agreed that the presence of military ERWs was generally empowering in nature, including for the psychological effect it had. For example, one felt the presence of the military “*motivated every individual to take the whole event as a very serious one*” (PC-C-C-1); another that “*interaction [with military personnel]... aided morale,... helped to create a more positive mindset,... [and] increase[d]... confidence* (PC-C-C-6); and another that the military personnel “*were able to console us, talk to us, and persuade us to have faith within*

ourselves...”, concluding that “...seeing them... summon[ed] up courage” (PC-C-C-4). In other words, the intervention and subsequent presence of military personnel alongside Paramount Chiefs was felt by most to impart a degree of confidence. Notably, several Paramount Chiefs suggested that—due to Sierra Leone’s history as a former colony of Britain, the British colonial administration’s role in reinforcing the country’s chieftaincy structures (from which Paramount Chiefs derive their authority), and the role the British Armed Forces played in ending the Sierra Leone Civil War—they were not only grateful for but actually expected the militarised support from HMG that they received (PC-C-C-1; PC-C-C-2; PC-C-C-6). One Paramount Chief, for example, stated that

...whenever we cry, [the British] should cry too... Because of the operation they carried... in the war..., whenever we have a situation or crisis, we expect the British military to come... We see that in all the crises Sierra Leone has ever had... It is clear in the minds of the people that whenever we have a crisis, the British... military has to come before we are able to see headway... [and] Ebola, again, is the same thing... When the British military came in... the people have that belief that... the situation was going to be over... Ask any Sierra Leonean, and they will tell you this (PC-C-C-6).

Therein, to this Paramount Chief, the intervention of the British Armed Forces specifically (i.e., as distinct from RSLAF) had a significant psychological component, in that it was felt to evidence Britain’s empathy, and gave them confidence that the crisis would be inevitably resolved.

These feelings of assurance were greatly aided through the resources that military personnel were able to facilitate for Paramount Chiefs. One, for example, remarked that in the (pre-DERC) DMO-led response, they

...hardly [got] some of the things... [they]... ask[ed for] to strengthen the community in the push for this Ebola [eradication effort]... But when [they] reach[ed] any lieutenant or captain in the military [who was situated in the DERC], [the military personnel] say, ‘Why not? Why don’t you get this?’. Everything [was] available (PC-C-C-1).

That is, the DERC’s military personnel were able to secure the delivery of tangible resources for Paramount Chiefs in a way that the pre-DERC’s civilian personnel were not, and to this Paramount Chief, did so proactively and with encouragement. This was felt, in the words of another Paramount Chief, to “guarantee our effort to go and do [Ebola response activities]” (PC-C-C-6). It is important to reiterate that the militarisation of the Ebola response corresponds with the time when significantly more resources were made available to Sierra Leone (i.e., that HMG’s intervention was both civilian and military in nature, and the availability of resources at a local level was not necessarily due to the latter). Nevertheless, the DERCs’ military personnel were the focal point through which these Paramount Chiefs requested and secured the resources they needed in a way that they previously could not. This helps to explain why Paramount Chiefs generally associated the availability of Ebola response resources with military ERWs, rather than their civilian counterparts.

Notably, as an important component of Paramount Chiefs' positive interaction with military personnel—and echoing the organisational hybridity previously examined—several commented on how the response's civil-military makeup softened the militaries' approach and made the militaries' role more tolerable. One Paramount Chief, for example, remarked that, prior to the outbreak,

...the military was just [perceived as a] sort of threat. But with... [civilian responders] mixing with our brothers in the military, you know, talking to our people, [and] visiting areas,... [then people] felt very comfortable... Having a mixture of the military personnel, the foreign[ers], and the indigenous... made everything okay (PC-C-C-1).

In other words, to this respondent, there was the possibility that the presence of military actors could have presented a problem for them and their constituents (i.e., they may have been perceived as threatening by the population). However, this problem was felt to be mitigated by the incorporation and joint effort of these actors alongside civilian ERWs, which to them, demonstrated the peaceful role the military actors were performing in the Ebola response. Another Paramount Chief echoed and elaborated on this notion when they remarked how surprised they were by how amicable and obliging the DERC's military personnel were:

The idea... before [the Ebola outbreak]... [was that] military [personnel are] somebody that cannot laugh and cannot talk to anybody... [But] the first time I met these military personnel [in the DERC], you [could] not know [that] these people [were] military personnel, because the way they [did] things... The way they talked to people, and the way they responded to issues... The military were so kind and peaceful, and they did not even behave like the military. They were so soft... I cannot over-emphasise their kindness, their behaviour, and the human character [they exemplified] towards mankind... [They] made us understand that the military [personnel were] just normal human beings, and the only difference we [civilians] have [compared with them] is the discipline [they manifest]... Maybe... [this is] because of the partnership [the militaries had]... working in the same office [as civilians]... (PC-C-C-6).

To this respondent, therefore, the military personnel involved in the Ebola response were perceived to be hospitable when compared with past experiences or prior assumptions (something which they theorised was due to fact that military personnel were working alongside civilians on a day-to-day basis, i.e., that their approach was moderated through organisational hybridity). One Paramount Chief even remarked that the DERC's military personnel “*listen[ed] to you more than even our own people*” (PC-C-C-1).

Therein, to several Paramount Chiefs, the civil-military nature of the Ebola response served to humanise its military actors. It also, according to one Paramount Chief, served to humanise Ebola-affected communities:

To me, I will always say that, if the... military had not intervened in the fight [against] Ebola, nobody would believe that [an] Ebola-affected person [was] not a criminal, is not a condemned person, and is [actually] just like any other person. Because [the military personnel] would come and interact [with the Ebola-affected person]... [with] limited barriers (PC-C-C-6).

That is, to this Paramount Chief, the response's military personnel (in this case, those maintaining quarantine cordons) interacted with quarantined individuals. Provided the significant stigma and fear that

was often associated with Ebola-affected families, this was felt to de-vilify them. While specific descriptions of these dynamics were limited (due to the fact that research primarily focused on documenting intra-DERC CMRel rather than field activities), other Paramount Chiefs and a minority of classical response actors also recalled instances when military personnel went beyond their mandate to not only secure but proactively support quarantined households, such as by fetching water, providing psychosocial support, and tending the affected family's farm (and therein, protecting their livelihood while they were in mandatory isolation).

Overall, Paramount Chiefs were remarkably supportive of the militaries' presence in the Ebola response (the prior chapters discussed some relevant dissent). Most felt it imparted confidence (that some expected was forthcoming due to the UK's historical relationship with Sierra Leone); facilitated and secured tangible resources; and was gentle and moderated in nature—perhaps due to civil-military mixing—in a way that was sometimes seen to extend to vulnerable Ebola-affected families. One Paramount Chief summed up working with the Ebola response's military personnel accordingly:

They had smiling faces, they were friendly... They were able to give hope to people... You see them always active, and want to do things [on] time... to see that things happened and the problem[s were] solved... Even if you had any concern and you [went] to the [DERC], you would be perfectly received by them with a smiling face ready to listen to you, and ready to solve your problem. Immediately... you would see their commitment... [and] they would communicate to the responsible [person] and say 'This is what the Paramount Chief... wants'. That is how I believe they help[ed] the people to come out of the [Ebola outbreak]... So, if [one is to] rate the participation of any participants in the Ebola response, the military will be the first of the people or groups that help[ed] to eradicate Ebola in Sierra Leone (PC-C-C-6).

Ultimately, all Paramount Chiefs that were interviewed (n=6) were net-positive about the intervention of both RSLAF and the British Armed Forces, and stated they would want the same (or a greater) military role in response to a hypothetical future crisis.

Importantly and as captured in the data, processes of decentralisation and more localised inclusion in Sierra Leone's Ebola response amounted to more than the participation of the country's network of Paramount Chiefs.

Each district of Sierra Leone has a DISEC, a network of structures that was in place prior to the Ebola outbreak (these were established as part of the post-civil war and HMG-supported security sector reform (SSR) that included the military-military officer training programme (ISAT) examined in Chapter 6, pages 111–144. These structures formalised the role of Paramount Chiefs in Sierra Leone's security apparatus (GoSL-M-D-2; GoSL-M-D-10; GoSL-M-N-6)).⁶⁷⁶ According to an RSLAF respondent responsible for helping to oversee these structures, when the Ebola outbreak began, DISECs were

... [already] there... They have the power and mandate to invite anybody that has to do with something of the issue that is being addressed... [For example] women's organisations... [and] international organisations on the ground, they are automatically part of the DISEC process (GoSL-M-N-14).

Therein (and as corroborated by a Paramount Chief), DISECs are comprised of not just local public authorities and chiefs, but also local civil society organisations (CSOs), youth councils, women’s leaders, local human rights monitors, *et cetera* (PC-C-C-2).

At first, these structures were poorly integrated into the Ebola response—in the words of one Paramount Chief and DISEC member, controlling Ebola “*from Freetown, no, it did not work until we had the [DERCs]*” (the DERCs took up to two months longer to establish than the NERC, but once in place, formally involved the DISECs and other local structures) (PC-C-C-2). “*Then it started working*”, they continued (PC-C-C-2). Once online, the DERCs more purposefully involved the DISEC network, as well as the growing number of Ebola response community task forces. Weekly meetings between Paramount Chiefs and the DERCs were also put in place, in which Paramount Chiefs were made active participants in district-wide Ebola response decision making (PC-C-C-3) (note—as referenced above and also as discussed in the chapter’s limitations section—the experience of Paramount Chiefs in north-western Sierra Leone is not necessarily generalisable to the experiences of local authorities elsewhere in the country).

These community task forces—the formation and operation of which were funded through the Ebola response—became well established and highly structured: bigger towns were broken down into smaller sections; areas with higher rates of Ebola received extra attention; and sectional sub-task forces were established, such as those which were solely comprised of youth groups (PC-C-C-2). One Paramount Chief described the process of the task forces’ inception and utility, the way in which it was hierarchically structured, and the relative diversity of its localised participants:

As Paramount Chiefs, we are... always with our people... I was part of the first task force that was formed in the [Government] hospital by the hospital staff... We had the first meeting before the disease came into the district. So, we were well informed and well prepared beforehand... And also later on, [GoSL] involved the Paramount Chiefs to take part by bringing out the Ebola bylaws [which were] designed by the National Council on Paramount Chiefs... The Ministry of Local Government came out with a document that we have to set up a chiefdom task force and a town task force and a village task force... So, I formed the chiefdom task force, wherein I have all the section chiefs... [as well as] a women’s leader, the pastor, the imam from the mosque, the youth leader, two members from the medical field, one herbalist, a journalist, the teachers, the motorbike rider’s association, [and] the driver’s union. Because these people are very important in the fight against Ebola (PC-C-C-2).

In other words, this chiefdom task force (which reported to the DERC) was itself comprised of town task forces and village task forces, which were themselves comprised of a large number of diverse local actors. These community task forces monitored movement and quarantined homes; set up night-time checkpoints (for which, in this instance, they were given a tea and head torches by the DERC); and supported contact tracing efforts (PC-C-C-2). At times, they went so far as to monitor the DERCs’ contract tracers themselves to make sure they were performing their jobs appropriately (PC-C-C-2). The task forces also ensured a crucial degree of ground truth and local knowledge to classical response actors in the DERC, for example, by arguing for the ability (and providing the necessary oversight) for communities to bury their dead in a safe and dignified way (GoSL-C-N-24). The community task forces

were, in short, profoundly important community-owned and community-led Ebola response organisations.

Importantly, the research sites' community task forces were not in parallel to the formal Ebola response, but rather, were integrated with it. For example, the NERC- and DERC-organised Kambia [District] Community Action Plan (KCAP) leant on both Kambia's DISEC its various community task forces to access and involve communities at the most local levels, including women's groups, youth groups, and—in the words of an involved Paramount Chief—“*just about everyone*” else (PC-C-C-6).⁶⁷⁷ Recalled a GoSL civilian respondent (and senior decision maker):

That was part of the decentralisation thing. You don't have to be a rocket scientist... To involve the traditional leaders,... the Paramount Chiefs and their section chiefs, and community people, village chiefs... They all played a very critical role... It was a true team effort (GoSL-C-N-24).

At least to this respondent, therefore, decentralising the Ebola response in a way that formally included community initiatives and structures in this way was fundamental to the overall success of containing Ebola and, ultimately, ending the epidemic.

The degree of localisation in the Ebola response is perhaps most clearly evidenced by the sheer scale of the Ebola response's workforce, as facilitated by its hierarchical actors. For example (and as described in Chapter 6, pages 111–144), upon their arrival in late 2014, medics from the British Armed Forces and RSLAF established two sites in Freetown to train Sierra Leonean ERWs in biohazard protection. On completing this training, individuals could then safely participate in the variety of Ebola response roles requiring the use of Personal Protective Equipment (PPE), which ranged from ETC hygienists, to ambulance drivers, to decontamination and burial team workers, *et cetera*. More than 4,200 individuals—a significant number for a country with so few medically trained individuals—were trained in these military-led centres, each of whom was given the instruction they needed to become safely participant in the response. This not only made the response more ethical for the degree of localisation it facilitated, but also more efficient and effective as it accelerated subsequent scale-up.

It is important to emphasise that the Ebola response did not perfect this localisation. Indeed, as argued in the prior chapters, the legacy of the response is one of marginalisation as much as it was one of inclusivity, including from the perspective of some Paramount Chiefs. For example, despite the inclusion of Paramount Chiefs, DISECs, and community task forces, one Paramount Chief said communication between military ERWs and local actors could have been much improved (PC-C-C-5), and another spoke about the ways that inclusion of local actors could have been more robust (P-C-C-2). The latter, therefore,

...recommended strongly that the traditional leaders or rulers have to be incorporated in disaster management, because disasters hit our people. It doesn't hit the higher office... When you bring in people like the army, the police, and the medical experts from overseas [such as the] WHO [or

UNICEF... *They will be working with the local people, and there is always that gap ... So, we have to come in to narrow that gap... [in] ethnicity, language..., tradition, and culture... [by] invol[ing] people on the ground (PC-C-C-2).*

This respondent argues, in other words, that local people will always be primarily affected by an emergency, and must therefore be proactively integrated within the response in a way that better ensures local dynamics are respected, knowledge utilised, and expertise empowered. However, their recommendation to involve and empower more local people in the response to future crises is, to an extent, a lesson that was learned: post-Ebola, this same Paramount Chief was sent abroad with a cluster of other Sierra Leoneans to be trained in disaster management (PC-C-C-2). In other words, community-level actors were recognised for their import in the Ebola response, and subsequent efforts were made to further empower them. In the words of another Paramount Chief,

...the Ebola response has proven that with the empowerment and the development of the chieftom administration, [GoSL] can achieve its objectives in terms of development, in terms of disease control, in terms of education, and in terms of everything else. Because in the chieftom we have a structure, and this structure cuts across to the last village (PC-C-C-6).

In short, however limited it may have been, the decentralisation and localisation of Sierra Leone's Ebola response to (some) empowered sub-district local actors was made possible through the strengthening of hierarchical coordination, as the need for robust coordination became more pronounced the further that decentralisation occurred (and in turn, the further that activities were scaled). However, decentralisation did not mean less hierarchy, but more: as the NERC oversaw and supported the DERCs, so the DERCs oversaw and supported the more local Paramount Chiefs, DISECs, and community task forces. After all, according to Douglasian Theory,

...in hierarchy... there is a multiplicity of levels, quite contrary to the common misunderstanding of hierarchy as comprising only high-status commanders and the commanded who lack status.⁶²⁰

Accordingly, and as stated by a British Armed Forces respondent, the hierarchy presented by the NERC and DERCs was not about removing the function of less hierarchical and more local actors, but—at least in the areas where data was collected—supporting them in a way that “*was just about speeding things up*” (HMG-M-N-2). In conclusion, an (I)NGO respondent argued that “*...it was the DERCs and it was the NERC that got rid of Ebola. That is the truth (NGO-C-N-7).*”

Discussion

The British and Sierra Leonean militaries played a central role in responding to the 2013–2016 West Africa Ebola Epidemic in Sierra Leone. As argued in Chapter 7 (pages 145–175), this initially frustrated classical response actors. Popularly conceptualised as highly distinct from militaries, they felt their professional territory was encroached upon. However, over time, this civil-military challenge was largely overcome and replaced by civil-military cooperation and collaboration. In large part, this was due to

surprising similarities in the hierarchical underpinnings of these groups' cultures of interventionism and forms of organisation, institutional power, and thought style.

While these similarities may have resulted in straightforward CMRel, it also implicates classical response actors as equally participant in the political economy of expedience paradox—a vicious cycle of life-saving assistance and structural harm that can play out during top-down public health emergency responses (a concept that was developed in Chapter 6, pages 111–144, and built upon in Chapter 7, pages 145–175). One of these harms in Sierra Leone was the insufficient inclusion of crisis-affected local populations therein (as examined in these chapters and by other scholars).^{33,37,285,298} Technical and operational efficiency was privileged over processes of inclusion which were perceived to be cumbersome, slow, and ultimately counterproductive to the goal of saving lives. The political economy of expedience paradox, therefore, is important in the study of public health emergency responses and their effects, in that the 'principle of do no harm' cannot fully apply if life-saving interventions are performed.

The aim of this chapter—through the application of Douglasian Theory to 110 semi-structured qualitative interviews with civilian and military ERWs—is to not only better understand the dilemma this represents, but to derive lessons as to how it might be mitigated or interrupted.

To do so, it was first necessary to understand the ways in which the hierarchical NERC and DERCs were purposefully designed with the support of military personnel from both the UK and Sierra Leone to accommodate a wide array of different groups, as it was understood that the inclusion of and collaboration between diverse actors would improve day-to-day decision making. This was felt to require robust oversight and accountability, as well as (relatedly) the standardisation of activities guided by best practice, both of which were also realised through the NERC and DERCs.

However, this oversight and accountability was enabling rather than disrupting, as the centres—in and through which classical response actors and militaries interacted—were conflict attenuating spaces. Their inherent hierarchy permitted and employed the use of rule-bound niches,^k neutral zones, co-dependence, and hybridity to help ensure that the diverse group of actors within could cooperate without incessant and disruptive conflict. This, in turn, helped to ensure that each group could continue to practice their quotidian ritual interaction.

Therein, while the NERC and DERCs might have nominally embodied a *C2 modus operandi*, its hierarchical actors tended not to rely on confrontation or coercion. Rather, the management and coordination style of the Command Team was much closer to “coaching”, to borrow briefly from Campbell's popular management terminology, wherein a desired approach was acculturated amongst others rather than mandated.^{678,679} Clarke and Campbell see this as decision making best practice in

^k As referenced earlier in this chapter, the DERCs' pillar system is arguably a good example of the parallel structures of sodality and modality that create robustness within a Douglasian hierarchy.⁶⁷⁴

humanitarian contexts, wherein effective decision making occurs through the decentralisation of operations, provided decentralised authorities are provided proper guidance and SOPs (which are themselves a kind of ritual ordering, to use Douglassian terms).¹⁷⁹ Interestingly, it is also not entirely dissimilar from some military doctrine, including the British Armed Forces’ mission command structure, wherein responsibility for daily decision making is devolved to lower level operatives who

...are told what to achieve and why, but are then left to decide how to achieve it. Subordinates are encouraged to use their judgement, initiative, and intelligence in pursuit of the commander’s goal.⁶⁸⁰

Therein, instead of hierarchy being used to give top-down orders, it is used as a structure for the dissemination of intent and resources—decision making itself is delegated (i.e., it is allowed to occur in a more decentralised way). This coupling of coaching or guidance and localisation that is achieved through hierarchy is crucial, because anthropology and sociology have repeatedly found that top-down confrontation and coercion leads to greater resentment, revolt, and, eventually, to “more ferocious enclaving”.⁶²⁰

In Sierra Leone, this ‘semi-exclusive hierarchical coordination’—in which hierarchical classical response actors were made to coordinate with even more hierarchically organised militaries—did, to some extent, still impose Ebola response coordination on local populations in a top-down manner (Figure 5). Indeed, the actors taking decisions to put the NERC and DERC structures in place were still hegemonic ones, and did so without the systematic input of many national health actors let alone local communities. Harm therefore resulted from this exclusion and marginalisation of local groups from full ownership of what was ultimately their public health crisis (i.e., as part of the political economy of expedience paradox).

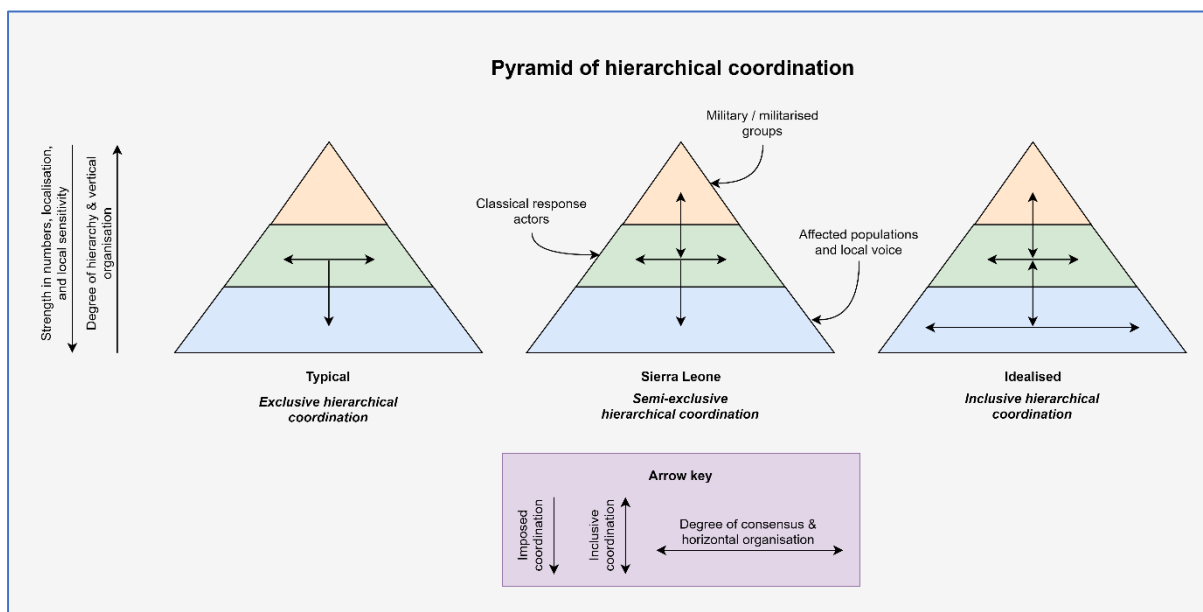


Figure 5: Typical exclusive, Sierra Leonean semi-exclusive, and idealised inclusive hierarchical coordination (Source: author)

However, when taking the perspective of militaries in this instance, the NERC and DERCs also evidence an important willingness of the hierarchical actors (albeit measured) to reach down and include less hierarchical groups in response to the Ebola crisis. Indeed, several of the most hierarchical actors involved in Sierra Leone's Ebola response considered it both efficient and effective to accommodate and proactively support such groups (at least in the thesis' areas of data collection). Doing so permitted a degree of decentralisation, localisation, and scalability. While this inclusion was limited, it was not nominal: hierarchical actors committed human and financial resources to these local actors, and proactively incorporated them into response structures.

Toning down a fully militarised C2 approach was key (as argued by other scholars, so was the militaries' de-emphasis of security logics,²⁶ which was perhaps made more straightforward for the fact that the British Armed Forces did not deploy combat troops to the Ebola response). Equally important, though, was supporting a more disciplined and efficient approach amongst classical response and other local actors so as to meet in a kind of middle ground: through the NERC and DERCs, oversight and accountability was extended beyond what would otherwise have been possible, efficiency and discipline was acculturated, and the response grew to thousands of (primarily Sierra Leonean) workers at the country's national, district, and sub-district levels. Once respectful relationships were established between these diverse actors, mutual learning was made possible. This, in turn, helped to ensure co-dependence was inherent in day-to-day activities. As it became clear to classical response actors and some local actors that their participation in the NERC and DERCs' hierarchical scheme was made secure through this co-dependence, anomaly (presented by both the outbreak itself, and also the intervention of military actors responding to it) became accommodated.

Taken together—and perhaps counterintuitively—this leads to this chapter's major contribution: a form of inclusivity in Sierra Leone's Ebola response was made possible through the conflict attenuating hierarchical ordering of its coordination centres and the subsequent accommodation of and decentralisation to less hierarchically organised groups. The involved militaries, in other words, not only encouraged but contrived the routine and empowered inclusion of less hierarchically organised groups in the Ebola response (in this instance, primarily classical response actors), thereby permitting scalability in a virtuous cycle. In a sense, this is akin to Durkheim's Division of Labour as not only the solution to inter-organisational conflict between differently ordered groups through mutual exchange, but also the most efficient mode of performing a multifaceted activity.⁶²⁰ As previously described, it is also not entirely distinct from some military doctrine including the British Armed Forces military mission command, which through delegation, allows for the more efficient application of decision making in the pursuit of a stated objective.

Further advancement of this contribution can be theorised. If a military can purposefully structure itself and its operational environment to incorporate less hierarchical, more democratic, and more consensus-

driven decision makers such as classical response actors and Paramount Chiefs in response to a high-speed and life-threatening crisis, classical response actors ought to be equally capable of extending this same inclusivity down the hierarchical spectrum. This should be possible even if one seeks to incorporate forms of social organisation that fall fully outside of the hierarchical type, such as marginalised and enclaved local groups (a phenomenon that Douglassian Theory has appropriately discerned).⁶²⁰

Therefore, while hierarchical coordination produced some harms in Sierra Leone, it perhaps did so for the ways it was imperfect and incomplete, particularly if and when the hierarchy “insists on grand unity” (such as the shared objective of responding to a large-scale public health emergency necessitating a whole-of-society response), and therein,

...allows scope for atonement, reintegration, and a more porous conception of the community open to individual or local group commitment and efforts to join.⁶²⁰

In other words, it is not just conflict that is attenuated, but peace that is created: by joining hierarchical ordering with unity of purpose, a structure of interaction, cooperation, and collaboration can be created through which the boundaries between various groups are made more permeable and local groups can be empowered to become more centrally participant.

This, in turn, represents the possibility of a truly ‘inclusive hierarchical coordination’ in the response to future public health emergencies (Figure 5, page 209). To extend the hierarchy would have permitted further localisation through the extension of oversight and accountability, thereby improving the Ebola response through greater horizontal organisation at its lower levels, the localisation of its interventions, and strength in numbers. A truly representative democracy is ultimately a direct one, after all, at least for those who choose to be involved, and effective hierarchy provides a structure for not only top-down direction but also the provision of guidance and resources (as well as bottom-up advocacy). In short, if realised, this inclusive hierarchical coordination would retain its particular organisational strengths, but also become more ethical, efficient, and effective for the ways it would no longer impose coordination on crisis-affected populations in a top-down manner but rather structure itself to systematically include and empower them as genuine participants.

Conclusion

This chapter has argued that hierarchy (on the one hand) and decentralisation and localisation (on the other) are neither opposing ideologies nor incompatible aspirations—that is, one does not preclude the other. Rather, applied together, these approaches can be co-dependent, interoperable, and greater than the sum of their collective parts, at least when organised in a conflict attenuating way. This was evident in Sierra Leone’s militarised NERC and DERCs, which helped to ensure that the various Ebola response activities organised within their rule-bound niche pillars and neutral zone fora were effectively interlinked, coordinated, accountable, and adaptable. Further, while the militaries put a C2 structure in place within

the NERC and DERCs, they neither commanded nor controlled, but instead cultivated and permeated discipline and efficiency amongst the centres' various actors. Therein, the oversight and accountability structures put in place by the British Armed Forces and RSLAF permitted classical response actors to intervene more effectively and to scale more aggressively than might have been otherwise possible.

To most ERW respondents (both civilian and military), therefore, elements of hierarchical oversight and the efficiency which was thus imparted through the NERC and DERCs' hierarchical organisation was of paramount importance to the successful, cooperative, and collaborative operation of the Ebola response. Further, these same structures also permitted a limited degree of localisation to more local actors, such as Paramount Chiefs and their chiefdom-based Ebola task forces. This localisation was admittedly limited (both in nature and also geography),^{285,675} but nevertheless had valuable ethical and positive operational consequences for the response. Crucially, it also evidences the plausible viability of further localisation during future public health emergency responses using a more thorough application of similar strategies.

In short, to realise ethical, efficient, and effective public health emergency responses—ones that systematically include local actors, while also ensuring that the resources required to respond are applied at scale, are aligned, and accountable—hierarchy, decentralisation, and localisation should go hand-in-hand.

Limitations

This study has various limitations, each of which is mitigated by the large number of interviews and relative diversity of respondents (and relatedly, efforts to reach saturation); the confidentiality of participation and anonymisation of statements provided; and the routinisation of reflexive practices throughout the research process.

In-country site selection was limited to the Western Area Urban (i.e., Freetown), Port Loko, and Kambia districts of Sierra Leone. As the former is coterminous with the capital city and the latter adjacent, and as each was a political stronghold of the party and president in contemporaneous power, these districts were among the more politically privileged at the time of the outbreak. Further, they were predominantly affected (at least officially) in the second half of the epidemic, after many lessons had been learned and incorporated into the response. Therefore, the perception of the response by Paramount Chiefs and ERWs who had worked in these areas is plausibly more positive than what might have been documented elsewhere. Further, STB spent a year working for an (I)NGO in these districts during the Ebola response, alongside many of the civilian and military ERWs who were interviewed for this project. Courtesy bias may therefore also affect research findings.

Respondent selection presents other possible limitations. Female respondents are significantly under-represented (which admittedly reflects the gendered skew of the response itself); governmental respondents may have been guarded in their criticism of their militaries, public institutions, or public

officials; and Paramount Chiefs were spoken to, in part, as representatives of and interlocutors with Ebola-affected communities, but their positionality as public authorities in this regard is complex, fluid, and contested.^{43,264} Further, the number of Paramount Chiefs that were interviewed was small (n=6) and geographically focused in Sierra Leone's northwest (as above), possibly limiting the generalisability of this respondent grouping's perspectives (though this does represent a significant proportion of the overall number of Paramount Chiefs in Western Area Urban and Kambia districts (n=8)).¹ Further still (and as previously referenced), local populations responded in significant informal ways to the Ebola outbreak, but the documentation of these perspectives or interventions was not systematically collected or examined herein.

¹ Paramount Chiefs in Port Loko District were not targeted for interviews, as it was not feasible to situate STB in the district. As previously described, Port Loko District interviews (which were primarily done remotely) were intended to complement the in-person interviews collected in Kambia and Western Area Urban districts (i.e., to supplement research findings from these districts until saturation was met).

Chapter 9 | Discussion

The 2013–2016 West Africa Ebola Epidemic was unprecedented in many ways, one of which was the central role of the British Armed Forces and Republic of Sierra Leone Armed Forces (RSLAF) in their support to the Ebola Virus Disease (Ebola) response in Sierra Leone. This military support was significant in its breadth and depth—it spanned multiple domains and functions and involved daily interaction with civilian Ebola Response Workers (ERWs) at the National and District Ebola Response Centres (the NERC and DERCS, respectively).

Summary of the relevant literature and the research gap

For the extent of civil-military relations (CMR), relationships (CMRel), and interaction (CMI) that were manifested, the intervention was unique, and to many, controversial. As discussed at length in Chapter 3 (pages 39–64), pertinent concerns in the literature coalesce around three key themes and debates.

The first key theme and debate relates to scepticism regarding the role of militaries in humanitarian crisis and public health emergency responses, especially the various harms that militarised interventions arguably risk. For example, some scholars argue that by intervening in such contexts militarily, it is very difficult—if not impossible—to consistently adhere to the Humanitarian Principles of independence, impartiality, neutrality, and humanity.^{23,189,374} This is evident, for example, when classical response actors rely on military assets (thus losing their ability to claim ‘independence’);^{196–198,326,376} and also when military actors supporting humanitarian or public health interventions commit acts of violence against crisis-affected populations (thus nullifying ‘humanity’).^{200,263,273,447} Many scholars argue that this, in turn, puts both classical response actors at risk of harm, and also limits their ability to provide life-saving assistance in response to the crisis at hand.^{23,189,452} Other scholars have argued that this kind of militarised intervention also contributes to the problematic ‘securitisation’ and ‘militarisation’ of humanitarianism and global health.^{27–29,269,509}

The second key theme and debate relates to arguments that—irrespective of these risks—productive and effective civil-military cooperation is untenable due to key organisational differences between classical response and military actors.^{36,221,458} In particular, scholars highlight the different approaches to hierarchy that the actors manifest. That is, classical response actors are generally characterised in the literature as horizontally organised and bottom-up organisations, which are democratic and consensus-based by nature.^{35,222,445} Militaries, on the other hand, are characterised as wholly hierarchical and top-down organisations, with dictatorial decisions being implemented including through the use of coercion.^{34,182,458} Scholars argue this difference results in a significant lack of trust, and an overall challenge—if not an impasse—to effective and productive civil-military cooperation in response to humanitarian crises and public health emergencies.^{34,36,135,221,374,458,461}

The third key theme and debate relates to the assertion that exogenous interventions impede capacity building amongst local institutions and actors (in turn limiting their resilience to future crises).^{176,191,265} For example, some scholars argue that if and when classical response and military actors appropriate the coordination and delivery of key health services, local institutions with relevant mandates—such as a health ministry and the wider health system—are unable to practice their *raison d'être*.^{232,244,248,532} This may limit local staff's ability to learn from the crisis, and may also mean response funds are primarily conveyed to classical response actors (that may or may not remain *in situ* post-crisis),^{232,237,321,530} rather than to an under-resourced health system in need of financial assistance.^{275,335,527} Both effects may decrease local institutions' resilience to future crises.^{191,470,512} Relatedly, scholars also argue that exogenous interventions ignore more local actors (especially the least politically empowered ones), which can: exacerbate their marginalisation and existing inequities;^{30,37,465} mean responses are less adaptive and sensitive to important local context(s);^{285,286,299} and mean responses do not take advantage of endogenous capacity and other strengths that would otherwise represent essential contributions to the response at hand.^{264,288,297}

However, at the time the thesis was conceived, little systematic and peer-reviewed research existed that specifically documented and examined the perspectives of civilian and military ERWs with a view to better understanding how these diverse public health practitioners convened (and the effects this convening had) in the response to one of the 21st century's most significant public health emergencies.

Accordingly, this thesis aimed to examine the origin, nature, and effect of the militaries' support to Sierra Leone's Ebola response, including consideration of the ways in which civil-military cooperation was produced and manifested within these spaces, as well as some of its wider effects (on practitioners and also more generally). To realise this aim, a large number of qualitative interviews were conducted with military and civilian ERWs including sub-district ones (i.e., Paramount Chiefs) to collect their perspectives on the research topic. Interviews were complemented by a number of United Kingdom (UK) government (HMG) documents not in the public domain sourced through requests made under the Freedom of Information (FOI) Act of 2000 (FOIA). The interviews were then analysed (a process which is reflected upon later in this chapter), and three original findings chapters (chapters 6–8) were written to present the findings.

Key original messages

Chapter 6 (pages 111–144) found that the decision to deploy military support to Sierra Leone's Ebola response can be traced to the advocacy of a small number of individuals and the compelling alignment of a number of political factors. The resulting military support that was provided—in particular, the militaries' *modus operandi* as related to coordination of the response—was considered by most ERWs to be a valuable contribution to the overall effort to contain the outbreak. However, the chapter also found that the need for militarised assistance partly resulted from a political and economic history in Sierra Leone that routinely under-empowered public institutions and local actors—structural factors which the

militaries' intervention also helped to perpetuate. This vicious cycle—conceptualised as the 'political economy of expedience'—represents a critical paradox that the chapter argues should be considered inherent in militarised responses to public health emergencies.

Chapter 7 (pages 145–175) then found that many people see military actors as ideologically opposed to humanitarian and public health actors, which helps to explain how and why civilian and military ERWs faced initial challenges to their interaction. However, the chapter also found that civilian and military ERWs were similarly hierarchical in organisation, which helps to explain how and why they were nevertheless able to cooperate and collaborate effectively later in the outbreak response. This civil-military cooperation and collaboration was particularly possible for the way the adjacent hierarchies were, through their interaction, self-moderating (i.e., that military ERWs became less hierarchical in approach) and were therefore complementary and co-constitutive. The chapter also implicated civilian ERWs—and the broader architecture of the hierarchical public health emergency response that was manifested in Sierra Leone—in the political economy of expedience paradox.

Finally, Chapter 8 (pages 176–213) found that Sierra Leone's hierarchical NERC and DERCs employed rules-based boundaries and procedures that secured neutral spaces for constructive negotiation, learning, and co-dependence among diverse (but relatively elite) members, amounting to unorthodox but robust civil-military cooperation and collaboration. Therein, the chapter found that the NERC and DERC structures facilitated a degree of decentralisation and localisation of response activities to a larger number and greater diversity of civilian ERWs than might have been otherwise possible, which, in turn, helped to enable a larger, more efficient, and more effective Ebola response. The centres were also found to have facilitated a degree of decentralisation and localisation of response activities to a number of more local actors, thereby not only helping to further increase the scale, efficiency, and efficacy of the response, but perhaps also helping to mitigate the political economy of expedience paradox. The chapter concluded by arguing that there is the potential to extend decentralisation and localisation during future public health emergency responses, so as to better include typically marginalised actors through an 'inclusive hierarchical coordination' (see Chapter 8, Figure 5, page 209) that engages the strengths of hierarchical efficiency and also inclusivity, thereby interrupting the paradox.

How the findings problematise the relevant literature

Some arguments that were landscaped at the beginning of this chapter (and were discussed at length in Chapter 3, pages 39–64) are corroborated by these findings. For example, Chapter 6 provided further evidence that exogenous interventions arise from a lack of endogenous resilience, and can also contribute to these vulnerabilities by limiting capacity building. Indeed, the political economy of expedience concept was developed to better describe this idea, which is not usually characterised as an ongoing political process (therein, the concept is a significant contribution to the literature, including for the way that such characterisation facilitates consideration of ways in which the process can be interrupted or undone).

Chapter 6 also described, however, a significant breadth and depth of support for military intervention by classical response actors (who also described a range of military contributions far exceeding that which is described in the civil-military typology or guiding documents). This support does not align with the multiplicity of arguments that are highly sceptical of civil-military cooperation. For example, most respondents discussed numerous ways their activities were significantly aided by the militaries' presence, rather than being threatened or otherwise limited by it.

As further examined in Chapter 7, this support is also antithetical to arguments that civil-military cooperation is untenable due to different relationships with hierarchy. Indeed, the chapter found that classical response actors found significant value in the militarised hierarchy of the response (the components of the militaries' *modus operandi* which were most valued by classical response actors were those which were the most hierarchical). Classical response actors appreciated the hierarchy for not only its efficiency, but also the way they felt it facilitated—rather than hindered or prevented, as in the literature—robust civil-military cooperation (a finding that was further detailed in Chapter 8). Indeed, classical response actors became more hierarchical through their interaction with military actors, and transitively, military actors became less so. Taken together in the examined case, therefore, the actors' similar approaches to hierarchy were found to be essential for facilitating cooperation (that is, through the mechanism of hierarchy, the presence of one justified, facilitated, and strengthened the presence of the other). This is significantly contrary to arguments in the literature.

In turn, findings on hierarchy also relate to discourses on localisation (which are discussed at length later in this chapter). These are some of the thesis' most significant contributions. In short, the same militarised hierarchy that was found to facilitate the interventions of classical response actors—contrary to the available evidence—also served to better decentralise and localise the response. This was especially true after the militarised hierarchy was moderated (as above), and used less for command and control (C2), and more for the dissemination of resources and support to subordinate levels. Therein, in this case, an exogenous intervention was found to partially overcome the concerns it is often associated with in the literature. It better enabled a complementary endogenous response, and therein, empowered national and local actors in a way that made the Ebola response not only more efficient and effective, but also more ethical. Contrary to arguments in the literature, therefore, this evidences how exogenous interventions can—if and when organised in the right way—serve not to disable, but rather enable, more localised responses to humanitarian crises and public health emergencies.

Taken together, the findings are therefore significant, and in many ways, disruptive.

Cross-cutting themes

From these chapter-specific findings and their implications, several related cross-cutting themes emerge: the diversity of humanitarian actors and their approaches; issues of sovereignty and power related to these

diverse approaches, and relatedly, the relevance of civil-military guiding documents; and linkages between CMRel and discourses on localisation and resilience. The relevance of the COVID-19 pandemic is also considered. In turn, these cross-cutting themes are discussed.

The diversity of humanitarian actors and their approaches to CMRel

In Chapter 7 (pages 145–175) and Chapter 8 (pages 176–213), a range of different civilian Ebola response actors—e.g., those working for international non-governmental organisations ((I)NGOs), United Nations (UN) agencies, and government departments—were grouped together under the term ‘classical response actors’. This stemmed from the normative role these actors have in responding to public health emergencies, as compared with the less typical public health role of militaries. However, the diversity of these civilian actors—including their mandates, approaches, and degrees of power—is considerable. This amounts to inherent differences both within and between these civilian actors, including in ways that are relevant to the thesis and its findings.

Even focusing solely on the range of humanitarian organisations responding to public health emergencies like Sierra Leone’s Ebola response, this diversity is evident. For example, those taking a ‘Dunantist approach’ (i.e., from Henry Dunant) adhere strictly to the Humanitarian Principles and see themselves as separate from state interests (this is sometimes termed the ‘classical’ humanitarian paradigm and was particularly robust prior to 1989 when there were heightened concerns that unprincipled activities could be seen as supporting global superpower competition).^{126,191,681–685} Meanwhile, those taking a ‘Wilsonian approach’ are more flexible with the principles of neutrality and independence,^{199,326,686–688} instead prioritising humanity as a “first order principle” (i.e., privileging the humanitarian imperative even if this means working with or in accordance with the state).⁶⁸⁹ Faith- and human rights-based organisations further diversify the organisations that are (or at least proclaim to be) humanitarian in nature.^{168,480,690–696} When one broadens the scope of consideration to include international governmental and transnational organisations (e.g., the Department for International Development (DfID) or the World Health Organisation (WHO)), the diversity of these actors—and the consistency of their adherence to the Humanitarian Principles of neutrality and independence—is complicated further still. This also does not consider the role of other international organisations (IOs) like the World Trade Organisation (WTO), which—despite not being a health agency—nevertheless has a significant effect on the field of public health through entwining national policy with neoliberal reform.²³⁵ Further still, national institutions, civil society organisations (CSOs), or even more local groups are key if not central actors (as addressed later in the discussion).^{322,326,697–705}

These different approaches can amount to unique organisational perspectives on CMRel. For example, while in some contexts Médecins Sans Frontières (MSF) might choose to withdraw from an operational environment requiring co-location with military personnel (an issue that is further discussed below),⁷⁰⁶ in Sierra Leone, the DfID-funded (I)NGO GOAL Global (GOAL) went so far as to house military

personnel within their accommodation (see Appendix C-2, pages 446–471). This context-specific inconsistency of CMRel closeness is often characterised in the literature and global guiding documents as existing on a two-dimensional spectrum of civil-military coordination (CMCoord) that runs from cooperation (in civil-military permissive environments such as natural disaster response during peacetime) to co-existence (where distinction and deconfliction is considered paramount, such as in the provision of humanitarian aid in ‘kinetic’ and ‘complex emergency’ contexts).^{374,447,657}

In the data, this incongruity was manifested in an interesting way: (I)NGO respondents at the international level (e.g., headquarter (HQ) offices not in Sierra Leone) were most likely to coalesce around a more Dunantist perspective, openly criticising the role of military actors in the response. The nearer to the field that an (I)NGO respondent was situated, the less likely they were to openly share these criticisms (at least without caveat)—indeed, they often felt strikingly positive about the role of the intervening militaries, despite being closest to the interface between vulnerable Ebola-affected populations and the response’s military personnel (i.e., at the tactical level, where CMRel is often perceived to be the most troublesome).²⁷⁰ Perhaps this difference of opinion results from a more conceptual and strategic assessment of long(er) term risks at the international level, versus an assessment arising from the direct confrontation of the humanitarian imperative in-country (i.e., when facing life-and-death situations, the timeline over which risk of harm is assessed becomes more compressed). This aligns with other scholarship,¹⁹⁴ which has posited that humanitarian organisations exhibit

...organizational ‘decoupling,’ by which, at the policy level, humanitarian leaders espouse the centrality of principled humanitarian action, whereas at the on-the-ground operational level, practice is rife with compromises.⁴⁴⁷

Either way, the diversity and at-times incompatibility of these approaches as related to the thesis’ topic— noting again that both are approaches taken by normative (civilian) humanitarian actors that intervene in response to crises like Sierra Leone’s—is significant. When one applies this diversity of humanitarian approach to the diversity of CMRel operational spaces (see Appendix A-4, pages 340–350, and also the diversity of armed actor groups including non-state armed groups (NSAGs), gendarmerie, and private security companies (PSCs) (see Appendix A-6, pages 363–372), the complexity of the topic at hand and the inability to make generalisations without reproach is evident.

Issues of sovereignty and power related to these diverse approaches, and relatedly, the relevance of civil-military guiding documents

Relatedly (as referenced above), these humanitarian actors have to navigate the assertion of state sovereignty vis-à-vis a government’s deployment of their national army in response to a given crisis including public health emergencies, and therein, negotiate their positionality with regards to the response at hand.^{20,146,159,168,170,707,708}

A public health emergency—particularly an outbreak of a high-consequence infectious disease (HCID) such as Ebola—is a distinct kind of crisis when compared with a natural disaster response (see Appendix A-6, pages 363–372). While natural disasters can cause and/or overlap with public health emergencies,^{709,710,710–712} disease outbreaks—unlike most natural disasters—are not only protracted but also dynamic (in that the harmful event is continuous and the geography of the crisis can shift); prone to escalation without effective containment; place responders at risk (notably, a threat which is indiscriminate unlike in most conflict settings); and also require a joined-up approach (chapters 6–8, for example, detail how this was accomplished through the NERC and DERCs).

When considering a government’s response to a cascading crisis (i.e., one with consequences for multiple sectors, such as an Ebola outbreak disrupting health services, education, trade, *et cetera*), a joined-up approach can be broadly understood as a whole-of-government one (a review of United States Government (USG) post-operation reports related to their whole-of-government response to the 2013–2016 West Africa Ebola Epidemic in Liberia was co-authored by the PhD candidate (STB) and can be found in Appendix A-3, pages 326–339). As part of a whole-of-government approach in response to crisis, it is the discretion of the sovereign government to choose whether defence and security assets are to be included (as long as there is a legal framework to do so, and international intervention precluding domestic military deployment under the Responsibility to Protect (R2P) is not relevant).^{25,243,260,658,707,713–718} The civil-military global guiding documents and the ‘principle of last resort’, after all, do not apply to national governments taking the decision to intervene militarily within domestic borders (which is a major gap in global guidance as examined in Appendix A-6, pages 363–372).^{356,357,365,374,657,719,720} Indeed, there are many

...contexts in which armed/security actors have a normalized role in the response [to emergencies]... [including] locally led response environments in which domestic militaries have regular and institutionalized roles as ‘first responders’, [which is] a growing trend across the globe.⁴⁴⁷

If and when the decision is made by a government to deploy their military—as it was by President Koroma in Sierra Leone (see Chapter 6, pages 111–144)—there is little that intervening (I)NGOs can do to enforce change, even if they consider the militarisation of the crisis to be anathema to the Humanitarian Principles.^{143,190,374,452,721,722} The organisation in question can advocate for the removal of military personnel and assets, but if the advocacy is ineffective, the choice is either to refuse to intervene, or to participate (however begrudgingly, while taking mitigating measures to protect adherence to the Humanitarian Principles to the extent possible).¹⁹⁰ Interestingly, for their focus on the importance of distinction between diverse actors,^{187,219,374,596,657} the civil-military global guiding documents may be a useful reference for humanitarian actors seeking to differentiate themselves from not only military actors, but also other civilian actors that negotiate their adherence to the Humanitarian Principles and their comfort with CMRel differently. Nevertheless, comprehensively maintaining distinction and strict

adherence to the Humanitarian Principles—whether with military or other civilian actors—is unworkable in a fully joined-up approach.³⁷⁴

Despite the challenge and limitations of applying the civil-military global guiding documents to public health emergencies so as to resolve this issue (though as noted elsewhere,¹ the WHO has recently published a highly relevant framework), the documents nevertheless landscape a number of key themes, issues, and challenges which were highly pertinent to the Sierra Leone case. This includes the documents' recognition of the need to maintain the overall civilian-led nature of a humanitarian response. This was the case in Sierra Leone—as it is in most contexts where, at least at the strategic level, militaries are tasked by civilian leadership—though was perhaps ambiguous for the leadership of military actors in the NERC and DERCs (as examined in chapters 6–8).^a The documents also speak to the need to: sensitise armed actors on the humanitarian approaches taken and principles espoused (which was also a challenge seen in Sierra Leone as examined in Chapter 7, pages 145–175); improve CMRel through raising mutual awareness of strengths and weaknesses of each type of actor (which, as examined in chapters 7–8, took some time in Sierra Leone, but was ultimately somewhat successful); and negotiate different working cultures, specifically including how humanitarian actors should understand and navigate militarised hierarchy (which, as examined in chapters 6–8, was highly relevant to the Sierra Leone case).^{356,357,374,447,596}

Therein (though perhaps obliquely), the civil-military global guiding documents recognise some CMRel problems as arising from different manifestations and organisation of power within and between the interacting groups (something that is also found in scholarship related to the securitisation of public and global health).^{26,71,723} Sovereignty and power, though, can be applied by more than the state and its armed forces: for example—at least where law is not infringed upon—institutions can apply a kind of sovereignty and power within the bounds of their organisation, as can individuals over themselves. How and where decisions are made—and on behalf of whom—links CMRel issues that were seen in the Sierra Leone case to discourses on localisation and resilience.

Linkages between CMRel and discourses on localisation and resilience

Beyond Dunantist and Wilsonian humanitarian approaches (as well as the approaches taken by faith- and human rights-based organisations), scholars have identified another, termed the 'resilience-based approach'.^{191,246–248,348,349,470} This kind of approach takes the position that crisis is the “new normality”,¹⁹¹ and it therefore focuses on recognising and building resilience amongst crisis-prone and crisis-affected communities as inevitable first responders (relatedly, this is often coupled with a decolonisation agenda, as scholars argue that a resilience-based approach can help to overcome unequal power dynamics found in other approaches).^{191,246–248,348,349,441,470} This theme was raised repeatedly in chapters 6–8, including as

^a For example, while Sierra Leone's Minister of Defence was seconded to the role of NERC Chief Executive Officer (CEO), the former role is actually a civilian one (though in this case, the specific individual did happen to be ex-military).

part of the political economy of expedience paradox, where an outside intervention can deliver life-saving assistance, but simultaneously limit a degree of capacity building that could have been better effected were the response organised differently including through the more robust incorporation of local actors.

Indeed, to many practitioners adhering to a resilience-based approach, the focus on building capacities of local institutions and organisations might primarily be understood to mean building the resilience of CSOs or even more local actors (though some scholars have argued that the impact and legitimacy of CSO leadership in these contexts requires further study).^{191,246–249,264,284,285,298,348,349,470} For example, the Grand Bargain—a major 2016 agreement between donor governments and humanitarian organisations—made an explicit commitment to increase attention and support for local response organisations.^{724,725} However, a resilience-based approach can also mean empowering the state and its institutions:

One of the manifestations of this [resilience-based approach] trend is the renewed appreciation of state control of humanitarian responses. This is partly related to the assertiveness of states... There is also a renewed respect for the role of the state in relation to the humanitarian endeavour.¹⁹¹

Therein—if and when applied to the state and its institutions as a humanitarian actor—a resilience-based approach is one that, at times, eschews the principles of independence and neutrality, especially when one of those institutions is military.^{190,191,374,447,454} This privileging of the principle of humanity over others is similar to the Wilsonian approach (described above), but goes one step further: it is not only a willingness to align with the interest of the state in the performance of humanitarian activities, but an explicit effort to proactively develop state capacities.¹⁹¹

While outside the typical purview of humanitarian endeavour, Sierra Leone's International Security Advisory Team (ISAT) programme is a good example of this kind of resilience-based approach developing public health emergency response capabilities (albeit incidentally). Following the 1991–2002 Sierra Leone Civil War, the programme built significant capacity within RSLAF (see Chapters 2, pages 28–38, Chapter 6, pages 111–144, and also Appendix C-1, pages 414–445).^{13,702,726} Unbeknownst to the programme's designers and funders (i.e., HMG), this developed a degree of resilience to public health emergencies within the institution, which helped to empower RSLAF in their Ebola response roles (see Chapter 6, pages 111–144). While this might have qualified the civil-military global guiding documents' recommended best practice of maintaining the fully civilian nature of humanitarian activity (as described above),^{356,357,374,447,596} it did mean the Ebola response retained a primarily Sierra Leonean character. This was an issue that was important to President Koroma and directly factored into his decision to involve RSLAF (fearing that otherwise, the British Armed Forces and other intervening international actors could have become the face of the response. This is described in Chapter 6, pages 111–144). Interestingly and relatedly, other scholars have previously used Douglassian Theory—the thesis' principal theoretical basis—to examine how the factionalisation of Sierra Leone's army during the 1991–2002 Sierra Leone Civil War contributed to extreme violence and prolonged the conflict.⁷²⁷ The post-war dissolution of these factions

and security sector reform (SSR) of the country's various armed actors into a cohesive group may have helped to reinstate the "cult of the federal army" and the maintenance of ritual order.⁷²⁷ While beyond the scope of the thesis, this plausibly contributed to the hierarchical cohesion of RSLAF that was seen in Sierra Leone's Ebola response.

In essence, a resilience-based approach—in this case, as applied to building the capacity of an armed actor—helped to facilitate the localisation of Ebola response leadership to Sierra Leonean actors (including but not limited to military ones), rather than solely international actors. Relatively speaking, in other words, the response was made more 'local' (in this case, leadership was comprised primarily of national rather than international actors. This theme is re-raised and reframed later in the discussion as a proposal for reconceptualising—and perhaps reconstituting—military institutions as robust public emergency response workforces). Further still—as was also argued in Chapter 8 (pages 176–213)—more local actors (i.e., sub-national and even sub-district Sierra Leonean actors) were then able to intervene through the organisation that was put in place (which, through hybridity, also shaped the militaries' organisation and approach).

As argued by other scholars, this localisation did not consistently occur throughout Sierra Leone (an issue that was found to be particularly problematic in the more politically marginalised east of the country).^{264,285,675} Notably, the thesis' field research sites in Sierra Leone's northwest were not only more politically privileged at the time of the Ebola epidemic but were also affected later in the epidemic, after: opportunities for learning arose (see Appendix C-2, pages 446–471); (some) important lessons had been learned; and time and resources were made available for their incorporation into Ebola response organisation and strategy. The *modus operandi* of the NERC and DERCs that was examined in this thesis therefore represents the pinnacle of learning that occurred in the Sierra Leone case, which—as with the concept of inclusive hierarchical coordination—provides a 'proof of concept' that a resilience-based approach could serve to successfully empower more local actors if these lessons were effectively applied.

Doing so could also help resolve the aforementioned dilemma presented to humanitarian actors taking a Dunantist approach operating as part of a joined-up response to a public health emergency (i.e., whether to adhere strictly to the Humanitarian Principles, or consider compromising these principles in the face of the humanitarian imperative).¹⁹⁰ Rather than humanitarian actors presuming crisis-affected communities' discomfort with intervening armed forces, local actors could delineate the terms and bounds of their support (or lack thereof) for military intervention and cooperative CMRel. If and where these communities are supportive of military intervention and cooperative CMRel, humanitarian actors could feel more confident compromising their principles of neutrality and independence. For example, as examined in Chapter 8 (pages 176–213), the most local actors interviewed for the thesis—sub-district Paramount Chiefs—had very positive perceptions of the role of the intervening militaries in Sierra

Leone.^b On the other hand, if and where crisis-affected communities are not supportive of military intervention and cooperative CMRel, humanitarian actors could better advocate for broader adherence to the Humanitarian Principles and the de-militarisation of the emergency response at hand.

It should be emphasised that crisis-affected communities are dynamic and diverse, and any majority opinion will include minority dissent. Nevertheless, the incorporation and empowerment of these communities through a resilience-based approach would provide them a degree of agency over the decision to intervene militarily, rather than the decision being taken by a small group of individuals (such as occurred in Sierra Leone: see Chapter 6, pages 111–144). This also accords with scholarly work on the role of communities as frontline responders in guiding and shaping inclusive and locally contextualised responses, which can help to not only build resilience, but also to overcome the aforementioned inequity that can be found in other humanitarian approaches.^{37,53,84,264,284,285,288,289} In short, decisions related to CMRel would not only be better informed through this incorporation of local actors, but their resilience against future crises would also be more robustly developed over the course of the emergency response at hand.

Considering COVID-19

The COVID-19 pandemic has raised a number of these and other themes, as countries throughout the world have engaged their militaries and other defence and security assets in response. Therefore, the relevance of the thesis' findings warrants brief consideration of the contemporary public health zeitgeist (while data collection concluded in 2018 and thus the pandemic was not raised in the data, many of the themes are highly relevant). Due to the scale of the COVID-19 pandemic and the diversity of related CMI, the UK's domestic experience is used to focus discussion.

During the COVID-19 pandemic in Britain, a number of different requests for domestic military support were made by local councils under the Military Aid to Civil Authority (MACA) policy (notably, a very similar version of this policy exists in Sierra Leone).⁷⁰⁷ In response to these requests, HMG deployed their armed forces and other defence assets.⁷⁰⁷ This has included (but is not limited to) support to public health information campaigns; medical training; hard sciences research; and logistics (including airlift, medical evacuations, and supply chain, as well as the manufacturing of Personal Protective Equipment (PPE)).^{707,728–731} It has also included support to the construction and operation of COVID-19 testing sites and the Nightingale field hospitals.^{707,728–731} Taken together, the British Armed Forces' support to the COVID-19 pandemic has been considerable (though not necessarily very visible in public discourse, perhaps because of the notable lack of military support to the enforcement of public health

^b Dissent within this group was examined in chapters 6–7. It is important to (re)note Paramount Chiefs' authority partially derives from British efforts at securing indirect rule during Sierra Leone's colonial era, and these actors are therefore plausibly biased towards the British Armed Forces (see Chapter 2, pages 28–29). Further, Ebola-affected community members were not interviewed for this study, which remains an important research gap considered later in the discussion.

measures).^{707,732} Indeed, it is Britain's biggest domestic military operation in peacetime, with a peak number of 23,000 military personnel comprising the COVID-19 Support Force (CSF) supporting dozens of MACA requests.^{707,732}

Focusing on the example of the secondment of military personnel to deliver oxygen tanks and drive ambulances as well as the significant secondment of military medics to National Health Service (NHS) hospitals,^{733–735} the political economy of expedience paradox is evident. These military secondments may well represent life-saving assistance, especially for those in need of urgent medical care. However, the need to deploy military personnel can also be seen to result from a lack of sufficient resilience within the NHS, resulting from (or at least exacerbated by) political decisions that have deprived the NHS of funding and resources (such as the loss of drivers and nursing staff caused by British withdrawal from the European Union (EU)).^{736–738} Further, in gap-filling these roles, the British Armed Forces plausibly mitigate public demand for more resources for the NHS and other public services. Thus, through their intervention, the militaries can be seen to have contributed to the very vulnerabilities that resulted in the perceived need for their deployment—another manifestation of the political economy of expedience paradox.

However, the British Armed Forces has also worked to empower local civilian actors through 'Local Resilience Forums' (LRFs)—pre-COVID-19 emergency response structures in which military personnel are embedded in order to provide support to local councils planning for and coordinating in response to crisis.⁷³⁵ Establishing these inter-agency centres throughout the country is a requirement of the Civil Contingencies Act of 2004.⁷³⁹ When seconded to LRFs, military personnel have no authority to make decisions.^{735,739} Rather—as in the inclusive hierarchical coordination model that was partially exemplified in the Sierra Leone response—personnel provide guidance to these local inter-agency (and at times, civil-military) fora, so they are better able to plan for and respond to crisis (including COVID-19, but also flooding and other local emergencies).^{735,739}

Recognising the breadth and depth of CMI in response to COVID-19 (in the UK and elsewhere) does not resolve CMRel issues or encourage the generalisability of the thesis' findings—if anything, it further evidences the inability to do so without reproach. What can be said, at least, is that the issue of CMRel in response to public health emergencies is highly pertinent, as its application is both extremely diverse and widespread. This, in turn, suggests the need for further consideration and research on the role and perception of military actors in response to public health emergencies.^c

^c A preliminary attempt by STB to do so as related to COVID-19 specifically resulted in a manuscript titled *Civil-Military Engagement in Public Health Emergencies: A Comparative Analysis of Domestic Responses to COVID-19*. As of March, 2022, the manuscript has been drafted and is being prepared for submission to a peer-reviewed academic journal. The working paper is reproduced in Appendix B-1 (pages 245–245). Recommendations for further research are considered later in the discussion.

Reflections on the use of theory

This thesis drew upon different theories for different constituent chapters (methods are described at length in Chapter 4, pages 66–94). For example, in Chapter 6 (pages 111–144), Shiffman and Smith’s framework of factors affecting political prioritisation (2007) was used to help organise data related to the political process leading to the decision to intervene militarily in Sierra Leone’s Ebola response.⁶¹⁸ The chapter also used Sheikh *et al.*’s ‘systems software’ and ‘systems hardware’ distinction (2011) to help organise data related to the content of the militaries’ intervention that followed.⁶¹⁹ In Chapter 7 (pages 145–175), Buchanan’s interpretation of Assemblage Theory—specifically his discussion of ‘de-territorialisation’ and ‘re-territorialisation’—was used to help map data related to classical response actors’ frustration at feeling usurped by the militaries’ intervention.⁶²³ Data were also considered and contextualised—as part of the ‘syndemic constellation of elements’—with explicit consideration of neoliberalism as the geopolitical and socioeconomic ordering in Sierra Leone leading up to the Ebola outbreak and response (see chapters 6–8).

Principally, however—for the original findings chapters drawing on the primary dataset of qualitative interviews from the Sierra Leone case—analysis used the neo-Durkheimian theories of Mary Douglas (i.e., Douglasian Theory). As applied to these chapters (specifically chapters 7–8), Douglasian Theory was useful for analysing social complexity, particularly as related to hierarchical organisation. Given its overall centrality to the thesis’ findings, the use of Douglasian Theory is briefly discussed.

Douglasian Theory was chosen after the collection and coding of qualitative interviews had been completed (i.e., a decision was made to defer selection of a theoretical framework until this time, and so until this point, the approach was primarily inductive though did draw on *a priori* themes raised during the review of the literature). The thesis’ methodology is described at length in Chapter 4, pages 66–94). Douglasian Theory was first considered by STB when their supervisors used the theory in a (then-forthcoming and now published) article examining systems of care within and localised responses to Sierra Leone’s Ebola response.²⁸⁵

6 (*vis*) and Richards’ book summarising Mary Douglas’ *oeuvre* (2017) was a principal reference for understanding and applying the theory.⁶²⁰ Use of this text was essential, rather than solely relying on Douglas’ original works—as written by 6 and Richards, Douglas’ various

...arguments... seem puzzling when considered on their own [and] only convey their full weight when seen in the context of her lifelong project... [The] book offers a key to tracing out the spiralling rather than linear trajectory of Douglas’ intellectual ambitions.⁶²⁰

Therein—for the ways it makes Douglas’ constituent arguments cohesive—6 and Richards’ book is in some ways a primary text, as it considerably advances new knowledge on Douglasian Theory (though the

authors do note that scholars of Douglasian Theory ought to engage with Douglas' original works as well).⁶²⁰

On reading the book, STB was struck by the theory's particular focus on several factors that felt highly relevant for the examination of CMRel in the militarised NERC and DERCS. This included its ambition to understand how diverse actors initially classify each other in hostile ways; how conflict inevitably arises between them; and how this conflict can be mitigated over time (and ultimately, peace created).⁶²⁰

Most notable to STB, though, was Douglasian Theory's focus on how hierarchical ordering has specific factors that can help to facilitate this conflict-to-peace process, i.e., its 'conflict attenuating' mechanisms of 'rule-bound niches', 'neutral zones', 'co-dependence', and 'hybridity'.⁶²⁰ Douglas did not claim that hierarchical ordering was uniquely capable of mitigating conflict.⁶²⁰ However, some of the conflict attenuating factors are unique to hierarchical ordering (i.e., rule-bound niches and neutral zones, which are predicated on the rule-based delineation of boundaries. Hybridity and co-dependence, on the other hand, do not necessarily require hierarchical ordering, though as argued in Chapter 8, pages 176–213, can nevertheless be effectively facilitated by it). Further, Douglas was, in some ways, a proponent of hierarchy:^d 6 and Richards write that Douglas

...admitted to a 'feeling for hierarchy'... that disquieted those who assumed she used the term in the way her critics did—to mean a coercive system of command and humiliation of subalterns. In fact,... she had in mind an opposite of what they understood it to mean... She developed an understanding of hierarchy as an institutional ordering that distributed power across linked but separated spheres and that tended to provide mutual checks and balances.⁶²⁰

Douglasian Theory's affinity for hierarchy may present a limitation, at least where it could introduce bias (the most obvious being the inability that scholars have to draw directly from Douglas' original works so as to examine other social organisations' conflict attenuating mechanisms as comprehensively as they can hierarchy's). Therefore—for the simple reason that it can be most easily examined using Douglasian Theory—there is a risk of being overly sympathetic to hierarchical ordering as an ideal scheme for the effective interaction between diverse actors with a view to peace.

Nevertheless, in the Sierra Leone case examined in chapters 6–8, hierarchy was the social organisation at hand: the intervening civilian and military ERWs were ordered in a very hierarchical way, as were the NERC and DERCS the latter helped to establish and lead. Further, while respondents expressed initial challenges to CMRel, these were overcome—a significant degree of cooperation and collaboration was later evident (as examined in chapters 7–8). In other words, conflict arose and was then attenuated between hierarchical actors operating and interacting within a hierarchical scheme. Therefore, Douglasian Theory was intuitively compatible with the inductively coded data (and was so without necessarily

^d As a further example, one of her later texts is titled *Being Fair to Hierarchists* (2003).⁶²²

assuming that respondents' perception of the manifested hierarchy was a 'coercive system of command and humiliation of subalterns', as above).⁶²⁰

Thereafter, the hierarchical mechanisms of conflict attenuation were applied as a relatively concrete framework to organise the data (particularly in Chapter 8, pages 176–213, wherein data were presented according to how co-dependence, hybridity, rule-bound niches, and neutral spaces were manifested within the NERC and DERCS). Therein, Douglasian Theory was used as a framework to not only organise the data, but also to present the line of argument that ultimately led to the concept of inclusive hierarchical coordination. It was also fundamental to the examination of dynamic CMI and CMRel (as opposed to observations in Chapter 6, pages 111–144, on the political process leading to the militaries' intervention and the content of the support that was provided). Douglasian Theory, in short, was not incidentally relevant or tangentially applied to the data. Rather, it permitted the significant deepening of analysis—that is, to transcend solely descriptive analysis so as to explain causation—and was therefore fundamental to the thesis' overall findings.

This depth of engagement with Douglasian Theory also meant the thesis went beyond its partial use for analysis, or relatedly, its use solely as a tool for the examination of conflict (as is often the case).⁶²⁰ Instead, the thesis used Douglasian Theory to examine interaction and social complexity within hierarchical schemes, with a view to not only explaining conflict, but also theorising tools for reconciliation and peace creation.^e Therefore, where other scholars from different disciplines have used particular aspects of Douglasian Theory for a diversity of particular studies (including Hood's (2000) application of the theory to the examination of the management of British civil servants and Mayhew *et al.*'s (2021) application to the examination of systems of care in Sierra Leone's Ebola response),^{285,727,740–744} this thesis (re)demonstrates the value and relevance of a more comprehensive application of Douglasian Theory and is thus a significant contribution to the theoretical literature.

Proposing the reconceptualisation of military institutions

When a public health emergency arises and transcends the extant resilience of public institutions and local actors, hierarchy can be used to encourage and empower a degree of decentralisation (and therefore inclusivity). This was seen in the Sierra Leone case, where the NERC and DERCS were led by national actors, and also proactively incorporated (some) sub-district local actors like Paramount Chiefs. The Paramount Chiefs, in turn, were able to use hierarchy to incorporate still more local actors through their (sub-)chiefdom Ebola response task forces.

Indeed, the very nature of hierarchy permits—if guided to this end—a theoretically limitless inclusivity, from international-level actors; to national, district, and village-level actors; or even to specific household

^e As described, a major gap that remains is the examination of other forms of social organisation and their capacity to realise (and mechanisms for) peace creation.

actors. The hierarchical structure only facilitates and represents true inclusivity if it is used for the delivery of resources, training, and support, with a view to empowering localised decision making and bottom-up advocacy (as distinct from facilitating top-down directives). When this occurs, a hierarchy's participants become indispensable to its operation (i.e., inherent co-dependence is developed). Anomaly can thus be accommodated—and therefore inter-organisational peace created—even in the face of a considerable and life-threatening crisis.^f This serves to make an emergency response more ethical, efficient, and effective.

How lines are drawn around this kind of 'local'-isation and the particular collection(s) of individuals or communities that comprise it will always be contested. The necessary considerations are too personal, ungeneralisable, and subject to change. In other words, how individuals define sovereignty over themselves and their communities will not ever be fully pinned down. That being said, some tentative inferences about what localisation means can be made—the consideration of which, while aspirational, may provide further and more robust ways of interrupting the political economy of expedience paradox.

For example, a national military officer deployed in response to an Ebola outbreak is most likely perceived to be more 'local' than an expatriate (I)NGO doctor or WHO epidemiologist. Further—at least in a reliably democratic state and outside complex emergency contexts—a national military officer is accountable to a government taking responsibility for the wellbeing of its citizens. In this way, a highly capacitated national military can perhaps be reconceptualised as a public emergency response workforce—a well-funded, organised, and accountable one—comprised of and operated by public servants who are tasked by a sovereign and civilian government. In the Sierra Leone case, this sovereign and civilian government was also a democratic one (albeit with a history of autocracy and other problematic expressions of hegemony), exercising an independence regained after centuries of colonial exploitation and rule. This reconceptualisation of military personnel as a viable public emergency response workforce can also contribute to the partial undoing of structural adjustment programmes (SAPs) and other neoliberal policies. These policies have historically stripped state ownership and accountability of public services and placed them in the hands of unelected (I)NGOs and private providers—or in some cases nobody—to fill gaps in the provision of critical public services that can arise during times of crisis.

If and when this recharacterisation is coupled with strategies for the systematic inclusion of often-marginalised local actors through (conflict attenuating) inclusive hierarchical coordination, the political economy of expedience paradox can be interrupted during the response to public health emergencies. Therein, crisis-affected populations would be not only aided in the alleviation of public health need, but also made resilient to the harmful structural effects that the response might otherwise perpetuate if

^f Interestingly, this kind of hierarchical model closely resembles the British Armed Forces' military mission command, wherein subordinate personnel are delegated decision making authority through the hierarchical scheme (other scholars have discussed potential applications of mission command to other civilian sectors, including the implementation of health policy.^{229–231,475}

organised in a less inclusive and locally empowering way. This can also serve to improve the efficiency and efficacy of the response, as above.

For such a recharacterisation to be fully realised, internal security functions would need to be returned to civilian police; international security functions be divorced to a smaller and more focused armed group where unavoidable; camouflaged uniforms be eschewed; institutional gender disparities addressed; and militaries disarmed. In other words, national militaries—at least their non-combatant services with skillsets broadly relevant to whole-of-government public health emergency responses—would need to be reformed and reconstituted as a robust (and civilianised) public emergency response workforce that is hierarchically organised, tooled, and trained to address public health crises.^g

This recharacterisation of militaries as a (civilianised) public emergency response workforce does not necessarily mean eschewing militaries' organisational strengths that contribute to crucial efficiency: because decision making is itself delegated within the proposed hierarchical model, procedure can be practical and expeditious (with the caveat that legal regulations should exist to ensure sufficient protection against harms are in place). This proposed hierarchical model somewhat reflects an idealised version of the WHO's nascent incident management system (IMS) developed after the organisation's widely criticised response to 2013–2016 West Africa Ebola Epidemic.^{8,226,746,747} However, the model would be extended further and organised so as to proactively incorporate and empower more (even 'non-expert') local actors as decision makers.^h Other military strengths such as routine training (e.g., simulation and table-top exercises) could also be used to help ensure such an organisational system is sufficiently robust, adaptable, and prepared to efficiently respond to dynamic crises.

The question remains (especially provided the spectre and re-emergence of near-peer posturing and conflict as seen in the ongoing crisis in Ukraine): would countries be willing to repurpose and civilianise portions of their militaries in a way that retains certain valuable aspects of military ordering (i.e., hierarchy) but also delegates and thus enables more democratic, inclusive, and locally responsive operations? Relatedly, is it time for a new kind of 'military' or a new kind of 'humanitarian force'? Examining and addressing these questions is a challenge to and for the research and policy community.

Conclusion

The 2013–2016 West Africa Ebola Epidemic was unprecedented in many ways, not least for the direct intervention and sustained role of the British Armed Forces and RSLAF in Sierra Leone's response. The militaries' intervention and role—particularly in coordination, planning, and organisation within

^g This is perhaps not dissimilar to the USG Public Health Service (PHS), which is a hierarchical and uniformed civilian public health service that was partly modelled on military organisation.⁷⁴⁵ It is also not dissimilar to British military medics routinely working within the UK health system.

^h Such as was seen in bottom-up leadership from local governance entities during the response to COVID-19 in Syria's northwest, for example.⁷⁴⁸

the civil-military NERC and DERCs—was generally understood to be complementary to civilian ERWs’ area of expertise. This was especially true because the militaries provided civilian ERWs with a hierarchical structure in which they could effectively operate and efficiently implement. These diverse actors were also able to robustly collaborate because of their shared hierarchical ordering. Given the thoroughly civil-military nature of the response, isolating the effect of the militaries’ intervention defies scientific measurement. Nevertheless, the militaries were generally understood by a majority of both military and civilian ERWs to have contributed valuable (even life-saving) assistance.

However, various harms were simultaneously facilitated through this intervention. For their insufficient inclusion as Ebola response leaders, this includes the failure to fully empower public institutions and many local actors. Therein, the response did not effectively address several of the key factors leading to the militaries’ intervention, thus leaving Sierra Leone vulnerable to future public health emergencies. This phenomenon is a vicious cycle the thesis has conceptualised as the political economy of expedience paradox.

Despite the paradox, the civil-military NERC and DERCs also provide important lessons for how hierarchical spaces need not be exclusionary ones. In fact, when organised in a conflict attenuating way, hierarchical spaces can be inclusive in nature and effect during public health emergency responses. This is because they can be structured to provide not only accountability and oversight, but also guidance and resources. In turn, this permits the safe and effective delegation of daily decision making to a larger, more diverse, and more local group of actors. In the Sierra Leone case, this included national military actors, and the Sierra Leonean (versus international) character of the response was thus maintained despite significant intervention by exogenous organisations. In other words, hierarchy—if organised the right way—can permit decentralisation and localisation (including to more local actors like Paramount Chiefs or those that comprised their sub-chiefdom Ebola response task forces).

Decolonising, democratising, and decentralising public health emergency responses through inclusive hierarchical coordination in this way is more than an ethical imperative. Greater inclusivity also means strength in numbers. Further, it ensures there is a more robust ability to understand and navigate local dynamics. Therefore, it is an indispensable tool for maximising efficiency and efficacy.

In short, there is a clear need for robust and efficient responses to public health emergencies when they arise, which at times will require exogenous support. There is a simultaneous need for these responses to be as localised and inclusive as possible. If organised using inclusive hierarchical coordination, these are highly compatible ambitions. Therein—and especially if coupled with the reconceptualisation of military actors as a robust public emergency response workforce and other resilience-building strategies—hierarchical intervention in response to public health emergencies becomes not the furthering of the political economy of expedience paradox, but rather its undoing.

Recommendations for research, policy, and practice

The thesis has various implications for research and policy which are formulated here as recommendations. Those for policy are separated into two categories: recommendations related to the cataloguing of military assets and the revisiting of civil-military guiding documents; and recommendations related to designing public health emergency responses to be as inclusive and localised as possible without disregarding hierarchical strengths.

Table 1: Recommendations for research, policy, and practice	
#	Recommendation
Further research	
1	Other CMRel operational spaces than that found in Sierra Leone have been theorised—for example, those where there is less civil-military alignment (CMA), or those where the area context is unstable or conflict-affected (see Appendix A-4, pages 340–350). Therefore, further research into CMRel and the way they manifest during other public health emergency responses is required, in order to understand the extent to which the thesis’ findings are (or are not) generalisable. ⁱ As a global pandemic, COVID-19 may present a viable case study that permits comparative examples to be drawn from a number of different operational spaces. ^j
2	The Sierra Leone context also stands out for the ISAT programme and the overall transformation of the country’s national military following the 1991–2002 Sierra Leone Civil War (see Chapter 6, pages 111–144). This may have uniquely situated RSLAF as a reliable and effective partner during the country’s Ebola response. Therefore, further research is needed that examines the ISAT model for the public health emergency response preparedness and capacities it incidentally developed in the national military. Relatedly, military-to-military training programmes do exist throughout much of the world, but documenting and examining them for their relevance during public health emergencies—including the strength of bilateral relationships they engender—remains a major gap in the research and also policy literature that should be addressed.
3	Further research focused on collecting and examining the perspectives of crisis-affected populations—including their perceptions of military actors performing non-military public health emergency response functions, as well as the extent to which they feel included or excluded from decision making processes—should be prioritised by the research community, rather than limiting research focus to the perspectives of civilian and military response actors as in this thesis. ^k This would serve to provide crucial insights into the extent to which the case examined in this thesis did (or did not) align with the localisation agenda.
Cataloguing of assets and the revisiting of civil-military guiding documents	
4	Military functions, assets, and capabilities that might be applied to public health emergency responses should be examined and catalogued. This includes consideration of not only military systems hardware, but also military systems software (see Chapter 6, pages 111–144, for an explanation of these terms and how they applied in the Sierra Leone case). Furthermore, this cataloguing exercise should include documentation and examination of the legal mechanisms through which a military can or cannot intervene in a given country, such as the UK’s and Sierra Leone’s aforementioned MACA protocol. This is, implicitly, an ongoing process

ⁱ As previously stated, a relevant ongoing research project with Brown University is described in Appendix C-2 on pages 245–245 with various working papers detailed in Appendix B-2, pages 245–245; where published, other relevant publications are included as Appendices A-1 through A-7 (pages 245–245; where in draft, under review, or in press, they are either included (Appendix B-1, pages 245–245) or summarised (Appendix B-2, 245–245).

^j A manuscript on this topic has been drafted by STB and two other scholars. As of the date of thesis submission, it is being prepared for submission to a peer-reviewed academic journal (Appendix B-1, 245–245).

^k Documenting and examining the perspective of crisis-affected communities on civil-military responses to humanitarian crises forms part of the core dataset collected for the previously referenced project associated with Brown University (see Appendix C-2, pages 245–245; see also Appendix B-2, 245–245).

	as a result of the COVID-19 pandemic, but should be formally integrated into global health preparedness and resilience review processes such as the Joint External Evaluation (JEE) tool. ¹
5	CMR global guiding documents specific to public health emergency responses should be re-examined and revision considered (see Appendix A-6, pages 363–372). The creation of new CMR guidance is particularly necessary for domestic contexts, perhaps as a template or as a set of principles that can be considered on a case-by-case basis due to the diversity of CMRel operational contexts (see Appendix A-4, pages 340–350) and the difficulty of applying the principle of last resort when sovereign countries decide to intervene militarily within their borders. Further, consideration should be given to disease outbreaks as a unique kind of crisis, due, for example, to their protracted nature; the risks presented to intervening personnel; and the plausible escalation of the crisis in the absence of an efficient and robust intervention. It is further necessary to consider and identify thresholds (epidemiological and otherwise) at which a military might most appropriately and effectively intervene to collaborate with national health actors as part of a whole-of-government approach. ¹ This could possibly be integrated into the Inter-Agency Standing Committee’s (IASC’s) Level 3 activation procedures for infectious disease events. ⁷⁴⁹ Relatedly, as harms may be caused by a whole-of-government approach as part of the political economy of expedience paradox, reconsideration of the ‘principle of do no harm’ may be required. A proposed ‘principle of do least harm’, wherein the maximisation of benefit to harm ratio is the principal objective of intervention, may be a better alternative. As the UN’s dedicated focal point for CMRel, the UN Office for the Coordination of Humanitarian Affairs (OCHA) Humanitarian Civil-Military Coordination Section (CMCS) is likely best placed to begin these discussions by convening the widest possible array of stakeholders explicitly including CSOs and other local groups.
6	As an ongoing process, there is a need to robustly map CSOs and other local groups, particularly in areas vulnerable to cascading crises. This could plausibly be facilitated by the UN Country Team (UNCT) with the robust support of CSOs and other local groups. Health authorities should ensure there are routine, active, and pre-crisis processes of engagement with these groups, for example, through a structure akin to Sierra Leone’s District Security Committee (DISEC) model or chiefdom Ebola task forces (see Chapter 8, pages 176–213; Britain’s aforementioned LRFs offer a similar concept). Where these structures exist (or, as a longer-term ambition, can be created), advocacy of (I)NGOs, public institutions, and the wider international community should focus on ensuring they are sufficiently funded, inclusive, and provided with the training and support required to develop their capacities as public health emergency response actors. These actors could then be integrated into public health emergency responses using hierarchical mechanisms (see below), which would help ensure the localisation agenda is better realised.
Designing public health emergency responses to be as inclusive and localised as possible	
7	Inclusive hierarchical coordination—that is, tiered and conflict attenuating hierarchical coordinating spaces with robust two-way communication and localised/delegated decision making—should be considered as a mechanism for both widening and deepening the inclusivity of public health emergency responses (see Chapter 8, pages 176–213). This applies to militaries which are (re)purposed for a civil-military public health emergency response, or civilian humanitarian actors and health authorities formulating an IMS. Either way, when being operationalised by relevant authorities (often by either UN OCHA or the WHO alongside national institutions), these hierarchical spaces should be actively designed and guided towards this end, including for their conflict attenuating use of rule-bound niches and neutral zones to organise specific groups of crisis responders. They should also be proactively organised to be inherently co-dependent in nature. As above, the British Armed Forces’ mission command model is perhaps a useful template for decentralised decision making during times of crisis from which relevant lessons can be drawn. As evidenced in this thesis, this would serve to realise localisation through the mechanism of conflict-attenuated hierarchy, thereby helping ensure exogenous responses are complementary rather than overshadowing of endogenous ones.
8	Within these inclusive hierarchical spaces, robust mechanisms should be developed for the incorporation of real-time social science analysis into public health response decision making with a view to adaptation. Social science analysis should include consideration of the ways and extent to which crisis-affected populations feel sufficiently participant. The Social Science in Humanitarian Action Platform (SSHAP) provides a good example of operationalisable social science analysis that could be better considered. ⁷⁵⁰ The UN Children’s

¹ It is also important to note that in 2021 (after the literature scoping and bulk of this thesis’ preparation), the WHO did publish a new and highly relevant guiding document titled *National civil-military health collaboration framework for strengthening health emergency preparedness*.³⁷⁰

	Fund (UNICEF) Social Science Analytics Cell (CASS) also developed the operationalised concept of Integrated Outbreak Analytics (IOA) in the later stages of the 2018–2020 Kivu Ebola Epidemic in the Democratic Republic of the Congo (DRC). This workable model combined epidemiological and social science data to inform the ongoing response. ²⁶² With the active participation of those who feel excluded, gaps or issues regarding community participation should be translated into concrete action plans to iteratively reform the response and ensure it is maximally inclusive.
9	As a longer-term process, consider reconceptualising and—to the extent possible, reconstituting—militaries as robust (and civilianised) public emergency response workforces. The role of militaries in Sierra Leone’s Ebola response was clearly significant, and the COVID-19 pandemic has further evidenced the widespread and central role that militaries can, do, and will play in the response to future public health emergencies (see Appendix B-1, pages 385–402). Militaries can no longer be thought of as an asset of last resort, especially in a world characterised by dramatic climate change and the increasing number of global crises this will likely facilitate. Such reconceptualisation and reconstitution will take a considerable amount of time and advocacy—starting as dialogue between (and the development of new discourse by) a cross-discipline intersection of research and policy experts alongside other stakeholders (including local actors). As part of this reconstitution process, focus will also be required to address militaries’ characteristic gender skew. However, the benefits of such changes are significant and worthwhile. Disarming militaries—at least some of their constituent services—and re-tooling them for public health emergency responses would represent a significant and positive change, in that it would help to re-establish public ownership and operation of a critical and life-saving public service in a way that also undoes the historical un(der)empowerment of national institutions, health systems, and local actors.

Table 1: Recommendations for research and policy

Limitations

There are various research limitations that plausibly arise from respondent and site selection; limited access to various key documents (including but not limited to those not in the public domain sought under FOIA); and a lack of previous research studies on the topic. Each, including mitigation measures taken, is addressed in turn.

While respondent selection was purposefully broad and inclusive in nature, there is an implicit gender bias in the data: selection skews heavily male, with only 24 female respondents (out of 110 total). This skew was particularly acute for military respondents (n=3). To some extent this reflects a gender skew that was evident in the Ebola response (especially in the intervening militaries), but nevertheless, this is an unambiguous research limitation and findings should be carefully considered on this basis (especially as women frequently provide frontline care and have considerable leadership potential during public health emergency responses).^{751,752} Another limitation arising from respondent selection is Paramount Chiefs’ positionality. These actors were spoken to as both representatives of Ebola-affected communities and as chiefdom-level civilian ERWs. However, their positionality as the former is complicated and contested,^{43,53} including for the way that their authority partially derives from the British colonial administration (see Chapter 2, pages 28–29 and also Appendix C-1, pages 416–418). Paramount Chiefs are therefore not fully independent or neutral actors, and may hold positive biases towards HMG. Accordingly, while documenting and examining their perspective does present an opportunity for knowledge creation, it also presents a challenge to doing so without reproach. The small number of Paramount Chiefs that were interviewed also limits generalisability (though due to the overall small number of Paramount Chiefs in the research sites, the number interviewed does represent a majority).

Further, governmental respondents—both military and civilian, and especially those contemporaneously employed at the time of interview—may have been circumspect in any criticism concerning their (or indeed another nation’s) military (ethics, risks, and risk mitigation are described in Chapter 4, pages 91–93). As with site selection biases, limitations arising from these factors were mitigated through the large number and variety of respondents, the confidentiality of participation, the anonymisation of collected statements, and an overall view to achieving research saturation. Taken together, these mitigating measures helped to ensure the transparency and diversity of statements given. Finally, while community responses to the Ebola epidemic were significant in both scale and effect, they fell outside of the formal Ebola response that was organised within the NERC and DERCS. As such, these perspectives were not explicitly included or examined as part of this research project, which represents an important research gap demanding further study (see below and also Appendix C-2, pages 468–470, for an overview of an ongoing research project that STB is affiliated with that seeks to address this research gap).

Site selection also presents several plausible limitations. The Port Loko, Kambia, and Western Area Urban districts of Sierra Leone were selected due to STB’s prior work there during the Ebola response. This presented a number of research strengths (e.g., that access to certain areas and also certain respondents—especially military ones—was made significantly more straightforward). However, it also meant that STB had previously worked with a number of the thesis’ civilian and military respondents during the Ebola response. Therefore, courtesy bias should be foregrounded as a possible limitation (this is mitigated through the use of extensive memo-taking, journaling, and other reflexive efforts throughout all phases of this study which are summarised in Chapter 5, pages 95–110, and expounded upon further in Appendix C-2, pages 446–471). Further, these districts were affected by Ebola later in the outbreak than the country’s eastern provinces, after lessons had been learned and incorporated into the response. It is therefore possible that CMRel were more positive and processes of localisation more robust than at other sites (though this may also represent a research strength when seeking to identify best practice, inasmuch as the case examined represents the pinnacle of learning in Sierra Leone’s Ebola response). As above, these limitations were mitigated through the large number and diversity of respondents, the anonymisation of statements provided, and an overall view to reaching saturation.

Lack of access to a number of documents also presents a limitation to the thesis’ findings. This includes documents not in the public domain that were requested from the UK Ministry of Defence (MoD) and DfID under FOIA. The agencies denied access to several requested documents, and only offered some with significant redactions. Several of these refused or redacted documents were nevertheless available to STB through the assistance of other individuals, thus mitigating this specific limitation. As the FOIA documents were only intended to complement the interview data rather than stand alone as a cohesive dataset, this limitation is not especially significant. Another related limitation results from a lack of access to a number of key academic journal articles that were not open access and were not otherwise accessible through the London School of Hygiene & Tropical Medicine (LSHTM) library services. This was perhaps

a more acute limitation when compared with other researchers at the school, as the focus of this thesis sits at the intersection of many fields (e.g., political science; international relations; military, peace, and security studies; management sciences; *et cetera*) rather than falling solely within a more conservative definition of the public health field. Effort was made to access the most pertinent of these documents through other means where possible (including through inter-library loans and article-by-article purchase), but comprehensively doing so was not possible.

Finally, there is a notable lack of prior research studies on the thesis' topic, which limited the ability to focus data collection according to prior findings, analysis, or frameworks. Therefore, most of the analysis in the thesis was formative. While the thesis is therefore significant for the research gap it helps to fill (see Chapter 3, pages 62–64), it also presents a challenge to comprehensively examining its credibility, scope, and generalisability. To begin to address the limitations resulting from this important research gap, STB has supported further relevant research in several other contexts. As of the date of thesis submission, this additional research has resulted in one peer-reviewed academic journal article being published (reproduced in Appendix A-2, pages 317–325), as well as several in-draft working papers drawing on data co-collected by STB for another research project (described further in Appendix C-2, pages 468–470). Nevertheless, research on this topic remains extremely nascent, particularly around the documentation and examination of crisis-affected community perspectives as previously described. Therefore, additional research is required to further nuance the thesis' findings; to robustly meet its aim, objectives, and questions; and to better mitigate its limitations.

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Appendices

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Appendices are separated into three over-arching groupings (A–C).

The first grouping, Appendix A-1–A-7, includes other relevant and published peer-reviewed academic journal articles that the PhD candidate (STB) is authored on. This includes a paper on the various operational challenges faced conducting Ebola response operations in Port Loko and Kambia (Appendix A-1, pages 303–316); a paper on civilian perception of military's role responding to the Ebola outbreak in northeast Nigeria (Appendix A-2, pages 317–325); and a paper that reviews the various United States Government (USG) post-operation reports that were produced following the outbreak, with a view to identifying recommendations that were shared between the various USG departments and therefore plausibly good candidates for policy change (Appendix A-3, pages 326–339). It also includes a paper that proposes a new typology for civil-military relationships (Appendix A-4, pages 340–350); an in-press paper validating the typology (Appendix A-5, pages 351–362); a paper examining the various civil-military guiding documents for their relevance during public health emergencies (Appendix A-6, pages 363–372); and a paper reviewing a March, 2017 roundtable meeting held by the Royal Institute for International Affairs (Chatham House) that convened civilian and military stakeholders from the Sierra Leone Ebola response (Appendix A-7, pages 373–384).

The next grouping, Appendix B-1–B-3, details other relevant working papers and publications. Appendix B-1 (pages 385–402) reproduces a working paper on civil-military responses to the COVID-19 pandemic. Appendix B-2 (pages 403–406) summarises other relevant manuscripts which are as-yet unpublished but are being prepared for submission to a peer-reviewed academic journal. Appendix B-3 (pages 407–413) details relevant publications that are not peer-reviewed academic journal articles (e.g., blogs, policy reports, and so forth).

The third and final grouping, Appendix C-1–C-2, are extended thesis chapters. Appendix C-1 (pages 414–445) details the relevant history and context of the case study (i.e., an extended version of Chapter 2). Appendix C-2 (pages 446–471) details STB’s personal and professional experiences relevant to the thesis (i.e., an extended version of the reflexive considerations discussed in Chapter 5, pages 95–110).

RESEARCH PAPER COVER SHEET

Please note that a cover sheet must be completed for each research paper included within a thesis.

SECTION A – Student details

Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone’s Ebola Response		
Primary Supervisor	Dina Balabanova		

If the Research Paper has previously been published please complete Section B, if not please move to Section C.

SECTION B – Paper already published

Where was the work published?	Global Health: Science and Practice		
When was the work published?	July 2017		
If the work was published prior to registration for your research degree, give a brief rationale for its inclusion	N.A.		
Have you retained the copyright for the work?*	No	Was the work subject to academic peer review?	Yes

*If yes, please attach evidence of retention. If no, or if the work is being included in its published format, please attach evidence of permission from the copyright holder (publisher or other author) to include this work.

SECTION C – Prepared for publication, but not yet published

Where is the work intended to be published?	N.A.
Please list the paper’s authors in the intended authorship order:	N.A.
Stage of publication	Choose an item.

SECTION D – Multi-authored work

For multi-authored work, give full details of your role in the research included in the paper and in the preparation of the paper. (Attach a further sheet if necessary)	STB was primarily responsible for data collection and analysis. STB, EP, and AAT contributed equally to drafting of the manuscript. AC, AH, and TS provided valuable insights and support to manuscript revisions.
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SECTION E

Student Signature	
Date	31/01/2022

Supervisor Signature	
Date	28/02/2022

ORIGINAL ARTICLE

Overcoming Operational Challenges to Ebola Case Investigation in Sierra Leone

Samuel T Boland,^{a,b} Erin Polich,^b Allison Connolly,^b Adam Hoar,^b Tom Sesay,^c Ahn-Minh A Tran^b

Deficiencies in transportation and communication, low frontline staff morale, and mistrust among communities, among other operational challenges, greatly limited Ebola case investigation in Sierra Leone. Recommendations for future outbreaks: (1) timely compensation for frontline staff, (2) context-appropriate transportation and communication resources, (3) systematic data collection, storage, and retrieval systems, (4) sound linkages between frontline staff and communities, (5) daily meetings between frontline staff and epidemiologists, (6) clear and appropriate operational chain of command, and (7) political and funding support to operational agencies.

ABSTRACT

The Ebola virus disease (EVD) epidemic that hit West Africa in 2013 was the worst outbreak of EVD in recorded history. While much has been published regarding the international and national-level EVD responses, there is a dearth of literature on district-level coordination and operational structures, successes, and failures. This article seeks to understand how the EVD response unfolded at the district level, namely the challenges to operationalizing EVD surveillance over the course of the outbreak in Port Loko and Kambia districts of Sierra Leone. We present here GOAL Global’s understanding of the fundamental challenges to case investigation operations during the EVD response, including environmental and infrastructural, sociocultural, and political and organizational challenges, with insight complemented by a survey of 42 case investigators. Major challenges included deficiencies in transportation and communication resources, low morale and fatigue among case investigators, mismanagement of data, mistrust among communities, and leadership challenges. Without addressing these operational challenges, technical surveillance solutions are difficult to implement and hold limited relevance, due to the poor quality and quantity of data being collected. The low prioritization of operational needs came at a high cost. To mediate this, GOAL addressed these operational challenges by acquiring critical transportation and communication resources to facilitate case investigation, including vehicles, boats, fuel, drivers, phones, and closed user groups; addressing fatigue and low morale by hiring more case investigators, making timely payments, arranging for time off, and providing meals and personal protective equipment; improving data tracking efforts through standard operating procedures, training, and mentorship to build higher-quality case histories and make it easier to access information; strengthening trust in communities by ensuring familiarity and consistency of case investigators; and improving operational leadership challenges through meetings and regular coordination, establishing an active surveillance strategy in Port Loko, and conducting an after-action review. Resolving or addressing these challenges was of primary importance, and requisite for the implementation of technical epidemiological complements to EVD case investigation.

INTRODUCTION

The West African Ebola virus disease (EVD) epidemic began in Meliandou, Guinea, in December 2013, before spreading to Liberia and Sierra Leone in March and May 2014, respectively. By July 2014, EVD

had spread beyond containment, and on August 8, 2014, the World Health Organization (WHO) declared a “Public Health Emergency of International Concern.”¹

While there is new literature on the scale of the outbreak, international-level failures, and EVD clinical features and transmission chains to help inform and contextualize these numbers, there is a dearth of literature on the operational details of the EVD response at the district level in Sierra Leone.² These details include day-to-day activities and the difficulties faced when mounting a response to a large-scale outbreak in resource-limited

^aLondon School of Hygiene & Tropical Medicine, London, United Kingdom.

^bGOAL Global, Dublin, Ireland.

^cMinistry of Health and Sanitation, Freetown, Sierra Leone.

Correspondence to Samuel Timothy Boland (boland.sam@gmail.com).

Emergency bylaws enacted in August 2014 required the reporting and investigation of all deaths and cases of sickness, among other exceptional legal demands.

Even with a robust national structure in place, conducting Ebola disease surveillance was an enormous effort considering the scale of the outbreak.

settings. This article attempts to help fill this gap, drawing on the authors' collective 64 months of experience with the EVD response efforts in Sierra Leone. Specifically, we discuss case investigation operations in Port Loko and Kambia districts of Sierra Leone.

Emergency bylaws enacted in August 2014 required the investigation of all deaths and cases of sickness, among other exceptional legal demands.³ Fulfilling this requirement and effectively managing the EVD outbreak required a well-trained and capacitated disease surveillance structure to conduct the following components:

- **Case investigation:** Conduct in-person assessments of all persons reported ill or deceased to determine if they met the case definition for suspected EVD, which is decided based on the confluence of 15 possible symptoms and history of EVD contact. Refer suspected cases to EVD treatment centers. Document all known contacts of the suspected EVD case and search for all missing contacts.
- **Dead body swabbing:** Using oral swab specimens, test all dead bodies for post-mortem EVD before burial. If specimen tests EVD-positive, conduct follow-up investigation and contact tracing.
- **Contact tracing:** Monitor anyone who has direct contact with an individual with EVD for signs and symptoms of the virus during the 21-day incubation period. Note that the term "contact tracing" in the Sierra Leonean context refers to the monitoring of known contacts, rather than elicitation and location of previously unknown contacts.

EVD surveillance requires all 3 of these complementary and co-dependent components; however, this manuscript focuses on the first component—case investigation and specifically its operational needs.

In October 2014, the National Ebola Response Centre (NERC) was created to provide a central, coordinated response to EVD at the national level.⁴ Corresponding District Ebola Response Centres (DERCs), responsible for local EVD response operations, rolled out to the country's 13 districts shortly thereafter.⁵ DERCs were staffed by the Republic of Sierra Leone Armed Forces, the British Armed Forces, the UK Department for International Development (DFID) and the UK Stabilisation Unit, the U.S. Centers for Disease Control and Prevention (CDC), the respective district medical officer (DMO) and members of their district health management team (DHMT), NGOs, and several United Nations agencies, including the Mission for Ebola Emergency Response and WHO.

However, even with this structure in place, conducting case investigation, dead body swabbing, and contact tracing was an enormous effort considering the scale of the outbreak. Sierra Leone has high levels of all-cause morbidity and mortality rates,⁶ and EVD presents many clinical similarities to endemic diseases like Lassa fever and malaria, the latter alone accounting for 50% of health facility outpatient visits.⁷ Indeed, by late 2014, Port Loko district experienced one of the highest EVD caseloads in the country, with nearly 100 laboratory-confirmed cases per week.⁸

The high burden of cases, requiring daily investigation, demanded substantial logistical resources and an operational framework—both of which were lacking in the earliest stages of the outbreak—and DERCs remained unable to contain the rapid spread of EVD. Delays in scaling up an international public health emergency response—for which there was little precedence—and a heavy focus on providing technical epidemiological support rather than operational and logistical support, exacerbated these challenges.

Rapid field epidemiology training by WHO and the CDC in late 2014 developed a much-needed cadre of Sierra Leonean case investigators (also referred to in-country as district surveillance officers), complemented by a cohort of expatriate WHO and CDC epidemiologists. However, operational support to facilitate their work during the height of the outbreak was still insufficient. EVD case investigation quality and efficiency thus remained insufficient through 2014. In Port Loko



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A safe burial cemetery in Kambia, Sierra Leone.

district during the month of December 2014, 22% of confirmed EVD cases were found dead at the time of investigation, only 26% of confirmed EVD cases had a known source case, and the percentage of confirmed EVD cases previously identified as EVD contacts was a mere 15%.⁹

METHODS

In December 2014, the Port Loko DERC requested NGO support for EVD surveillance from the Ebola Response Consortium, an NGO consortium in Sierra Leone led by the International Rescue Committee. GOAL Global thus began supporting EVD surveillance in Port Loko in January 2015, with DFID funding. The same request was made in Kambia in March 2015, with GOAL support beginning in April 2015. What follows are the challenges encountered in conducting EVD case investigation in Port Loko and Kambia, and the work of GOAL in collaboration with various DERC and DHMT stakeholders to address and effectively operationalize EVD surveillance activities in these 2 districts. A summary of challenges and interventions is presented in the Table.

This insight draws from our experiences working in the EVD response, as well as a survey of 42 Port Loko and Kambia case investigators conducted by 2 of the authors in December 2015. The University of Chicago Social and Behavioral Sciences Institutional Review Board reviewed and approved the survey.

We acknowledge the following limitations of this analysis: All data presented here were official data, or data collected by the authors themselves during the response, with all efforts made to portray an accurate picture. However, data quality is admittedly limited due to the crisis conditions of the EVD response. Additionally, this article represents the viewpoints of a limited number of professionals working in Port Loko and Kambia districts of Sierra Leone during this time—only several among thousands of national staff and many tens of international responders who worked in these districts during the outbreak.

CHALLENGES TO CONDUCTING EVD CASE INVESTIGATION

Environmental and Infrastructural Challenges

Case investigator transportation presented a substantial challenge to EVD surveillance. In Port Loko and Kambia, only 7 and 3 vehicles,

respectively, were available for case investigation as of December 2015 to cover an average of 43.3 daily alerts of sickness and death in Port Loko and 8.1 in Kambia,¹⁰ among a total population of 900,000 people over a total area of 8,827 square kilometers.^{11,12} This created major logistical challenges to response capacity.

In addition to the challenge presented by lack of vehicles, both Port Loko and Kambia have poor-quality unpaved roads and a complicated latticework of riverine areas. Accessibility difficulties are exacerbated during the rainy season from May to September, when the 2 districts each receive between 2 and 4 meters of rain.¹³ Poorly maintained and poor-quality vehicles were inadequate for such harsh conditions and prevented timely and efficient case investigation when they broke down or could not navigate roads. A lack of reliable fuel supply further hampered case investigation efforts.

Severe communication challenges also impeded case investigation. Deficiencies in Sierra Leone's telecommunications infrastructure meant it was often difficult for communities to raise sickness and death alerts, particularly in rural areas. As such, the flow of information necessary for EVD surveillance was often limited at its point of origin.

However, if communities raised an alert, there was no guarantee that a case investigator would successfully locate the alert, as the reported locations were often unspecific and investigators often lacked phone credit or found themselves out of network coverage to call for clarification. Additionally, case investigators often failed to communicate important information back to the

GOAL Global began supporting EVD surveillance in two districts—Port Loko and Kambia—in January 2015 and March 2015, respectively.

Severe communication challenges limited the flow of information necessary for EVD surveillance.



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In Sierra Leone, case investigators had to navigate unpaved roads and riverine areas.

TABLE. Challenges and Solutions to Conducting Ebola Virus Disease Case Investigation, Sierra Leone

Type	Challenges	Solutions
Environmental and Infrastructural		
Transportation	<ul style="list-style-type: none"> Lack of vehicles, poorly maintained low-quality vehicles, and lack of fuel posed challenges for case investigators to cover daily alerts of sickness and death in the 2 districts. Poor-quality unpaved roads, riverine areas, and the rainy season from May to September further complicated response efforts. 	<ul style="list-style-type: none"> GOAL collaborated with DFID, NERC, WHO, and other NGOs to provide high-quality off-road vehicles, along with fuel, drivers, and other logistical support. GOAL rented 12 vehicles in Port Loko and Kambia, and advocated with WHO and NERC to provide additional vehicles. GOAL requested authorization and funding from DFID for Catholic Relief Services in Port Loko and GOAL in Kambia to fuel the additional vehicles. GOAL advocated and helped facilitate the acquisition of boats from the Republic of Sierra Leone Armed Forces to facilitate access to riverine areas in Kambia.
Communication	<ul style="list-style-type: none"> Deficiencies in telecommunications infrastructure made it difficult for communities to raise sickness and death alerts, particularly in rural areas. Case investigators could not reliably locate alerts and often failed to communicate important information due to unspecific reported locations, lack of phone credit, or unreliable network coverage. 	<ul style="list-style-type: none"> GOAL distributed cellular phones, phone credit, and satellite phones to case investigators and their coordinators in the DHMT and DERC. GOAL provided closed user groups to all case investigation teams and selected individuals in the DERC, enabling free unlimited calling between case investigators, their supervisors, and epidemiology teams in WHO and CDC.
Data quality and management	<ul style="list-style-type: none"> Mismanagement of investigation materials posed a challenge to locating specific information, tracking efforts, and building case histories. Discrepancies occurred at the field and district levels, and no formal filing mechanism existed for completed case investigation forms. Inconsistency in naming conventions, spelling, and characterization of residence made matching documents difficult. 	<ul style="list-style-type: none"> GOAL developed standard operating procedures in collaboration with all surveillance stakeholders. Standard operating procedures ensured that case investigation forms were collected, stored, and organized in a retrievable manner. GOAL hired data managers in both the Port Loko and Kambia DERC to file and immediately digitize this information in real time. WHO established an after-action review in Port Loko in collaboration with GOAL, CDC, and the DHMT to review case investigation information and data at the end of each day.
Personal safety and fatigue	<ul style="list-style-type: none"> Case investigators were unable to eat during their long work day due to dangers of purchasing food from high-risk communities, stigma from communities who feared them, a lack of personal funds, and insufficient time. 	<ul style="list-style-type: none"> GOAL immediately provided daily take-away breakfast and lunch to all case investigators. Case investigators received hand sanitizer and personal protective equipment to help prevent EVD infection, and rain gear allowed for easier movement of personnel during the rainy season.
Sociocultural		
Community trust	<ul style="list-style-type: none"> A lack of community trust in response staff and enormous stigma resulted in difficulties conducting case investigations, lack of truthful information, and sometimes violence. Case investigators rarely returned to the same communities each day and generally did not work in their own communities. 	<ul style="list-style-type: none"> GOAL assigned a dedicated team for each of Port Loko's and Kambia's chiefdoms to ensure familiarity and consistency. To the extent possible, case investigators were assigned to work in their chiefdom of origin.

Continued

TABLE. Continued

Type	Challenges	Solutions
Traditional healers	<ul style="list-style-type: none"> A lack of trust in facility-based health care and fear of nosocomial infections drove many to seek health care from traditional healers. Despite the fact that traditional healers were legally banned from practicing and required to report cases of illness, many people disregarded the bylaws despite fears of punitive measures. Cases of sickness and death went unreported, and traditional healers fueled new EVD clusters when they contracted the disease from their patients. 	<ul style="list-style-type: none"> DERC stakeholders, including GOAL, attempted to formally involve traditional healers as public health agents in the EVD response. However, due to the illegality of their work under the national bylaws, there was strong political hesitation to permit activity that appeared to legitimize the trade. As such, further efforts to include traditional healers were not pursued.
Political and Organizational		
Management structures	<ul style="list-style-type: none"> In Port Loko, GOAL became the lead operational agency and coordinator of the surveillance pillar. However, in Kambia, WHO continued leading surveillance, directing operational activities, and overseeing logistical needs despite not controlling operational resources. Crucial operational adjustments in Port Loko were therefore not easily implemented in Kambia. No single organization was identified as the lead agency for case investigators, and therefore no single point of advocacy existed to resolve their needs, complicating the resolution of problems. 	<ul style="list-style-type: none"> Leadership challenges in Kambia were addressed to some degree through relationship building and regular coordination with technical leads and DERC management. GOAL, WHO, and CDC developed an active surveillance strategy in Port Loko to address the high proportion of EVD cases identified post-mortem or with no known source case.
Human resources	<ul style="list-style-type: none"> The lack of sufficient case investigators and the work fatigue that resulted were among the biggest challenges facing case investigators. Funding constraints and a perceived lack of need at the NERC resulted in a national directive that prevented hiring new surveillance staff. 	<ul style="list-style-type: none"> GOAL advocated with DFID and NERC to bring in additional human resources. The DHMT, GOAL, WHO, and CDC trained the new case investigators. Mentorship in the field reinforced the training. A rotation system was implemented to provide time off to address surveillance efficiency, quality, and case investigator work fatigue.
Compensation	<ul style="list-style-type: none"> Case investigators averaged more than a month of missed pay per person and could sometimes not afford to buy food or pay rent. At the national level, case investigators were sometimes incorrectly relegated to lower pay categories and clerical errors resulted in their removal from payroll. Threats of strikes were frequent and morale was extremely low. 	<ul style="list-style-type: none"> Resolving case investigator salary issues was a protracted and complicated process. Initially, NERC paid all case investigators, with funding from the World Bank. Ultimately, GOAL secured DFID funding and NERC permission to pay all case investigators directly in both districts beginning in July 2015.
Inter-pillar coordination	<ul style="list-style-type: none"> Many of the 11 vertical pillars of operation at DERCs performed complementary work. Horizontal integration and cooperation between pillars was profoundly challenging, which often resulted in a lack of effective cooperation between them. 	<ul style="list-style-type: none"> Meetings were established to create horizontal linkages between the pillars in Port Loko in January 2015 and in Kambia in April 2015. GOAL attempted to reinforce horizontal communication by developing an EVD response framework, which was not fully realized because it was developed late in the response.

Abbreviations: CDC, U.S. Centers for Disease Control and Prevention; DERC, District Ebola Response Centre; DFID, UK Department for International Development; DHMT, district health management team; EVD, Ebola virus disease; NERC, National Ebola Response Centre; WHO, World Health Organization.

No formal filing mechanism existed for completed case investigation forms and locating information was challenging and time-consuming.

DERC because of these same reasons. The delay in both accessing cases and reporting on them due to telecommunications challenges resulted in protracted and haphazard case investigations and follow-up.

Data management of investigation materials from the field and within the DERC also posed a challenge to effectively tracking and building case histories, with discrepancies occurring both in the field and at the DERC. No formal filing mechanism existed for completed case investigation forms, which were in hard copy only and were often scattered across multiple DERC offices. Locating specific information was therefore challenging and time-consuming; this was further complicated by Sierra Leonean naming conventions, variations in spelling, and characterization of residence, which made matching documents exceptionally difficult. The need for a systemized retrieval mechanism was crucial because an EVD case was generally not laboratory-confirmed on the day it was investigated, when the case investigation form was completed. As such, if a positive case result returned from the laboratory, locating the initial case investigation form from a previous day often proved difficult. A case investigation form duplicated from memory usually resulted in a lower-quality case report.

Lastly, case investigators were unable to eat during their long work day due to dangers of purchasing food from high-risk communities, stigma from communities who feared EVD responders, a lack of personal funds to do so, and insufficient time. Case investigators complained of fatigue due to insufficient nutrition, which resulted in limiting work efficiency and rigor.

Sociocultural Challenges

Sociocultural challenges further limited EVD surveillance efficacy. Enormous stigma against EVD response workers and a powerful lack of trust in EVD response staff resulted in difficulties generating high-quality case investigations and sometimes resulted in violence against case investigators.¹⁴ Due to insufficient human resources and logistical capacity, case investigators rarely returned to the same communities each day, but instead responded to alerts ad hoc. Nor was it standard procedure for case investigators to operate within their own community. Thus, communities often regarded them with suspicion as outsiders. For instance, in April 2015, community members chased case investigators out of a remote village in Kambia and threatened them with

Case investigators rarely returned to the same communities or operated within their own communities, which resulted in lack of trust and sometimes violence.

machetes when they were dispatched to investigate an alert.

When case investigators in Port Loko and Kambia were asked to rank the challenges they considered most significant to their work, 77% included “community trust in surveillance” as 1 of their top 3 challenges (Figure 1). This lack of trust led to lower-quality investigations, as communities were reticent to provide truthful information to case investigators.

Additionally, a lack of trust in facility-based health care and fear of nosocomial infections drove many to seek health care from traditional healers. While traditional healers were legally banned from practicing under the emergency bylaws and required to report any cases of illness,³ many disregarded the bylaws and continued treating patients without integration with EVD surveillance or response activities. As such, many instances of sickness and death remained unreported, and the high-risk population of traditional healers fueled new EVD clusters when they contracted EVD from their patients. Traditional healers and those with connections to them often were not transparent with case investigators for fear of punitive measures for violating the emergency bylaws.

Political and Organizational Challenges

Some of the greatest challenges that faced EVD surveillance in Port Loko and Kambia were political and organizational challenges. WHO district offices were intended to provide technical support and offer an advisory role to DERC operations. In the early days of the response and in the absence of widespread external support, WHO also provided operational and logistical support for many DERC activities. This engendered a reliance within the DERC on WHO as both an advisory and operational body, despite the WHO Assistant Director-General Dr. Bruce Aylward attesting that the “organization . . . was not designed to be an operational field-based organization . . . play[ing] such a role.”¹⁵

When GOAL began supporting Port Loko case investigation in January 2015, it was quickly identified as the lead operational agency and coordinated the surveillance pillar (1 of 11 organizational pillars of operation within DERCs), collaborating closely with WHO and CDC as technical leads. In Kambia, due to a different response trajectory and political climate, WHO maintained coordination leadership of the surveillance pillar, directed operational activities, and

oversaw logistical needs despite not controlling operational resources. The difference in these 2 management structures meant that operational adjustments in Port Loko identified as crucial and effective (see Interventions) were not easily implemented in Kambia, a political challenge that frequently limited response efficacy and efficiency.

This management structure of the surveillance pillar in Kambia contributed to challenges with coordination. No single organization was identified as the lead agency for case investigators, and therefore no single point of advocacy existed to resolve their needs, limiting the resolution of various identified and serious problems. In contrast, these concerns were addressed more efficiently in Port Loko, where management and organizational responsibilities were more clearly delineated.

Human resources, particularly the lack of sufficient case investigators and the work fatigue that resulted, were among the biggest challenges facing EVD case investigation in both Port Loko and Kambia. Throughout much of the outbreak, case investigators worked 7 days a week, without scheduled time off or periods of rest. From an operational standpoint, this was necessary as human resources were badly lacking. However,

21% of case investigators surveyed considered work fatigue as 1 of the 3 biggest challenges to their work (Figure 1). Funding constraints and a perceived lack of need at the NERC resulted in a national directive that prevented the hiring of new surveillance staff after March 2015. This became problematic, particularly in Kambia when GOAL and the DERC leadership identified an immediate need to increase the number of investigators from 3 to 9 in April 2015 to effectively address the persistent EVD caseload in Kambia and the high risk of EVD importation from neighboring Guinea.¹⁶

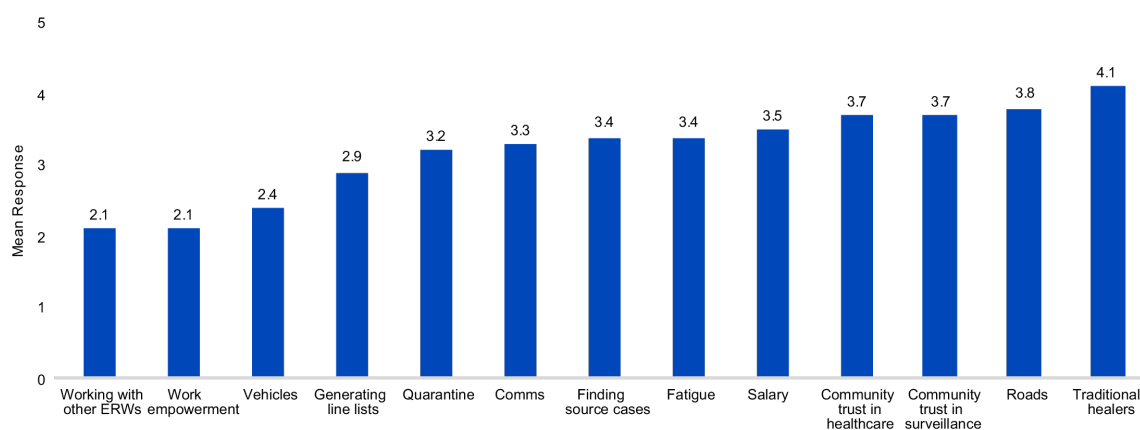
Timely compensation was considered to be another major challenge by case investigators: 53% of case investigators included compensation as 1 of the 3 biggest challenges to their work (Figure 1). When asked “What are some things NERC could have done better?” 88% of case investigators listed late or non-compensation.

A letter dated February 16, 2015, from the Port Loko DMO to NERC listed a backlog of 92.4 million SLL (approximately US\$18,500) among the district’s 53 case investigators, averaging more than 1 month of missed pay per person, dating back to October 2014 (Alfred Kamara, written communication, February 16, 2015). These

The difference in operational management structures between the 2 districts meant that crucial operational adjustments in Port Loko were not easily implemented in Kambia.

The lack of sufficient case investigators and the work fatigue that resulted were among the biggest challenges facing EVD case investigation in both Port Loko and Kambia.

FIGURE 1. Challenges Identified by Case Investigators as Most Significant^a to EVD Case Investigation, Port Loko and Kambia Districts, Sierra Leone (N=42)



Abbreviations: ERW, Ebola response workers; EVD, Ebola virus disease.

^a On a scale of 1 to 5 (1=not significant at all, 5=most significant).

GOAL collaborated with other agencies to provide high-quality off-road vehicles, fuel, drivers, and logistical support, as well as boats for riverine areas.

Late payments, non-compensation, and clerical errors related to pay resulted in threats of strike and extremely low morale among case investigators.

Case investigators and coordinators in the DHMT and DERC received phones, phone credit, satellite phones, and closed user groups to ensure timely communication.

payments were not distributed until May 2015. In a low-income country where personal savings are nominal, case investigators sometimes complained that they could not afford to buy food or pay rent due to lack of payment. Additional issues at the national level included erroneous relegation of case investigators to lower pay categories and clerical errors that removed personnel from payroll. Threats of strikes were frequent, and morale was extremely low.

Lastly, the organizational design of the DERC itself challenged collaborative work. DERCs were organized by 11 vertical pillars of operation, each with its own function and management. Many pillars performed complementary work; however, horizontal integration and cooperation was profoundly challenging, as doing so could appear to encroach on identified management responsibility. This often resulted in a lack of effective cooperation between pillars.

INTERVENTIONS TO ADDRESS OPERATIONAL EVD CASE INVESTIGATION CHALLENGES

Without addressing operational challenges, technical surveillance solutions are difficult to implement and hold limited relevance, due to the poor quality and quantity of data being collected to direct more technical and strategic solutions. In the early months of the Port Loko and Kambia DERC-led responses, epidemiological analysis was prioritized over operational needs. This lower prioritization came at a high opportunity cost, leading to a decrease in operational capacity and efficacy of interventions intended to resolve challenges detrimental to case investigation. To mediate this, GOAL addressed these operational challenges as outlined below, corresponding to the aforementioned categories of challenges.

Environmental and Infrastructural Interventions

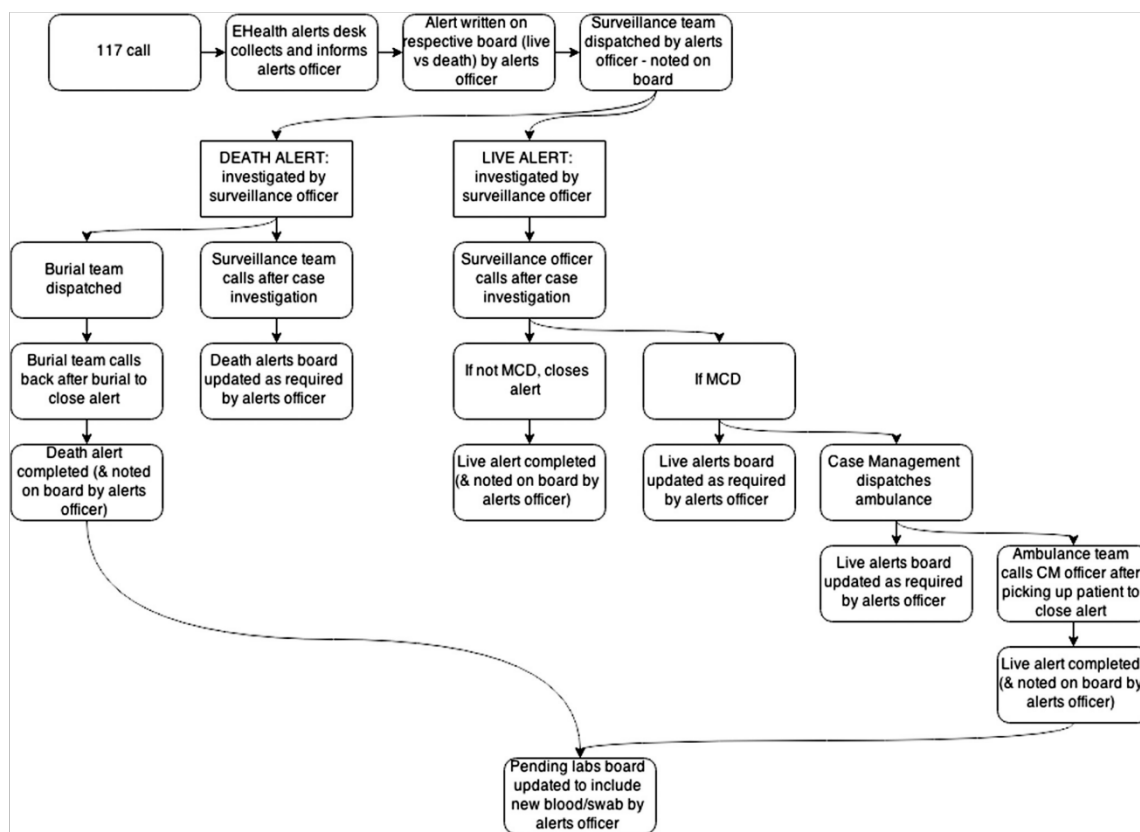
First, an intervention was necessary to provide case investigators with the basic resources they required to continue working. GOAL immediately provided daily take-away breakfast and lunch to all case investigators to prevent hunger, fatigue, and EVD exposure from purchasing food in high-risk communities and to avoid stigma faced in communities during investigations. Case investigators received hand sanitizer and appropriate personal protective equipment to help prevent EVD infection, and rain gear allowed for easier

movement of personnel in flooded areas. Case investigator morale improved rapidly as a result.

To address transportation issues, GOAL collaborated with DFID, NERC, WHO, and other NGOs to provide high-quality off-road vehicles to case investigation teams in both Port Loko and Kambia, along with the requisite fuel, drivers, and other logistical support. GOAL rented 12 vehicles in Port Loko and Kambia, and advocated with WHO and NERC to provide additional vehicles for case investigation. GOAL asked DFID for authorization and funding for Catholic Relief Services as the district fleet management agency in Port Loko and GOAL in Kambia to source and provide fuel for the additional vehicles. This allowed the assignment of at least 1 case investigation team to each of the 2 district's chiefdoms. Boats were needed to facilitate access to riverine areas, which were successfully acquired from the Republic of Sierra Leone Armed Forces. These measures improved the timeliness, quality, and efficiency of case investigation activities in areas that were previously difficult or impossible to access.

GOAL distributed cellular phones, phone credit, and satellite phones, where necessary, to case investigators and their coordinators in the DHMT and DERC, to ensure the timely communication of information between the DERC and the field. Closed user groups were provided to all case investigation teams and selected individuals in the DERC, enabling free unlimited calling between case investigators, their supervisors, and epidemiology teams in WHO and CDC. These measures also facilitated more timely requests, and ultimately, responsiveness from case investigators to the DERC for resources such as the dispatch of ambulance or burial teams.

WHO established an after-action review in Port Loko in collaboration with GOAL, CDC, and the DHMT in January 2015, to review case investigation information and data at the end of each day. The after-action review provided an opportunity for ongoing training as epidemiologists reviewed cases with case investigators and provided guidance on how to improve subsequent investigations. The after-action review also ensured all surveillance information and case investigation forms from the field were systematically returned to the DERC each day, as well as provided a daily forum to raise operational concerns. This effective measure was immediately implemented by GOAL and other surveillance

FIGURE 2. Flow Chart of Ebola Disease Alert Response, Sierra Leone

Abbreviations: CM, case management; EVD, Ebola virus disease; MCD, meets case definition.

Notes: A "117 call" is the national EVD alert hotline, the mechanism by which most occurrences of sickness and death were reported to the District Ebola Response Centres (DERCs). "EHealth" is an NGO that supported the DERC. This flow chart is part of the standard operating procedures developed by Samuel Boland on behalf of GOAL.

pillar partners in Kambia when their support began in April 2015.

Challenges surrounding data quality and coordination were also addressed by developing various standard operating procedures in collaboration with all surveillance stakeholders, including the basic structure of alert response by case investigators (Figure 2). Standard operating procedures were also put in place to ensure case investigation forms were collected, stored, and organized in a retrievable manner. All information was consolidated in an organized filing

cabinet. GOAL hired data managers in both the Port Loko and Kambia DERCs to file and immediately digitize this information in real time. This allowed for timely retrieval and communication of surveillance data to relevant stakeholders and EVD response workers, including case investigators.

Sociocultural Interventions

Assigning 1 dedicated team for each of Port Loko's and Kambia's chiefdoms enabled familiarity and



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Community members in Kambia, Sierra Leone, welcome case investigators and their release from quarantine.

Case investigators worked in dedicated chiefdoms to ensure familiarity and consistency, which strengthened trust among communities.

Case investigators received training and mentorship to improve data collection quality.

An EVD response framework was established to create linkages between pillars, but it was not fully realized as it was developed late in the response.

consistency between communities and the case investigators working within them. To the extent possible, case investigators were assigned to work in their chiefdom of origin. As a result, community trust in case investigators improved in both districts, and case investigators could thus be in regular conversation with local leaders such as paramount and village chiefs, teachers, health facility staff, and traditional healers. Additionally, data quality increased as case investigators became experts in specific EVD cases and transmission chains. This occurred because of the geographic consistency of case investigator deployment and the increased understanding of local cultural contexts surrounding a particular transmission chain.

Several DERC stakeholders, including GOAL in Port Loko in June 2015, attempted to formally involve traditional healers as public health agents in the EVD response. However, despite the potential efficacy of their inclusion, due to the illegality of traditional healers' work under the national bylaws, there was strong political hesitation to permit activity that appeared to legitimize the trade.¹⁷ As such, further efforts to include traditional healers in the EVD response were not pursued.

Political and Organizational Interventions

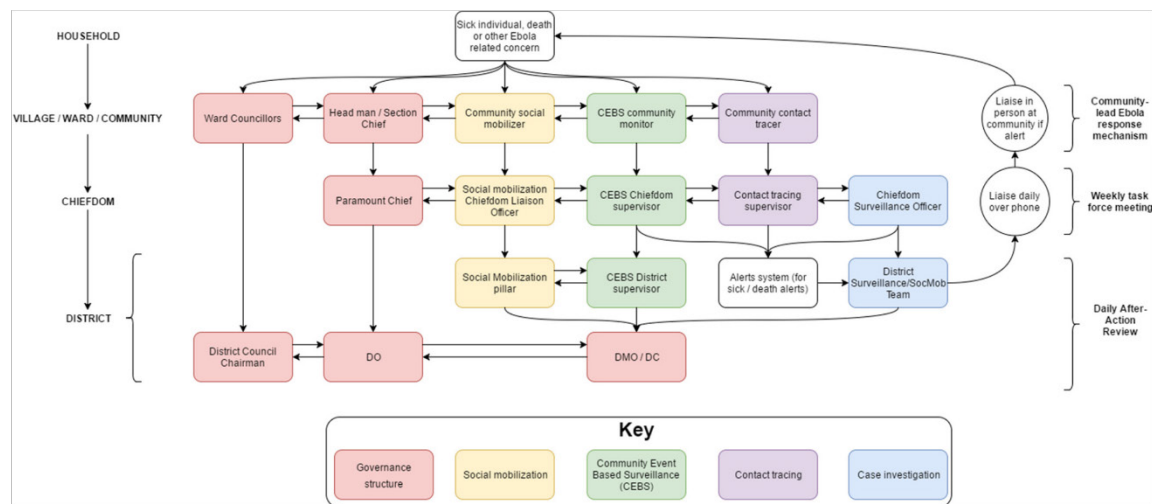
Additional human resources were brought in to address the issue of work fatigue in both Port Loko and Kambia. GOAL advocated for these additional case investigators with DFID and NERC, who agreed to increase case investigators in both districts. In July 2015, case investigators increased from 25 to 65 in Port Loko, and from 3 to 9 in April 2015 in Kambia— with a further

increase from 9 to 21 in July 2015.^{11,12} The number of case investigators is relative to the size of the districts—Port Loko has an estimated population of 550,000 and an area of 2,208 square miles split among eleven chiefdoms, whereas Kambia has a population of 350,000 and an area of 1,200 square miles split among 7 chiefdoms. The DHMT, GOAL, WHO, and CDC trained these new case investigators, and mentorship in the field reinforced the formal training, resulting in improved data collection quality. As new case investigators became operational, a rotation system was implemented to provide time off. This helped address surveillance efficiency, quality, and case investigator work fatigue.

Resolving compensation issues for case investigators was a protracted and complicated process. Initially, NERC paid all case investigators, with funding from the World Bank. GOAL advocated with NERC on behalf of case investigators, the visibility of which provided some comfort to case investigators. Ultimately, to alleviate ongoing challenges surrounding payments, GOAL secured DFID funding and NERC permission to pay all case investigators directly in both districts beginning in July 2015. Direct and timely payment considerably improved case investigator morale.

Inter-pillar coordination meetings were established to create horizontal linkages between the pillars in Port Loko in January 2015, and in Kambia in April 2015. GOAL attempted to reinforce horizontal communication by developing an EVD response framework (Figure 3). Unfortunately, this structure was not fully realized in either district as it was developed late in the response. However, responses to future emergencies should consider similar coordination mechanisms that encourage both horizontal and vertical communication.

Leadership challenges in Kambia were mitigated to some degree through relationship building and regular coordination with technical leads and DERC management; however, case investigation management remained fragmented. To address the high proportion of EVD cases identified post-mortem or with no known source case, GOAL, WHO, and CDC developed an active surveillance strategy in Port Loko, which began in April 2015. This strategy targeted operational resources based on epidemiologic analysis of areas that were underreporting—an ideal convergence of operational and technical expertise. DERC leadership in Kambia decided not to employ this strategy as they considered it too difficult to operationalize. Although similar interventions

FIGURE 3. GOAL Ebola Virus Disease Response Structure, Sierra Leone

Abbreviations: CEBS, community event-based surveillance; DC, District Coordinator; DMO, District Medical Officer; DO, District Officer.

Note: Developed by Samuel Boland on behalf of GOAL.

occurred in the 2 districts, analysis of alert data from June 2015 to September 2015 (during Operation Northern Push, an effort by the NERC and DFID to eliminate EVD transmission from Port Loko and Kambia), showed statistically significant lower percentage increases in alerts in Kambia.¹⁸

RECOMMENDATIONS

EVD case investigation in Port Loko and Kambia districts of Sierra Leone faced numerous environmental, infrastructural, sociocultural, political, and organizational obstacles and difficulties. GOAL's intervention, beginning in January 2015 in Port Loko and April 2015 in Kambia, addressed these issues to varying degrees of success in each district.

While the focus on technical support is indispensable in any outbreak, operational needs must be addressed and structures established to ensure the quality and systematic collection of surveillance data, as well as its storage, organization, retrievability, and communication. Without comprehensive and reliable data, effective technical

support is limited. In future outbreaks, all of the following operational components must also be addressed within a politically and organizationally enabling environment:

- Ensure frontline staff receive timely compensation for and sufficient rest from their work, to boost staff morale, efficiency, and safety.
- Provide sufficient and context-appropriate transportation and communication resources, to ensure effective communication between field staff, their coordinators, and community members.
- Establish systematic data collection, storage, and retrieval systems, to ensure that any record can be effectively and efficiently accessed.
- Create formal linkages between frontline staff and the communities they work in to develop trust between them, thus increasing staff safety and investigation quality.
- Establish daily meetings between frontline staff and epidemiologists to ensure information and data quality and to provide opportunities for daily mentorship and training.

Technical support is indispensable in any outbreak but is limited unless operational needs are addressed and structures established to ensure the quality and systematic collection of surveillance data.

- Identify clear and appropriate leadership for operational chain of command.
- Give credence at all political and funding levels to operational foundations.

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^a The chapter's type-set references are also reproduced within this thesis' references section.^{74,641,753–768}

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Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone's Ebola Response		
Primary Supervisor	Dina Balabanova		

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Civilian perception of the role of the military in Nigeria's 2014 Ebola outbreak and health-related responses in the North East region

Chris M A Kwaja ¹, D J Olivieri ^{2,3}, S Boland ⁴, P C Henwood,⁵ B Card,³ D P Polatty,⁶ A C Levine ³

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¹Centre for Peace and Security Studies, Modibbo Adama University of Technology, Yola, Adamawa, Nigeria

²Warren Alpert Medical School, Brown University, Providence, Rhode Island, USA

³Center for Human Rights and Humanitarian Studies, Watson Institute for International and Public Affairs, Brown University, Providence, Rhode Island, USA

⁴Department of Global Health & Development, London School of Hygiene and Tropical Medicine, London, UK

⁵Office of Global Affairs, Thomas Jefferson University, Philadelphia, Pennsylvania, USA

⁶Humanitarian Response Program, US Naval War College, Newport, Rhode Island, USA

Correspondence to

Dr Chris M A Kwaja, Centre for Peace and Security Studies, Modibbo Adama University of Technology, Yola, Adamawa, Nigeria; kwajaamc@yahoo.com

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ABSTRACT

Introduction Civilian–military relations play an important yet under-researched role in low-income and middle-income country epidemic response. One crucial component of civilian–military relations is defining the role of the military. This paper evaluates the role of Nigerian military during the 2014–2016 West African Ebola epidemic.

Methods Focus groups and key informant interviews were conducted throughout three states in North East region of Nigeria: Borno, Yobe and Adamawa. Participants were identified through mapping of stakeholder involvement in Nigerian epidemic response. English-translated transcripts of each key informant interview and focus group discussion were then coded and key themes were elucidated and analysed.

Results Major themes elucidated include developing inclusive coordination plans between civilian and military entities, facilitating human rights reporting mechanisms and distributing military resources more equitably across geographical catchment areas. The Nigerian Military served numerous functions: 37% (22/59) of respondents indicated ‘security/peace’ as the military’s primary function, while 42% (25/59) cited health services. Variations across geographic settings were also noted: 35% (7/20) of participants in Borno stated the military primarily provided transportation, while 73% (11/15) in Adamawa and 29% (7/24) in Yobe listed health services.

Conclusions Robust civilian–military relations require an appropriately defined role of the military and clear civilian–military communication. Important considerations to contextualise civilian–military relations include military cultural–linguistic understanding, human rights promotion, and community-based needs assessments; such foci can facilitate the military’s understanding of community norms and civilian cooperation with military aims. In turn, more robust civilian–military relations can promote overall epidemic response and reduce the global burden of disease.

INTRODUCTION

Nigerian civilian–military relations

Over the past decade, significant research has been conducted on the role of the military in humanitarian crises.^{1–2} However, there remains a lack of research on civilian perception of domestic military actors in low-income and middle-income countries (LMICs). This important yet under-researched area often precludes the success of military interventions; without mutual understanding, civilian and military

Key messages

- This research demonstrates the opportunity for strategic partnership between civilian and military institutions in epidemic response.
- Robust civilian–military interactions require an appropriately defined role for the military in epidemic response.
- Establishing channels of communication between civilian and military entities can promote cooperation in epidemic response.

actors derail shared goals of peace and security.³ More generally, civilian–military interactions can be analysed from sociological, political and anthropological perspectives.^{3–7} This research analyses the role of the LMIC militaries in efficacious civilian–military relations through an anthropological lens. Further, we use Nigeria as a case study given the Nigerian military’s role in responding to various health and humanitarian crises since 2009.^{8–10}

To our knowledge and based on a web search, civilian understanding of the Nigerian military’s role is not well described in literature. Previous research described the Nigerian military’s decades long autocratic rule from the 1960s–1990s as suffering from praetorianism and lacking effective and accountable leadership.⁷ Noted barriers to effective Nigerian civilian–military relations include diarchal military–civilian leadership, Nigeria’s outstanding ethnic diversity, and unclear commitment to democratic principles.⁷ More recent scholarship on Nigerian civilian–military interactions analyses military intervention in recent domestic conflicts, such as the 2009 Boko Haram insurgency and the 2014–2016 West African Ebola epidemic.^{8–10}

Boko Haram insurgency of 2009

The Nigerian military intervened in the Boko Haram insurgency 2009 through a variety of domestic actors including National Emergency Management Agency, State Emergency Management Agency and the Nigerian military’s Disaster Response Unit. Collectively, these entities failed to effectively respond to the several rural geographic areas affected by the Boko Haram insurgency in 2009 (Figure 1).^{8–10} As a result, the 2009 Boko Haram insurgency has continued in various forms through the present day. Further, struggles within Nigeria’s emergency response necessitated the help

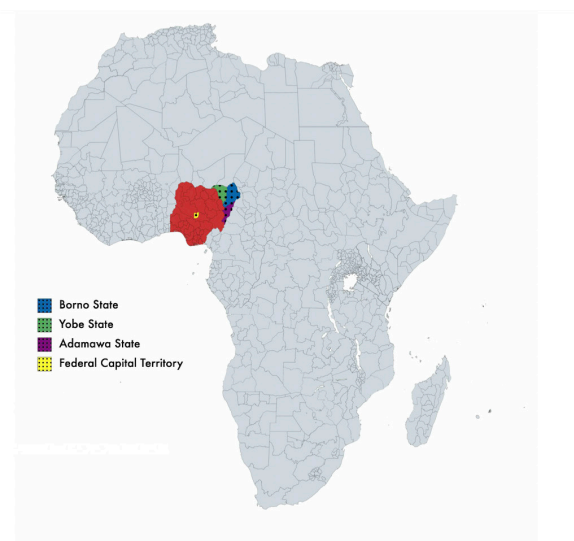


Figure 1 The geographic location of the three selected Nigerian states.

of the foreign militaries from Niger and Chad in 2015 to help quell the insurgency.¹⁰ Potential reasons for the Nigerian military's failure to effectively respond to the insurgency includes a deficit in trust between the military and the civilian population, poor remuneration of security personnel, inadequate or obsolete equipment, poor military leadership, erosion of public trust in the military and deficits in national intelligence.^{11–13} Potential rationale for foreign military involvement include regional stability and national security.^{13–15} In particular, the Nigerian military struggled to procure enough humanitarian and security resources to effectively respond to Boko Haram, which foreshadowed its struggles in the 2014–2016 West African Ebola epidemic.^{10 13–15} The failures of Nigeria's national emergency response to Boko Haram from 2009 to 2015 prefaced changes in the Nigerian military's role during the 2014–2016 West African Ebola epidemic.

Ebola outbreak of 2014 and military response in Nigeria

The 2014–2016 West African Ebola epidemic spanned 10 countries and caused an estimated 12 000 deaths.¹⁶ In West Africa, Ebola first spread from Guinea to Liberia and Sierra Leone. From there, small outbreaks emerged in Nigeria and Mali. Stakeholders involved in the epidemic response included local public health departments, non-governmental organisations (NGOs), transnational organisations and domestic militaries, among many others.¹⁷ In Nigeria, the military played a major role in the 2014–2016 West African Ebola epidemic. In this case, the military's role expanded to both healthcare provision and resource distribution—roles not successfully managed during the 2009 Boko Haram insurgency. More specifically, in response to Ebola, the Nigerian military constructed healthcare facilities, provided transportation, and delivered direct aid to civilians.^{18 19} The Nigerian military's emerging role in the 2014–2016 West African Ebola epidemic aimed to centralise national emergency actor coordination.²⁰ The military's deployment to various rural and geographically isolated areas in the North East region of Nigeria allowed them to transport food, water, and healthcare resources to areas most in need. Finally, the military also enforced security

containment measures and participated in public health outreach during the 2014–2016 West African Ebola epidemic.

Aim/purpose

The Boko Haram insurgency of 2009 and the Ebola outbreak of 2014 help contextualise Nigerian civilian–military relations. This paper aims to evaluate the role of the Nigerian military during epidemic response, using original research and insights from military and civilian populations during the 2014–2016 West African Ebola epidemic as a case study.

METHODOLOGY

Research questions

Research questions are as follows:

- ▶ What was the role of the Nigerian military in relation to epidemic response?
- ▶ How did human rights violations and lack of cultural–linguistic competency engender or constrain civilian–military cooperation in the Nigerian response to the 2014–2016 West African Ebola epidemic?

Study population and selection

The Nigerian states of Adamawa, Borno and Yobe were selected for the research study since they were particularly affected by both the 2009 Boko Haram insurgency and the 2014–2016 West African Ebola epidemic. The military has maintained a significant presence in each of these three states since it began fighting Boko Haram. **Figure 1** depicts the geographic location of the three selected Nigerian states.

The local government areas (LGAs) selected include Madagali, Michika and Yola North (in Adamawa); Maiduguri, Jere and Damboa (in Borno) as well as Damaturu, Gujba and Geidam (in Yobe). These LGAs experienced major humanitarian challenges, driven by weak health systems and substandard living conditions such as poor sanitation and lack of clean water. LGA locations were selected by the principal investigator (CMAK) given his regional experience and expertise.

Study participants included community actors, military personnel, representatives from governmental and NGOs and various other stakeholders (**Table 1**). Participant groups were chosen to provide a holistic understanding of Nigerian civilian–military relations; respondents included civilian community members, members of the Nigerian military, humanitarian workers, and civilian government officials. Special attention was given to recruit and capture the voices of socially vulnerable groups such as women and individuals living with disabilities to obtain a more complete view of civilian–military relations.

Protocol

Key informant interviews (KIIs) and focus group discussions (FGDs) were chosen for data collection in each LGA. Before KII and FGD initiation, the principal investigator obtained consent from each participant: individuals were explained the study's goals, respondent confidentiality agreement, and provided an opportunity to ask questions. Compensation for study participation was not provided in any form, and participants were allowed to end the interview at any time. Pre-designed interview/discussion guides (**Box 1**) were employed to conduct the KIIs and FGDs undertaken at locations chosen by the respondents.

Next, English-translated transcripts of each KII and FGD were analysed via 'grounded theory' data analysis techniques. For each question, the research assistant made a list of key

Table 1 Respondent breakdowns

Sector	Examples	Number FGDs	Number KIIs
Civilian community	<ul style="list-style-type: none"> ▶ Community-based organisations ▶ Internally displaced persons camp (Adamawa, Borno, Yobe) 	24	7
Military	<ul style="list-style-type: none"> ▶ NEMA ▶ SEMA ▶ Directorate of Civil-Military Relations, Defence Headquarters 	16	8
Humanitarian workers	<ul style="list-style-type: none"> ▶ Nigerian Red Cross ▶ WHO ▶ Médecins Sans Frontières ▶ United Nations Children's Fund 	9	8
Civilian government officials (Federal, State and Local)	<ul style="list-style-type: none"> ▶ Nigerian Centre for Disease Control ▶ Federal Nigerian Ministry of Health ▶ Nigerian State Ministry of Health (Adamawa, Borno and Yobe) ▶ Institute of Human Virology, Nigeria 	16	8

FGD, focus group discussion; KII, key informant interview; NEMA, National Emergency Management Authority; SEMA, State Emergency Management Agency.

themes extrapolated from responses in the corresponding FGD and KII. 'Coding' refers to the assignment of themes to each interview question. Two to five themes were elucidated from each question. Given the semi-structured nature of the data collection, when reviewing the KII and FGD transcripts, themes were associated with the most recently asked question. Examples of themes include Security/Peace, Transportation, Health Services, and Law and Order. A full list of themes can be found for each question grouping in online supplemental table 1. The codebook was then analysed for comparisons between and within each FGD and KII. Any discrepancies between the themes in the codebook and transcript resulted in a re-read of the transcript until an agreement was met. Last, the Standards for Reporting Qualitative Research (SRQR) guidelines were recorded and followed (online supplemental file 1).

Key informant interviews and focus group discussions

A total of 65 respondents ranging from ages 30–50 were targeted for the KIIs across the three focal states of Adamawa, Borno and Yobe. Interviewees and organisations were identified through a mapping of their involvement and roles in epidemic response with a specific focus on the north-eastern region of Nigeria. The FGDs targeted 31 respondents ranging from ages 35–65 across Adamawa, Borno and Yobe; the FGDs were comprised of 7–8 participants each and aimed to generate a shared understanding of the issues and elicit dissenting views in a respectful manner. The participants for the FGDs were chosen in a way that provided a diverse representation of stakeholders. Stakeholders were identified through a mapping of their involvement and roles in epidemic response (Table 1).

Ethical considerations

The study eliminated recruitment coercion through delaying consent and study participation by several days, engaging each participant on more than occasions to promote understanding, and allowing participants to end their participation at any moment. No personal identifying information (i.e., names, date of birth, ID number) was obtained at any point during the course of the study. Last, no refusals were obtained during the duration of the study.

Data collection and quality assurance

The principal investigator (CMAK) was responsible for conducting the interviews and data collection. The KIIs and FGDs lasted 40 min on average and occurred from June–August 2019. Next, research assistants translated the KIIs and

FGDs into English. Transcripts were reviewed for accuracy by the PI and any discrepancies resulted in re-translation.

INTEGRATED RESULTS AND DISCUSSION SECTION

Role of the military

Marked diversity was noted regarding the primary purpose and function of the military during the epidemic response (table 2). To start, while 37% (22/59) of respondents overall indicated 'security/peace' as the military's primary function, an even greater number, 42% (25/59), cited 'health services'. The remaining 17% (10/59) and 3% (2/59) listed 'transportation' or 'no idea' as the military's main role in epidemic response, respectively. The respondents who provided 'no idea' as a response all came from one FGD in Borno, with one WHO officer stating that they 'don't think [the military] play any specific roles in term of pandemic response' except that 'sometimes [the military] convey injured persons to the hospital especially during [conflict]' (KII conducted with WHO Officer in Borno).

Variations in interview responses between Yobe, Adamawa and Borno reveal key differences in civilian–military interactions. In regions where respondents noted a greater diversity in the military's role, respondents viewed the military more positively: 94% (14/15) had an overall positive association with the military's contributions in Adamawa and 50% (12/24) in Yobe, whereas only 25% (5/20) did in Borno. Sixty-five per cent (13/20) of people in Borno viewed the military negatively, with 35% (7/20) describing the military as having a markedly limited role relative to responses from other areas. Respondents in Borno noted that 'the community's perception of the military in pandemic response is poor because they are... seen [to cause] unrest [in] the community' (KII, Borno) while others found the military as 'not friendly' and their role in such sector as 'limited if any' (KII, Borno). Another respondent described the military as 'looters [that] are not healthy for the community at all' (FGD in Borno internally displaced persons (IDP) camp). However, it is not clear from our research whether the correlation between a more positive perception of the military is due to the military's more significant and diverse roles in these regions, or whether the insecurity of regions like Borno contributes to poor and abusive behaviour of the military, as has been found in context of other African nations in conflict.²¹

The analysis revealed that 67% (10/15) of participants in Adamawa and 50% (12/24) of participants in Yobe described the military's role as 'security/peace' when compared with Borno (15%; (3/20)). This might be a product of the military's primary role in pandemic response: 35% (7/20) of Borno participants

Box 1 Interview guide

Key Informant Interviews (KIIs):

- i. In your view(s), what do you think constitutes the key roles of the military in relation to their involvement in pandemic response?
- ii. How do local community members perceive the military's involvement in pandemic response?
- iii. Do existing structures and mechanisms engender community acceptance and support of the military's involvement in pandemic response?
- iv. Are there specific constraints that make it difficult for communities to support the military in relation to its involvement in pandemic response?
- v. Are there guiding principles that define military involvement in pandemic response in the North East region? If so, what are they?
- vi. What are the existing challenges that affect cooperation and coordination between the military and communities in relation to pandemic response in Nigeria's North East region?
- vii. In what ways can the constraints identified above be addressed?
- viii. In what ways and to what extent do local contexts influence or impact on the involvement of the military in pandemic response in Nigeria's North East region?
- ix. How does the Nigerian military understand local contexts during pandemic response in the North East region?
- x. Are there better or more effective ways to engender civil–military relations during pandemic response in the North East region of Nigeria?

Focus Group Discussions (FGDs):

- i. What is/are the specific role(s) of the military in relation to pandemic response in Nigeria's North East region?
- ii. How do communities perceive the involvement of the military in relation to pandemic response in Nigeria's North East region?
- iii. What are the existing structures and mechanisms that engender community acceptance and support or otherwise, in relation to the involvement of the military in pandemic response, in Nigeria's North East region?
- iv. What are the guiding principles that define Nigerian military involvement in pandemic response in the North East region?
- v. What are the existing challenges that affect cooperation and coordination between the military and communities in relation to pandemic response in Nigeria's North East region?
- vi. In what way(s) and to what extent do local contexts influence or impact on the military's involvement in pandemic response in Nigeria's North East region?
- vii. What are the most effective ways to engender civil–military relations in the context of the military's pandemic response in Nigeria's North East region?

primarily described 'transportation' as the main role of the military, which was significantly higher than 'transportation' in either the 7% (1/15) in Adamawa or the 8% (2/24) in Yobe. Similar to the aforementioned WHO respondent, a Community Leader in Borno described that 'the only role of the military in pandemic response is the conveyance of injured to the hospital during an intense period of the insurgency. They do not play another role as far [as the] law is concerned' (KII, Borno). Potential reasons for the military focusing on providing transportation

in Borno when compared with other regions include local geographic instability due to incomplete or non-existent roads. Finally, civilian–military relations in Borno may be affected due to previous failures to effectively respond to public health and humanitarian challenges, from cholera to the Boko Haram insurgency attacks.^{9 10 13 22 23}

Contrastingly, in Yobe, 50% (12/24) of respondents viewed the military's response positively, which 29% (7/24) of participants reasoned could be improved due to more extensive 'civilian communication'. Participants in Yobe noted several ways to enhance civilian–military communication: 17% (4/24) listed 'using traditional leaders' and 13% (3/24) listed a 'civilian task force'. Twenty-nine per cent (7/24) of respondents viewed health services as a function of the military in Yobe, which is particularly significant provided that 50% (12/24) of respondents viewed the military as being involved in 'security/peace'. When regarding the latter, respondents in this area were more prone to describe the military as helping secure security and peace rather than as an institution that exacerbated local violence. For example, one UNICEF Child Protection Assistant described the military's role as 'restoring peace in response to violent attacks in communities and other associated dangers' (KII, Yobe).

In comparison, the military often viewed their role differently. The military often described their principal role as 'security', but also understood that they were being asked to expand their role to include health service provision and humanitarian aid. Therefore, the specific function and activity were seen to be adaptable:

The role of the military is to defend the territories of the Nigerian state. It is not our duty to provide medical aid for the people, but we do it because we want to make ourselves friendly to the people so that they can give us the cooperation that we need from them (KII, Military Officer in Yola).

This expanded role of the military was most evident in an FGD in an IDP camp in Yobe. In Yobe, individuals often described the military as providing a greater extent of services: aid, shelter and medical support. Given the socioeconomic challenges of IDP camps in Yobe, reasons for more extensive military involvement include regional stability, counter-insurgency tactics, and geographic location of important agricultural resources. Responses conducted at the IDP with an individual from Borno elaborated further, stating that 'we don't [know] much about their roles but they [have provided] medical services [and] ambulance for those that are critically ill' (FGD, Yobe). Another participant affirmed that the military's contributions went beyond security, stating that 'the military assisted us in providing security and transportation' (FGD, Yobe).

In short, these results indicate that civilian perception of the Nigerian military's role differed significantly across different geographic areas, possibly a product of the Nigerian military providing varying services in different regions. In turn, disparities in military aid and humanitarian support affect civilian perceptions of the military. Next, in places with a more extensive Boko Haram presence, the military provided a wider array of services. For example, in Yobe and Adamawa, civilians often viewed the military more positively, some even going so far as to say that 'without the military [they] wouldn't have survived these crises' (FGD, Yobe IDP camp). These great differences between the community's and military's definition of the military's role in humanitarian crises further underscore the importance of effective civilian–military communication. Additionally, expanding the Nigerian military's services in non-crises times can improve civilian–military engagement (FGD, Adamawa).

Table 2 Results summary

Codes	Key concepts in quotes
Grounded theory inductive analysis	Healthcare as a right; provision to all community members in times of crisis
► <i>Role of the military</i>	Military's resources can facilitate protection of communities/citizens; Domestic militaries are best suited to promote peace
Health Services (42%; 25/59)	Transportation to and from medical facilities; transportation of goods/services
Security & Peace (37%; 22/59)	Proper provision of military goods (healthcare, food, shelter); domestic support from military can save lives
Transportation (17%; 10/59)	Negatives outweigh positives; human rights violations; the military lacks community-based insight; inequitable geographic service provision
► <i>Perception of the military</i>	Military's effectiveness considered on a case-by-case basis
Positive (53%; 31/59)	Gender-based violence, sexual assault, physical abuse, manipulation; child soldiers
Negative (27%; 16/59)	Enhanced communication between community members and military leaders; open forums; linguistic-cultural competency
None/neutral (20%; 12/59)	Human rights violations preclude trust; community members afraid and not trusting of the military's weapons; Military awareness training; working with community leaders
► <i>Challenges to civilian-military cooperation</i>	Lack of equitable distribution of medical support/goods
Human Rights (27%; 16/59)	
Cultural-linguistic (41%; 24/59)	
Trust (15%; 9/59)	
Medical support (5%; 3/59)	

Consequentially, why does the Nigerian military not offer an equitable array of services to all geographic regions across Nigeria? Cross-comparing FGDs and KIIs demonstrate various inequities in service provision by the Nigerian military. To start, the lack of a robust disaster-preparedness plan might have contributed to inadequate resource distribution by the Nigerian military (KIIs in Yobe, Borno).²³ It is also important to note the negative consequences of the military providing extensive services: actors might conflate the military's actions with humanitarian agencies, potentially leading to a perceived compromise of humanitarian neutrality.^{24 25} Therefore, careful planning and execution are needed to expand the military's breadth of services. Last, it is important to note that geographic variations in service provision across Nigeria might also reflect the differing regional challenges such as Ebola and Boko Haram.

Challenges to civilian-military community acceptance

Our findings suggest that civilian-military trust is crucial to the military's overall effectiveness (table 2). The two most frequently mentioned barriers to civilian-military acceptance were lack of cultural-linguistic understanding (41%; 24/59) and human rights violations (27%; 16/59). Other less commonly noted barriers include breakdowns in trust/communication (15%; 9/59) and medical support (5%; 3/59).

To start, human rights violations represented an important part of the breakdown of civilian-military relations in certain locales. Human rights violations by military forces include different abuses such as physical abuse, sexual assaults and the enlistment of child soldiers (Folarian, Oluwatobi, Richardson).^{26 27} Specifically relating to the Nigerian military, war crimes relating to unlawful detention, sexual violence and physical abuse have been documented over the past decade in both the Ebola epidemic and the Boko Haram insurgency.²⁶⁻³⁰ Twenty-seven per cent (16/59) of participants mentioned gender-based violence, human rights violations, or extortion as a barrier to civilian-military cooperation in the Ebola epidemic. While our respondents did not specifically mention child soldiers as documented, they mentioned sexual abuse and violence by military personnel. Indeed, the problem is either so significant or perceived to be so significant that one military respondent described sexual assault as a barrier to civilian-military interactions in the Ebola epidemic:

Actually, there are constraints in some locations because some of our military boys, once there is an issue of insurgency, will use that as an advantage against the community like the issue of rape, force[d]

pregnancies, among others. Sometimes they [the community] find it very difficult to collaborate with the military because of that fear. (KII with Military Officer, Yola).

Corresponding FGDs in Yobe mentioned other horrific human rights violations in the Ebola epidemic, including:

- 'Extortion. Sometimes they collect our food ticket provided by NGOs' (FGD Yobe).
- 'Human right violations including sexual and gender-based violence' (FGD Yobe).
- 'Threats, sexual harassment and looting' (FGD, Borno).

Human rights violations disrupt safe, effective civilian-military interactions. Beyond ending these human rights abuses and violations, proactively building trust is a crucial first step towards realising more positive civil-military relations. Intelligence officers understood this relationship, and one described medical provision as a way to do just this:

Carrying out medical intervention to people has been used to establish [a] cordial relationship with the people and people have been so happy receiving such medical aids from the military at that particular time. (KII, Intelligence Officer, Yola).

These challenges in civilian-military cooperation have existed long before the 2014-2016 West African Ebola epidemic. Barriers to effective public health cooperation are cultural, socioeconomic, linguistic and political.^{31 32} Our data align with this assertion, as explicated by a young man in Adamawa, who said that:

One of the basic challenges is the refusal or the community to accept such intervention[s]... [which] can result from many factors such as religion, culture, or the relationship between the military and the people. For instance, many people may reject the polio vaccine due largely to religion. (FGD, Adamawa).

Next, 41% (24/59) of respondents also mentioned the military's cultural-linguistic understanding as an important barrier to efficacious civilian-military cooperation. These barriers are well defined in the literature and repeatedly described by research subjects, several of whom mentioned cultural competency training to improve civilian-military interactions.³¹ Cultural-linguistic barriers were evident across each locale: Borno 55% (11/20), Yobe 42% (10/24) and Adamawa 20% (3/15). Responses explained communication breakdowns—from verbal language fluency to disregard of community norms. In Adamawa, one participant described several interventions that could be used to fashion greater civilian acceptance: describing

awareness campaigns and asking the military to remove their weapons (FGD, Adamawa). This relative power imbalance due to weapons in civilian–military relations is well-described in literature.³³ Identifying concrete ways to remove civilian–military barriers to interactions, such as removing weapons in non-crisis settings, represent important efforts to improve civilian–military interactions and, therefore, epidemic response.

LIMITATIONS

It is important to note several limitations of the research study. First, the FGDs and KIs were conducted in three Nigerian states. Civilian–military relations might strongly differ in other regions of Nigeria, and therefore generalisability to all of Nigeria should be cautioned given regional variations. Additionally, further research is warranted to evaluate the role of civilian–military relations in other LMICs. Last, this research was conducted before 2020 and, therefore, does not apply to the COVID-19 pandemic.

CONCLUSION

In conclusion, this research demonstrates the opportunity for a strategic partnership between civilian and military sectors in epidemic response. Robust civilian–military interactions require an appropriately defined role for the military and methods by which communication can be enhanced between both entities. Important considerations include military cultural–linguistic understanding, human rights promotion and implementing robust community-based needs assessments; such foci can facilitate the military’s understanding of community norms. Strategies presented herein aim to improve civilian–military epidemic response.

Contributors CMAK: conceptualisation, data curation/investigation, formal analysis, methodology, writing—original draft, review and editing, principal investigator, guarantor. DJO: conceptualisation, data curation/investigation, formal analysis, methodology, writing—original draft, review, editing, final manuscript submission. SB: formal analysis, writing—original draft, review and editing. PCH: formal analysis, writing—original draft, review and editing. BC: formal analysis, writing, review and editing. DPP: formal analysis, writing, review and editing. ACL: conceptualisation, formal analysis, methodology, writing—original draft, review and editing.

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ORCID iDs

Chris M A Kwaja <http://orcid.org/0000-0002-8207-9861>

D J Olivieri <http://orcid.org/0000-0003-2684-4941>

S Boland <http://orcid.org/0000-0001-6470-5470>

A C Levine <http://orcid.org/0000-0003-3982-3824>

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Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone’s Ebola Response		
Primary Supervisor	Dina Balabanova		

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A whole-of-government review to a whole-of-government response: a narrative review of the United States Government's 2013–2016 West Africa Ebola Epidemic post-operation reports

Key messages

Various agencies of the United States Government responded to the 2013-2016 West Africa Ebola Epidemic, and generated post-operation reports. To date, no analysis has been conducted to identifying synergies and divergencies of report recommendations, with a view to highlighting priority areas for institutional reform within the United States Government.

Abstract

The 2013-2016 West Africa Ebola Epidemic was and remains the world's largest outbreak of Ebola Virus Disease. The United States Government (USG) spent \$2.7 billion responding to the outbreak, predominantly through the deployment of the US Agency for International Development, the Centers for Disease Control and Prevention, and the Department of Defense. Each of these USG agencies, as well as several others, wrote substantive post-operation reports, including myriad recommendations for how to improve interdepartmental coordination and collaboration during future disease outbreak responses. However, to date, no effort has been made to compare and contrast these post-operation reports and their respective recommendations, with a view to finding synergies between them. This essay evaluates the various reports in the public domain, and finds that four areas are consistently referenced: the need to clarify roles and responsibilities between USG agencies, reinforce data sharing and surveillance, perform joint planning, and improve communication and coordination with external partners. These four areas therefore represent high-priority policy interventions for ensuring the efficacy and efficiency of the USG's future interventions in response to critical public health threats.

Introduction

The 2013–2016 West Africa Ebola Epidemic was and remains the world's largest outbreak of Ebola Virus Disease. The outbreak was more than 30 times larger than any prior: over 28,000 people were infected across ten countries, of whom more than 11,000 died (World Health Organisation 2016). In the end, it took more than two years to contain the outbreak, a process that required the intervention of local, international, and multilateral actors in an unprecedentedly large and complex disease outbreak response (World Health Organization 2016).

The unprecedented spread of the 2013-2016 West Africa Ebola Epidemic, occurring in a region with weak health systems and no previous Ebola experience, led to the first-ever US declaration of a humanitarian disaster as a result of a health emergency; The United States Government (USG) was the single largest financial contributor to the response, expending \$2.7 billion of a \$5.4 billion emergency appropriation fund. This disaster declaration placed USAID's Office of Foreign Disaster Assistance (OFDA) as the lead of all US federal agencies involved in the response. OFDA deployed a Disaster Assistance Response Team (DART) to the affected countries, which included personnel from public health, humanitarian, and military backgrounds to coordinate outbreak containment and stabilisation efforts, which President Obama referred to as “the strategic and operational backbone of America's response” (United States Congress House Committee on Foreign Affairs 2014).

This funding was predominantly funnelled by DART to the various elements of a USG ‘whole of government’ response, primarily the US Agency for International Development (USAID), the Centers for Disease Control and Prevention (CDC), and the Department of Defense (DOD). Response activities of these three agencies included clinical, laboratory, community, logistics, and communication interventions, as well as efforts to address second-order impacts on the health systems of affected countries (Centers for Disease Control and Prevention 2016; Heather Higginbottom 2014). Additionally, the DOD's Africa Command (AFRICOM) stood up a Joint Force Command-United Assistance under the command of

U.S. Army Africa (USARAF) in Liberia “to provide regional command and control support to U.S. military activities and facilitate coordination with U.S. government and international relief efforts” (Office of the Press Secretary 2014; Joint and Coalition Operational Analysis (JCOA) 2016). The US strategy focused on four lines of effort: 1) controlling the epidemic; 2) managing the secondary consequences of the outbreak; 3) building coherent leadership and response operations; and 4) ensuring global health security (Heather Higginbottom 2014). While this strategy covered all US agencies, USAID, CDC, and DOD performed the lion’s share of USG implementation.

The USG also created several audits, evaluations, and after-action reviews of their own response. They attempt to synthesise successes, failures, and suggested future directions for USG-support to large international outbreaks. They also call for changes in organisation, communication, and coordination structures that were established between the various USG agencies. However, each of these reviews was produced independently by respective USG agencies, and the disparate philosophies, mandates, and interests therein produced a dynamic – and occasionally conflicting – range of recommendations.

To date, there is no publicly available synthesis or analysis of the various USG reviews, or an analysis of where and how the reviews’ recommendations align. This is a critical gap in the literature: responses to future outbreaks will be more efficiently and effectively organised if the USG can harmonise their response, and if local, international, and multilateral actors can effectively anticipate what they can expect from the USG. A synthesis of these recommendations could also identify gaps in knowledge and experience to inform future planning, policy analyses, and research.

While a full narrative review is beyond the scope of this paper, our preliminary analysis serves to highlight key synergies and disagreements between the various USG reviews of the West Africa Ebola response, and thereby evidence the need for a comprehensive and rigorous narrative review.

Background

There was some shared history of collaboration between the involved USG agencies. For example, the DART structure was familiar to USAID and DOD, who had a shared history of using it to coordinate during natural disaster responses; the CDC and USAID had experience working together on global health programming in international settings, and even on coordination in previous Ebola outbreaks; and the CDC and DOD had some experience working together domestically on emergency response. However, these three agencies had not all previously worked together in a large-scale humanitarian operation. The CDC had no history of DART participation, the CDC and USAID did not share a history of coordination during humanitarian disasters specifically, and previous CDC-DOD collaboration was limited to domestic contexts. Therefore, while each of the agencies brought expertise and experience to the “whole of government” framework, the scale of the outbreak and subsequent USG response challenged each agency to work in new ways and to coordinate efforts at an unprecedented scale. This inevitably resulted in various frictions, as agencies worked to navigate unknown spaces. These points of friction provide a basis for improving the efficiency and effectiveness of future USG “whole of government” efforts, and the evaluations and reports by individual agencies offer a useful starting point to examine options for doing just this.

It is important to note that prior to the 2013-2016 West Africa Ebola Epidemic, the DOD did have an existing military presence in Liberia under Operation Onward Liberty (OOL). OOL was officially chartered in 2010 with the purpose of assisting and professionalising the Armed Forces of Liberia (AFL) (U.S. Mission Liberia 2016). As it was chartered prior to the outbreak, OOL was not an Ebola response mechanism of USG, though support to the AFL did include training to AFL medical personnel (U.S. Mission Liberia 2016). Further, OOL helped build valuable relationships between the DOD and Liberian government prior to the 2013-2016 West Africa Ebola Epidemic. At the conclusion of OUA in the spring of 2016, a small amount of work was transitioned to the longer-standing OOL, including a small element of approximately 100 military, civilians, and contractors, as well as continued medical training to the AFL (U.S. Department of Defense 2016). OOL concluded on August 11, 2016, with the DOD stating that OOL successfully “concluded its six-year mentoring and advising mission to assist the (AFL) in building a professional military that is responsible for the country’s security, that is respectful of the rule of law, and

that is answerable to civilian authority” (U.S. Mission Liberia 2016). OOL is distinct from the other programs evaluated in this review, as it is an example of the DOD using infrastructure in place to advance their efforts against Ebola, rather than the deployment of new Ebola-specific programming organised under DART. Similarly, USAID and the CDC also had long-standing presence in the region that was mobilised in addition to the DART, and was not the focus of long-term Ebola response and recovery post-DART. For this reason, and because OOL does not have an after-action report in the public domain, it does not fit this review’s inclusion criteria.

Methods

The 2013-2016 West Africa Ebola Epidemic resulted in a proliferation of scientific writing in the peer-reviewed literature. Though this literature is essential if we are to advance the state-of-the-art of effectively containing Ebola outbreaks, the peer-reviewed scientific literature does not capture audits, evaluations, or official reviews of the USG response. Broad internet searches of USG websites were conducted to compile documents in the public domain. Reports, evaluations, and audits conducted by USG agencies, independent evaluators, Inspectors General of DOD, HHS, CDC, Government Accountability Office (GAO), and the Congressional Research Service (CRS) were included for initial analysis, as were various panels commissioned by agencies. These reports were then reviewed to identify specific recommendations for future action by USG agencies or the USG as a whole. Reports without specific recommendations were excluded. Reports that dealt exclusively with compliance to appropriated funds were also excluded, as their recommendations focused on existing funding and programs, rather than future planning or events. Of the remaining and included reports, recommendations were then categorised as either internal to a specific agency, or as having external implications for other agencies or the USG more broadly. These recommendations were then categorised by theme or type, as described in the findings. These methods are summarised in Figure 1.

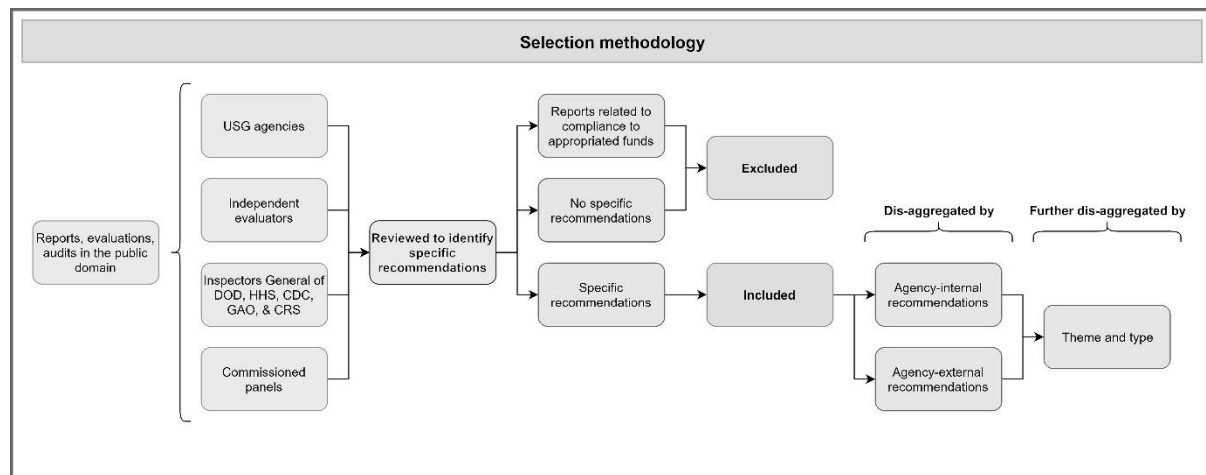


Figure 1: Selection methodology

Patient and Public Involvement

No patients or members of the public were involved in the design, or conduct, or reporting, or dissemination of the research for this manuscript. This paper solely relies on public-access reports written and published by the United States Government following the 2013-2016 West Africa Ebola Epidemic.

Findings

Using the methodology as above, searches for publicly available audits, evaluations, and reports on the USG response to the 2013-2016 West Africa Ebola Epidemic yielded eight major reports. Two GAO audits that focused on USAID spending compliance and one HHS Inspector General Audit on CDC spending compliance were excluded since they focused on compliance with regulations, and did not make recommendations regarding future response efforts (U.S. Government Accountability Office 2018; 2016;

Office of Inspector General 2017). One report by CRS was excluded because it did not contain specific recommendations for a future response, but rather explored future restrictions or directions that Congress could place on funding outbreak responses (Salaam-Blyther, Epstein, and Skorupski 2016). Four remaining reports across USG agencies were included for further analysis. They each included a recommendations section, with recommendations internal to individual agencies as well as for the broader USG. These reports, summarised in Table 1, include 175 recommendations across DOD, HHS, and USAID (Joint and Coalition Operational Analysis (JCOA) 2016; Jonathan Fielding et al. 2016; Swati Sadaphal et al. 2018; Office of Inspector General 2018). Nearly a third of recommendations address either the USG broadly, or are a call for improved inter-agency coordination.

Document title	Agency	Authors	Total # recs	# agency-specific Recs	# recs relevant to multiple agencies or broader USG
<i>Operation United Assistance: The DOD Response to Ebola in West Africa</i>	DOD	DOD's Joint and Coalitions Operations Analysis	98 (plus 55 sub-recs)	71	27
<i>The Report of the Independent Panel on the U.S. Department of Health and Human Services (HHS) Ebola Response</i>	HHS	Independent Panel of volunteer experts	48	37	7
Evaluation of Ebola Virus Disease Response in West Africa 2014–2016: Objective 4, Coordination of the Response	USAID ('USAID -OFDA')	External evaluators, International Business & Technical Consultants, INC	15	2	13
<i>Lessons from USAID's Ebola Response Highlight the Need for a Public Health Emergency Policy Framework</i>	USAID ('USAID -OIG')	Office of the Inspector General	14	11	3
TOTAL: 50					

Table 1: Summary of USG post-Ebola reports

Despite the lack of structural and stylistic uniformity, the 50 recommendations with implications for multiple agencies can be categorised accordingly:

- 1) clarifying roles and responsibilities;
- 2) data sharing and surveillance;
- 3) joint planning;
- 4) coordination with external, non-USG partners

These recommendations have been summarised in Table 2, according to these four categories, and further broken down by source as titled in Table 1 Column 2 (Joint and Coalition Operational Analysis (JCOA) 2016; Office of the Assistant Secretary for Preparedness and Response 2016; Swati Sadaphal et al. 2018; Office of Inspector General 2018).

1. Recommendations to Clarify Roles & Responsibilities
DOD
<ul style="list-style-type: none"> • Support interagency clarification of roles, responsibilities and decision-making process to support integration and expedite the whole-of-government response

<ul style="list-style-type: none"> • Advocate for a USG examination of disaster response procedures to determine what changes need to be made, including domestic and international USG responders' interaction during a global health crisis • Participate in interagency meetings to synchronize Global Health Security Agenda plans and activities • Expand virtual and physical collaboration among supporting commands and agencies to improve shared situational understanding and the capacity to quickly coordinate and plan • Support developing a cross-organizational USG team that can coordinate a scalable whole-of-community contagious biological response • Examine the placement of liaisons between DOD and partner organizations • Review and revise DOD policies/authorities while in support of other USG agencies
<p>HHS</p>
<ul style="list-style-type: none"> • Coordinate with the National Security Council and federal partners to develop a USG framework for multi-agency response to international incidences, and identify lead/coordination and support responsibilities for agencies in different scenarios • Coordinate with the NSC and federal partners to define roles for HHS in responses with simultaneous domestic and international components • Work with the NSC, FEMA, and USAID on pre-scripted mission assignments for international deployment of public health and medical personnel to support USG efforts
<p>USAID-OFDA</p>
<ul style="list-style-type: none"> • Be prepared to coordinate future public health emergencies and deploy technical experts in the relevant health (or other) sectors at scale within DART teams • Prepare written guidelines for staff and partners for scaling population-level control of pandemic diseases of humanitarian concern, including SOPs for coordinating with HHS, DOD, and other USG
<p>USAID-OIG</p>
<ul style="list-style-type: none"> • Implement a communication and coordination strategy that would govern how USAID will work with external actors (other USG agencies, the UN, international organizations, NGOs) • Work with USG to identify and test roles and capabilities, and responsibilities for future use, including the Mission Tasking Matrix with the DOD
<p>2. Recommendations on Surveillance & Data Sharing</p>
<p>DOD</p>
<ul style="list-style-type: none"> • Work with CDC and others on a strategic plan for a global laboratory network and information sharing • Support USG plans that increase public health and bio-surveillance capacities of partner nations • Participate with other USG agencies and international public health organizations to improve laboratory integration with host-nation public health systems • Develop policies and procedures to improve information sharing with non-DOD partners
<p>HHS</p>
<ul style="list-style-type: none"> • Partner with NGOs in developing countries to strengthen their ability to identify, report, and respond • Expand support to the Global Outbreak Alert and Response Network
<p>USAID-OFDA</p>
<ul style="list-style-type: none"> • Develop an MOU with CDC on early detection and sharing important surveillance data in real time

<ul style="list-style-type: none"> • Pursue collaboration with DOD’s Laboratory Response Network and other key laboratories at CDC • Expand OFDA’s disaster guidelines to recognize different types of outbreak threats that are potential continental crises, resourcing CDC guidance with real time revisions and replacements
USAID-OIG
<ul style="list-style-type: none"> • Develop policies for rapid data and information sharing with host governments, WHO, and USG
3. Recommendations on Joint Planning
DOD
<ul style="list-style-type: none"> • Develop with USG and other partners a national-level, contagious, biological outbreak plan for domestic and international responses • Assess current DOD and other USG pandemic influenza and infectious disease exercise programs, and advocate for regular, integrated national-level exercises with the whole-of-community • Emphasize planning lines of effort that address support to the USG and support to partner nations. • Expand the collaborative disaster preparedness program with partner nations and with USAID • Incorporate USAID in all phases of planning and execution for operations and exercises • Increase participation by DOD planners in the USAID Joint Humanitarian Operations Course
HHS
<ul style="list-style-type: none"> • Incorporate lessons learned regarding PPE and medical waste management in training and exercises • Develop a coherent and shared USG position on the appropriate study design for experimental vaccines
USAID-OFDA
<ul style="list-style-type: none"> • Work with CDC on a range of infectious disease scenarios, including different pathogens, different settings (permissive, non-permissive, conflict, non-conflict, urban, rural), and on different participation of USG agencies such as DOD • In its planning with CDC and international partners, avoid a country-specific orientation to future public health emergencies, as differing circumstances affect who can respond, cultural dimensions, etc.
USAID-OIG
Nil
4. Recommendations on Coordination with external, non-USG actors
DOD
<ul style="list-style-type: none"> • Support USG work with IOs, NGOs, partner nations, and others to define roles and responsibilities during international crisis response, including infectious disease outbreaks
HHS
<ul style="list-style-type: none"> • Partner with NGOs in developing countries to strengthen capacity to respond to public health threats • Member states of multilateral organizations should coordinate to rapidly provide assistance to other countries responding to urgent public health threats, and source responders with needed expertise

<ul style="list-style-type: none"> • Work with domestic and international partners to identify incentives and means to marshal the PPE manufacturing sector and distribution supply chain to support future response to public health threats
<p>USAID-OFDA</p> <ul style="list-style-type: none"> • USG should sustain its communication and work with the emergency wing of WHO to take on an expanded role in directly managing field operations in large public health emergencies • USG should engage more with other relevant donors in planning future outbreak strategies • With CDC, enter into an agreement with Canada and others in francophone settings or countries where the USG has limited access • USG should promote a UN response to future pandemics that does not create new architectures, but involves new protocols and reinforces the Global Health Security Agenda • Coordinate with WHO and CDC meld together epidemiology and the logistics of response into a new body of practice
<p>USAID-OIG</p> <p>Nil</p>

Table 2: Thematic consolidation of recommendations from USG post-Ebola reports

Discussion

The huge effort and resources required to contain the West Africa Ebola Epidemic helped advance the science of containing subsequent Ebola outbreaks, not limited to the development of effective new vaccines and therapeutics, improvements in personal protective equipment, and better medical care for survivors. In addition to these scientific developments, major organisations also implemented systems and organisational changes in response to failures and challenges faced during the West Africa Ebola response. This includes institutional reforms of the World Health Organisation (WHO) Health Emergencies Program (WHE), and a renewed focus by donors on investing in health systems strengthening efforts in poor and outbreak-prone countries.

However, no major relevant institutional reforms of interagency work across DOD, HHS, or USAID have occurred following the West Africa Ebola Epidemic, despite an analysis of the recommendations from each agency's reports revealing a significant amount of overlap and convergence of recommendations. The recommendations also identify knowledge gaps for further consideration, analysis, and research. Examining the coherence and divergence of these recommendations, as well as identified knowledge gaps, can provide important direction to USG coordination of future USG disease outbreak responses. Given the critical role the USG holds in both political and funding considerations, any change in or improvement to USG coordination also has significant implications for all other actors.

Each report included recommendations to clarify roles and responsibilities within the USG, often via multiple recommendations. This is unsurprising, given the novelty of using a DART in response to a health event, and more generally, due to the confluence of often siloed USG agencies and actors working together in new ways at such a large scale. However, despite a uniform call for better clarity on roles and responsibilities, the recommendations differ in important ways on how to realise this. The HHS report suggests that the National Security Council (NSC) could serve as an arbiter of this process across the USG, while USAID and DOD recommendations do not explicitly invoke the NSC. The USAID-OFDA evaluation actually recommends that USAID should be prepared to lead future health outbreak responses via the same DART mechanism, while the DOD report recommends establishing a "cross-organisational USG team" for coordination – the distinction of this from the DART is not clear. Meanwhile the USAID-OIG and DOD reports recommend working across agencies to clarify roles and responsibilities but offer no specific platform through which this could be best achieved. Another key divergence includes reference within the HHS and DOD recommendations to the challenge of creating interagency

coordination structures that could apply to both domestic and international contexts, while the USAID reports – given the agency’s strictly international mission – do not consider this challenge. Beyond the usual challenges of bureaucratic politics and institutional processes, these differences are not trivial, and run the risk of each agency attempting their own disparate process to carry USG-wide recommendations forward.

Each report also contains recommendations on data sharing and surveillance, both within the USG and with external partners. The DOD and USAID reports call for strengthening surveillance networks and laboratory systems with the support of different USG agencies. Meanwhile, the HHS and DOD specifically recommend that greater support be given to strengthening partner country laboratory networks. The DOD and USAID reports also make general calls for improved data sharing across USG agencies, a recommendation that is not explicitly addressed in the HHS review. While these recommendations uniformly acknowledge the need for USG support to the laboratory and surveillance capacity building of partner countries, it is unclear how coordination across the USG on these investments might occur. In short, while data sharing between USG agencies is called for, there are risks of inefficiencies and missed opportunities if each agency addresses data sharing processes differently.

In addition to the clarification of roles and responsibilities and recommendations related to data sharing and surveillance, joint planning is a core focus of the reports’ recommendations. The DOD, perhaps due to its institutional culture of planning and forecasting, offers the most detailed recommendations on future joint planning efforts, though the USAID-OFDA evaluation also focuses on its value. While the joint planning recommendations offer an opportunity to build from lessons learned from the 2013-2016 West Africa Epidemic, the joint planning recommendations also offer the best insights into the knowledge gaps and questions that should be considered for future outbreak response. In particular, the USAID-OFDA recommendations call for planning exercises that consider the milieu of response contexts including “permissive, non-permissive, conflict, non-conflict, urban, [and] rural” environments, as well consideration for different geographic locations. This illustrates the breadth of concerns for which the 2013-2016 outbreak provided insufficient experience (Swati Sadaphal et al. 2018). As alluded to by the DOD and USAID-OFDA reports, joint planning and joint exercises could also address some of the challenges or ambiguities related to agency roles and responsibilities. Joint planning also offers the opportunity to address new innovations and approaches for future responses, including innovations in vaccine introduction, and PPE, among others. By planning together and exercising together, some of the operational bugs of coordination could be tested in advance of a real-world outbreak.

Finally, the reports’ recommendations on communication and coordination with non-USG external partners reflect the complex context of a disease outbreak with humanitarian consequences. Each reports’ recommendations recognise the importance of improved coordination with non-USG partners, including capacity-building and joint planning for future events. Coordination between local, international, and multilateral actors is always a challenge, which is itself complicated further by the presence and intervention of multiple USG agencies: internal questions and ambiguity related to USG inter-agency roles and responsibilities, data sharing and surveillance, and joint planning represent a communication and coordination problem with external agencies and groups interested in engaging and collaborating with USG efforts.

As these 50 recommendations can be typed into four overarching categories that are shared between the agencies, each category represents a relevant and critical point of focus for USG reform, despite possible difficulties in implementing these changes (Table 3). This focus and reform is particularly important due to the diverse capabilities and resources of the USG that can be a significant asset in response efforts. However, these assets are not optimised if a large USG presence ultimately creates confusion and effects unwieldy coordination. Efforts to improve internal cohesion across the USG are likely a pre-requisite for meaningful improvements in USG activities during disease outbreak responses, to reduce friction therein, and to find efficiencies in working with external partners. Even if some of these issues are protracted or remain ultimately unresolved, a publicly available report on how the USG understands and intends to use the various reports’ recommendations to inform future responses would allow other actors to better anticipate means of coordination with and support from the USG.

Recommendation	Relevance	Degree of technical or logistical difficulty for implementation
Clarify roles and responsibilities of each constituent agency	High. All four reports and all three agencies listed recommendations in this category. Ensuring clarity of roles and responsibilities, and having a shared understanding of coordination between these functions, would represent a significant added-value in future emergency response.	While politically this is a very challenging question, technically and logistically, addressing this recommendation should not represent a significant difficulty for constituent agencies. However, while many interventions in this space are limited to policy and procedure rather than tangible expenses, overlapping authorities and areas of responsibility do exist. There could be significant implications for agencies if existing workstreams or professional purviews were to be mandated away from them to another agency as part of this review process.
Improve surveillance and data sharing between agencies	High. All four reports and all three agencies listed recommendations in this category. Agencies' contributions to disease outbreak response efforts cannot be harmonised without open access to shared data. Good laboratory networks are necessary for the rapid identification of emerging disease threats, which could curtail the scale and difficulty of containment.	Supporting partner country laboratory networks and improving health information and surveillance systems is long-term and expensive work, but is clearly defined and approachable. There are existing workstreams and experience within USG doing this abroad, and further efforts to coordinate these workstreams could be beneficial. Other interventions in this space, such as rapid information sharing across agencies or with the WHO, is a technical issue requiring the development and maintenance of good data architecture, which can be addressed with technical expertise, joint planning, and financial resources.
Conduct joint-planning between agencies	Medium-High. Three of four reports and all three agencies listed recommendations in this category. Joint planning is crucial to practice recommendations in the other three categories referenced here. Beyond learning how to better engage between themselves and building relationships across agencies (which is no small asset), it is important to remember that outbreak environments are often highly dynamic and context-specific, so there is no one-size-fits-all approach that could be pre-planned during such exercises. Joint planning also offers the opportunity to help clarify roles and responsibilities between agencies and to identify ways to improve data sharing between them.	While some USG agencies operate more independently than others, some USG agencies have significant experience with joint-planning, especially the DOD. Tabletop exercises and joint-planning in this way are generally understood to be useful tools for identifying problems and improving future coordination, so should not be thought of as particularly controversial or too difficult. On this basis, it should not represent a significant technical or logistical challenge to conduct joint-planning exercises. Models for joint planning at the strategic, operational, and tactical level should be considered, particularly given the context-specific nature of outbreak environments.
Harmonise communication and coordination with external, non-USG actors	Medium-high. Three of four reports and all three agencies listed recommendations in this category. In addition to the support provided by external governments like USG, any outbreak response is necessarily a joint effort between a respective national government and their health authority, non-governmental organisations, and intergovernmental/international organisations. It is critical that USG agencies can speak with one voice and from one position to ensure the efficient and cogent interaction and cooperation with external non-USG actors.	Technically and logistically, addressing this recommendation should not represent a significant difficulty for constituent agencies, especially if roles and responsibilities of each constituent agency (including a shared understanding of coordination between agencies' functions) are clarified according to the first recommendation category.

Table 3: Recommendations, their relevance, and the degree of difficulty for implementation

While reforms within individual USG agencies can be easier to attain than reforms across agencies, there are mechanisms to drive coordinated, cross-agency change. First, Congressional reporting requirements or legislative action can drive structural reforms across agencies. New legislation as well as oversight and reporting requirements could compel a coordinated effort across agencies to address the overlapping recommendations included in this analysis. Second, the President, via the National Security Council (NSC), could address recommendations that span across USG agencies. The NSC is designed to coordinate policy across the interagency and could take on an effort to streamline these recommendations into a more cohesive USG policy on international outbreak response. Finally, individual agencies themselves could opt to work together to address common recommendations and develop new approaches to coordination for future response. Congressional Action and NSC Coordination are the most feasible of these options, as their authorities on oversight and coordination span across USG agencies. While individual agencies are not precluded from working together to plan more effectively to address future outbreaks, Congress or the NSC will be able to drive the process more authoritatively.

Limitations

There are several limitations to this analysis. Importantly, the analysis relies on publicly available documents, and there may be a robust response to these recommendations by the USG that have not been made public; With the exception of the USAID-OIG audit, the recommendations made have no requirement for action, nor do the documents make public which (if any) recommendations have already been actioned. It is possible that these recommendations were in fact synthesised, deconflicted, and acted upon through internal USG processes that are simply not documented in the public domain.

Furthermore, there are other types of internal and external documentation beyond audits, evaluations, and reports that offer additional useful recommendations or courses of action for USG agencies, including those produced externally to USG. As these were not included in the analysis, key recommendations identified elsewhere may have been excluded. Further, while this paper represents an preliminary analysis, a more rigorous and in-depth governmental analysis of these common and shared recommendations, including a specific focus on deconflicting differing proposals about viable reform, is necessary to fully understand the appetite for and viability of each constituent reform. Consideration of reforms at the strategic, operational, and tactical level will strengthen a more in-depth analysis. However, this analysis may nonetheless represent a useful way to begin a conversation on some of the structural and policy questions within the USG that remain unclear, unanswered, or unsatisfactorily resolved, at least in a public forum.

Finally, some of the recommendations made in these publicly available reports may be difficult to generalise. The 2013-2016 West Africa Ebola Epidemic is as-yet unprecedented in its scope and the scale of the response to it. It is possible that some of the recommendations made in evaluating the USG response are not generalisable to other contexts and future outbreaks. Other contexts, pathogens, or factors may point to USG engagement that does not mirror what worked in the context of Ebola in the 2013-2016 West Africa Ebola Epidemic; political contexts may require inter-agency USG responses that diverge significantly from what was seen there. If these recommendations are to inform policy and process for future outbreaks, they should be only one of many inputs considered.

Conclusion

The 2013-2016 Ebola Epidemic in West Africa was in many ways a watershed event for public health and humanitarian response. In the wake of this unprecedented tragedy, the international community is building better science and structures to address ongoing and future outbreaks of humanitarian concern. Applying some of the lessons learned is already evident in elements of ongoing responses to new Ebola outbreaks, by both the international community and the USG specifically. However, it remains unclear whether the lessons-learned and questions raised in evaluating the USG response to the West Africa outbreak have been addressed or even consciously considered. The public evaluations of DOD, HHS, and USAID support to the USG response point to some clear opportunities for improvement, which remain largely unresolved. Even a few years after the 2013-2016 West Africa Epidemic, a publicly available, comprehensive review of the USG's "whole of government" response which synthesises

common recommendations and deconflicts differing proposals about the best way forward would represent enormous value. This paper represents a first attempt to conduct a preliminary analysis to that end, and as such we hope it serves to encourage others to consider the value of a more rigorous and in-depth governmental analysis. Of specific concern and priority for development are policy areas referenced by each of the primary agencies, including the need to clarify roles and responsibilities between USG agencies, reinforce data sharing and surveillance, perform joint planning, and improve communication and coordination with external partners. While context will always shape the specifics of a USG response, the lack of a public, transparent, and generic conceptualisation of future USG operations for efficient and effective deployment of a “whole of government” response in an outbreak scenario remains a missed opportunity; key building blocks to an improved USG response overall may well lie in such a review and analysis.

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^a This chapter's references are also reproduced within the thesis' references section.⁷⁹⁸⁻⁸¹³

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Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone's Ebola Response		
Primary Supervisor	Dina Balabanova		

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Understanding medical civil-military relationships within the humanitarian-development-peace 'triple nexus': a typology to enable effective discourse

Simon Horne,^{1,2} S Boland³

¹Conflict and Health Research Group, King's College London, London, UK

²Academic Department of Military Emergency Medicine, Royal Centre for Defence Medicine, Birmingham, UK

³London School of Hygiene and Tropical Medicine, London, UK

Correspondence to

Simon Horne, Conflict and Health Research Group, King's College London, London WC2R 2LS, UK; simon.horne@nhs.net

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ABSTRACT

The interface between humanitarianism, development and peacebuilding is increasingly congested. Western foreign policies have shifted towards pro-active stabilisation agendas and so Civil-Military Relationships (CMRel) will inevitably be more frequent. Debate is hampered by lack of a common language or clear, mutually understood operational contexts to define such relationships. Often it may be easier to simply assume that military co-operation attempts are solely to 'win hearts and minds', rather than attempt to navigate the morass of different acronyms. In healthcare, such relationships are common and more complex - partly as health is seen as both an easy entry point for diplomacy and so is a priority for militaries, and because health is so critical to apolitical humanitarian responses. This paper identifies the characteristics of commonly described kinds of CMRel, and then derives a typology that describe them in functional groups as they apply to healthcare-related contexts (although it is likely to be far more widely applicable). Three broad classifications are described, and then mapped against 6 axes; the underlying military and civilian motivations, the level of the engagement (strategic to tactical), the relative stability of the geographical area, and finally the alignment between the civilian and military interests. A visual representation shows where different types may co-exist, and where they are likely to be more problematic. The model predicts two key areas where friction is likely; tactical interactions in highly unstable areas and in lower threat areas where independent military activity may undermine ongoing civilian programmes. The former is well described, supporting the typology. The latter is not and represents an ideal area for future study. In short, we describe an in-depth typology mapping the Civil-Military space in humanitarian and development contexts with a focus on healthcare, defining operational spaces and the identifying of areas of synergy and friction.

INTRODUCTION

The interface between humanitarianism, development and peacebuilding—the 'triple nexus'—is challenging and contested, as the political search for long-term solutions abuts the humanitarian imperative for the apolitical relief of suffering.¹ Western government foreign policy has shifted towards a proactive stabilisation agenda making the deployment of military assets in non-traditional roles (including health sector support and even development) increasingly common.

Meaningful debate over the use of these military assets in triple nexus contexts is hampered by the

wide range of motivations for their deployment; the subsequent morass of acronyms and definitions can confuse all parties (potentially even the military) about what they are seeking to achieve. Indeed, the very choice of the term CMRel was necessitated by the fact that Civil-Military Relations (CMR) is already taken (describing a government's interface with its own military) as are Civil-Military operations (CMO), coordination (CMCoord), cooperation (CIMIC) and even interactions (CMI)—all already being used by militaries and/or civilians to describe specific relationships and objectives. This lack of a standardised language generates confusion and makes 'appropriate' interactions harder, or may even prevent them entirely.

Typologies and frameworks have been attempted. Some are so broad they lack utility, for example, describing CMRel as the 'issues that arise as civilian and military sectors negotiate their place in society and on the world stage'.² Others such as the United Nations Office for the Coordination of Humanitarian Affairs' (UN OCHA's) 'cooperation-co-existence' spectrum fail to capture the range or complexity of situations where multiple civilian and military actors may operate concurrently.³ In other circumstances, specific terminology exists, but is not applicable to international triple nexus contexts.⁴

This paper derives a typology of relationships between civilian agencies and foreign/UN militaries. It uses medical CMRel to approach this important conversation, and there are several reasons for this. Humanitarian organisations and military medical units have the same origin in international humanitarian law (IHL), and therefore entertain similar legal protections and responsibilities.⁵ Importantly and contradictorily, medicine is also seen by governments interested in political influence and stabilisation as a mechanism for achieving just that, as health is often considered a supraordinate goal acceptable to all parties, and more generally as a 'bridge to peace'.^{6,7} As a clear and broadly accepted example of CMRel on one hand, and a valuable political tool on the other, medical CMRel are likely to occur more frequently in the future. Most importantly, any typology capable of disentangling these motivations and complexities is likely applicable to CMRel more broadly, particularly other technical functions, such as engineering and logistics.

The typology is then used to highlight areas of likely CMRel tension. These are areas where further research and guidelines should be developed to clarify roles and responsibilities within CMRel,



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with a focus on providing effective relief to triple nexus-affected populations. It is hoped then that this typology will serve to stimulate productive dialogue between militaries and civilians about when and how to appropriately use military healthcare assets in aid, development and peacebuilding contexts.

BACKGROUND AND LITERATURE REVIEW

There are a number of motivations for the deployment of military forces to a triple nexus context. For example, many foreign governments adhere to variations of Fusion Theory or the Comprehensive Approach, which maintain that peace overseas enhances security at home, and can be achieved through a blend of security, political, financial and development tools.^{8 9} Adherents of these strategies believe that militaries can support many aspects of fragile states beyond simple peacekeeping; interventions which may result in CMRel. Meanwhile, for actors adhering to humanitarian principles of neutrality, impartiality and independence, there are legitimate concerns that CMRel unacceptably blur the line between agents with very different motivations. In extreme cases, this could bring physical harm to humanitarians, mistaken by belligerents for those supporting disputed political agendas.¹⁰

Despite these concerns, there are areas where CMRel are relatively uncontroversial. For example, few dispute the obligations of an occupying force to ensure the provision of aid to a conflict-affected civilian population, as enshrined in IHL.^{11 12} Similarly, military support to disaster relief efforts in peaceful regions is largely accepted by the international community, with clear guidelines for CMRel in these contexts.¹³ Domestic Civil-Military RELATIONS (a completely distinct area, between a military and its *own* government) are also widely described and generally accepted.

Other contexts generate significant disagreement and debate. For example, international guidelines exist for CMRel in complex humanitarian emergencies, where a humanitarian crisis occurs within an area suffering 'total or considerable breakdown of authority resulting from internal or external conflict'.¹⁴ However, the practical implementation of these guidelines is often contentious, particularly provided the dynamic and unpredictable nature of these environments. Similarly, the role of CMRel in public health crises such as the 2013–2016 West Africa Ebola Epidemic remains undefined, as it is for military 'hearts and minds' activities (ie, those with an explicit counterinsurgency purpose) or military capacity-building which occurs alongside civilian development projects.^{15 16}

Several authors have attempted generic CMRel typologies, but none is sufficiently and comprehensively workable for medical CMRel. For example, Seybolt describes a typology for military humanitarian interventions, based on the nature of intervention.¹⁷ Although relevant to the wider humanitarian context, Seybolt's system does not span the breadth of triple nexus contexts. It also fails to consider the constituent components of militaries, which may include independently deployable corps that do not engage in offensive operations (such as health workers or engineers), with which civilian organs may selectively establish CMRel despite concerns about the wider military.⁵ UN OCHA describe a cooperation to coexistence spectrum and also outline appropriate CMRel according to the level of conflict; ranging from direct delivery of aid, to logistics support, to infrastructure support (the cookie-truck-bridge model).¹⁸ However, again this fails to capture the diversity and complexity of real-world motivations and contexts which underlie CMRel,^{19 20}

perhaps explaining why awareness and implementation of these guidelines is limited on the ground.^{21 22}

METHOD FOR TYPOLOGY DEVELOPMENT

The typology development followed five stages, influenced by Kluge²³:

1. Identification of the relevant partners to CMRel;
2. Identification of the motivations for establishing CMRel;
3. Defining 'level of engagement';
4. Grouping of existing terms and analysis of empirical regularities between them;
5. Development of a new analytic dimension, 'alignment of interest'.

Several candidate analysis dimensions were drawn on after analysis of the existing literature. Table 1 shows examples of the main typological dimensions previously described in the wider CMRel literature and indicates those which have potential relevance to medical CMRel in triple nexus contexts.

PARTNERS TO CMREL

Civilian actors

Host government departments, foreign government agencies, international organisations (IOs), UN organisations and local, national and international non-governmental organisations (NGOs) may all engage with militaries in a triple nexus context.

Humanitarian organisations focus on access to affected communities and the apolitical delivery of relief in an emergency context. These goals are circumstantially dependent on the humanitarian organisation's adherence to core humanitarian principles, including neutrality, impartiality and independence. This is particularly true in contexts where trust between affected communities and government or other politically aligned groups is limited. Necessarily, this requires that humanitarian agencies maintain a position that is discrete from actors with political or perceived political interests. However, while ideological adherence to humanitarian principles may be considered paramount to some humanitarian organisations regardless of context, the functional utility of this adherence is less immediate in environments where trust between communities and political actors is robust.

Development agencies—which includes NGOs, IOs, UN organisations and government departments—may have similar concerns, and may at times choose to partially align with humanitarian principles according to the context. However, if the context permits, and if doing so would improve the efficiency or efficacy of development project implementation, these agencies may also choose to act with a cooperative or collegiate approach to a wider array of stakeholders, and have more of a focus on stabilisation or even peacebuilding and prosperity agendas. At times, this may include relationships with politically aligned actors, including militaries.

Military forces

Historically, militaries have often established CMRel to generate support from a conflict-affected civilian population, often referred to as the 'hearts and minds' strategy. This may be done to access certain areas unopposed, to gain mission-critical intelligence from friendly populations, or to better ensure the safety of military personnel during tactical operations.

In a triple nexus context, militaries' combatant units can support humanitarian activities by improving or helping provide security to civilian agencies. The most obvious example is military support to peacekeeping operations, or in the provision

Table 1 Existing typologies of relevance to CMREs

Ref. to CMRel in CHE	Author	Primary context	Dimensions described
N	Luckham ⁴	CMRel and the role of the military in determining domestic policies	<ol style="list-style-type: none"> 1. Civil power: civil institution and strength (high vs not high). 2. Military power: military influence and strength (high, medium or low). 3. Boundaries: between the military and its society (integral, fragmented or permeated).
N	Feaver (described in Gurcan) ³	CMRel and the degree to which civilian oversight generates actual control of (mostly domestic) military policies	<ol style="list-style-type: none"> 1. Civilian oversight: intrusive or not intrusive. 2. Military compliance ('working or shirking').
Ni	Byman <i>et al</i> ⁵⁴	Types of contingency operations, particularly disaster relief and CHE (including the degree of CMRel needed, rather than being a typology of CMRel per se)	<ol style="list-style-type: none"> 1. Simple or complex (poorly defined, but related to presence of conflict). 2. Coercive or not coercive. 3. Mission: aid victims or resolve conflict.
N	Staniland ⁵⁵	Different CMREs in Pakistan and India	<ol style="list-style-type: none"> 1. Domestic political variables (institutionalisation and legitimacy—high vs low). 2. Threat configuration (external or internal).
Y	Seybolt ¹⁷	Efficacy of military intervention in humanitarian crises by purpose of activity	<ol style="list-style-type: none"> 1. Humanitarian consideration: address privation or violence. 2. Political considerations: focusing on victims or perpetrators.
Y	Seybolt ¹⁷	Efficacy of military intervention in humanitarian crises by type of activity	<ol style="list-style-type: none"> 1. Help deliver aid. 2. Protect aid ops. 3. Save the victims. 4. Defeat the perpetrators.
Y	Boland ⁵⁶	CMRel according to mandate for military intervention (moral vs legal), and then by primary purpose of military deployment	<ol style="list-style-type: none"> 1. Domestic intervention. 2. 'Traditional' military activity overseas (security, peacekeeping) <ol style="list-style-type: none"> a. With Host State consent. b. Without Host State consent (Responsibility to Protect, etc). 3. Humanitarian cooperation/coordination: <ol style="list-style-type: none"> a. Military provision as secondary mission; b. Direct integration with humanitarian actors.
Y	IASC ⁵³	Health-related military tasks according to risk of impacting humanitarian principles	<ol style="list-style-type: none"> 1. Military mission: peacetime, peacekeeping, peace-enforcement or combat. 2. Type of health action: <ol style="list-style-type: none"> a. Indirect or direct; b. Health specific or not; c. Security of humanitarian actors; d. Risk to humanitarian principles (high, medium or low).
Y	Penner ⁵⁷	Relative productivity of humanitarian CMREs across a range of conflict/non-conflict/disaster settings	<ol style="list-style-type: none"> 1. Disaster/postconflict/conflict contexts. 2. INGO or NGO.
Y	Rietjens <i>et al</i> ⁵⁸	Mechanisms for CMRel in humanitarian emergencies based on information systems processing theory	<ol style="list-style-type: none"> 1. Self-contained tasks, slack resources, vertical information systems and lateral relations.

CMREs, Civil-Military Relationships; INGO, international non-governmental organisation; NGO, non-governmental organisation.

of military escorts to civilian convoys. A military may also undertake a non-security secondary role as a source of generic manpower, for example, by helping to remove debris or delivering aid following a natural disaster.

Many might perceive militaries as homogenous groups, as they all represent a physical manifestation of a foreign policy. However, within any military there are groups with different specialisms, constraints or objectives. The degree to which these constituent groups hold a military nature can differ significantly from the wider military body, including in the relationships the groups have with civilian populations.²⁰ For example, in the UK's military, medical services (excluding veterinary services) and chaplains are legally non-combatant as defined by the Geneva conventions; they do not engage in 'hostile acts... on behalf of a party to the conflict'.²⁴ Medical groups also have professional and ethical codes that may take precedence over their military obligations, and as a result, these groups may merit or seek a different relationship with civilian actors and affected populations.

Importantly, in some militaries, these groups can also be deployed independent of combatant groups. For example, the UK commitment to the 2013–2016 West Africa Ebola Epidemic response largely involved support troops. In addition to medical

groups, other technical professions within a military might aspire to a closer CMRel than their 'teeth-arm' (frontline combat troops) counterparts, such as engineering, logistics, stabilisation, coordination, political and civil affairs, and analysis personnel.

Non-state armed groups

The typology was not designed to include relationships with non-state armed groups (NSAGs). However, as NSAGs become increasingly organised, politically competent and media aware, they often recognise the imperative to provide functions of the state they are seeking to replace or augment. It is conceivable therefore that many of the influence, political and capacity building interests demonstrated by foreign militaries may in fact be shared by NSAGs. Thus, the typology may provide a reasonable starting framework for relationships between these groups and civilian agencies as well.

POTENTIAL MOTIVATIONS FOR ESTABLISHING MEDICAL CMREL Influence

Humanitarian groups are generally clear about their motivations for interacting with the military, whether that is simply to protect

and promote humanitarian principles, avoid competition, minimise inconsistency or, when appropriate, to pursue common goals.²⁵ At a strategic level, the promotion of the humanitarian agenda can be seen as influence, for example, when the international president of Médecins sans Frontières (MSF) presented to the UN Security Council in 2016.²⁶

The motivations for a military or a state-sponsored civilian organisation entering a CMRel may be more variable.²⁷ These include generic political influence; bettering national security through regional stability, alliances and interoperability; improving resilience through development; realising a humanitarian imperative; affecting public perception at home; or meeting a professional obligation.

Social perception

Social perceptions that drive domestic political and social agendas may also be at play, as an ethical government response to human suffering is perceived to be of paramount importance to populations and voters at home. For example, while the deployment of the UK military to a disaster is almost invariably undertaken at the request of the Department for International Development (DfID), it can also be requested by the Foreign and Commonwealth Office (FCO) if DfID does not deem a military-aided response justifiable from a purely humanitarian perspective.²⁸ This allows military deployment to areas affected by natural events to demonstrate support, rather than because humanitarian relief is necessarily needed. The UK military response to Hurricane Irma in the British Virgin Islands is a useful example.

Social perception is not mentioned as a driver in the literature around such CMReIs, but logically falls as a subset of influence.

Positive health outcomes

Achieving positive health outcomes in triple nexus-affected areas may also be a genuine military motivation, at least inasmuch as health risks in less resilient countries have recognised risks for the security of other countries. Infectious disease outbreaks are the most obvious example, with same-day global travel and long incubation periods for dangerous disease—up to 21 days for Ebola, for example—the concept of quarantine has become untenable, as diseases can move faster than contacts can be identified or international borders can close.

Initiatives such as the Global Health Security Agenda (GHSA) and Global Health Security Alliance sprang from this realisation. These initiatives focus on building capacity to detect and manage potential public health emergencies of international concern at their source by supporting affected nations under the International Health Regulations.²⁹

Some might argue that this capacity building serves to secure the Western world more than it supports health development in the host nation. For example, the GHSA and others recognise that improved health is also linked to a reduction in conflict, as well as improvement in economic and other development indices, with positive knock-on effects to high-income countries^{29 30}:

Healthier populations make for more prosperous and stable societies. When the United States helps improve the health of people in other countries, Americans gain goodwill and strengthen US national security.³¹

However, while other motivations are made explicit (and are perhaps referenced to gain broader political support in legislative bodies), the motivation is still health-based in real and meaningful ways.³²

In addition, militaries often have access to areas of healthcare (eg, those provided by host-nation militaries) that are less available to civilian organisations. In some countries, this sector is sizeable. In Pakistan, for example, it is estimated that 10 million people access their healthcare through the military.³³

Professional obligations

Perhaps unique to military medical elements are professional obligations placed on healthcare workers (HCW). Many medical systems require doctors to improve their knowledge and clinical skills, to seek excellence in clinical care and delivery and to aspire to medical best practice.³⁴ Understanding ‘best practice’ requires knowledge sharing within the medical community, including the civilian medical community.

However, these technical aspects are not the only areas of military medical professional obligations. Importantly, there are also extensive duties to the patient and to other HCW. In many countries and areas, these are clearly described ethical duties, and include compassion and altruism, which are motivations aligned closely with a humanitarian rationale. Indeed, it is important to note that military HCW are granted the same protections under the first Geneva Convention.

Critically, these professional obligations are not voluntary. To use the UK as an example once more, the UK General Medical Council is clear that a HCW is ‘personally accountable for (their) professional practice and must always be prepared to justify (their) decisions and actions’.³⁵ While the challenges of dual loyalties for military medical personnel are well described, UK Military Medical Officers are explicitly ‘doctors first’, and many believe this should hold true worldwide.^{36 37} While other technical functions do not have such clearly defined professional obligations, other groups supporting healthcare delivery (eg, logistics and engineering corps involved in healthcare facility construction or medical supply chains) are arguably also captured by these obligations.

Professional obligations are not described in the literature as key motivations for CMR—perhaps because on an organisational or state level, personal obligations are unlikely to be important. They are however likely to be drivers for many of the personal interactions that occur ‘on the ground’. As they result from a fundamental desire to see a health benefit, this group is included under ‘positive health outcomes’.

Humanitarian imperative

As a motivation for establishing CMRel, disaster relief overlaps with positive health outcomes, but may also appear to meet the humanitarian imperative of saving lives and relieving suffering. On occasion, the military may be doing this at the direct request of a humanitarian agency or affected-country government (as in the 2013–2016 West Africa Ebola Epidemic), and so might be considered a genuine part of a foundationally humanitarian response.³⁰

GROUPING EXISTING TERMS: THE BASIC TYPOLOGY

Terms in common use were grouped, with key factors relevant to the above dimensions highlighted. Each group was given a type, iteratively derived from the individual terms.

Military-led Civil-Military Coordination

Military-led Civil-Military Coordination (CIMIC) primarily serves military and/or national security objectives, and so includes information and intelligence gathering, access permissions and

other *'hearts and minds'* activities. CIMIC activities may also serve secondary purposes, such as relief activities.

CIMIC CMRel are specifically between a military and a civilian agency or community and are widely described. Key examples include the USA's Civil-Military Operations (CMO), North Atlantic Treaty Organization's (NATO's) CIMIC and Canada's Civil-Military Cooperation (CIMIC/COCIM).^{38–40}

Defence engagement (DE) is defined by a focus on national influence and security through overseas capacity-building and conflict prevention.⁴¹ As with CIMIC, DE does not preclude benefit to other agencies or populations, but these are generally secondary effects. DE also prefers military-to-military relationships, although civil-military interactions are explicitly encompassed in the doctrine.

Doctrinally, these CMRel historically sat predominantly at the tactical level (such as the Medical Civic Action Programme in Vietnam⁴²), although recent changing doctrine has seen a greater role at the operational level. The exception is DE, which started at the strategic and operational levels and has far less application at the tactical level.

Civil-Military Healthcare Engagement

Civil-Military Healthcare Engagement (CMHE) includes CMRels that emphasise health benefits as a primary outcome. Motivations for CMHE can range from ensuring health security at home, to an altruistic interest in improved global health generally, to targeted humanitarian-like interests in securing the health of a triple nexus-affected population.⁴³ Improved host nation health is a specified objective of CMHE, regardless of other motivations.

A predominantly civilian-led example of CMHE are Global Health Security initiatives, including the GHSA. More military-focused example is the USA's Global Health Engagement. As noted above, UK Defence Healthcare Engagement (DHE) is technically DE activity carried out by a medical unit. However,

given DHE's inevitable health focus and an increasingly nuanced approach to capacity building, it is better accommodated within CMHE.⁴⁴

These CMRel sit predominantly at the strategic and operational levels.

Civilian-led Civil-Military Coordination

Civilian-led Civil-Military Coordination (C-CMC) emphasises the primacy of civilian objectives and leadership, and includes IHL, international humanitarian disaster relief law (IDRL) and UN CMCoord. As such, they cover the entire spectrum from international strategies to manage health risks, thorough operational relationships in disaster zones, down to the interaction between force elements and civilian agencies on the ground.

Common CMRels are shown at Table 2, grouped according to the above types. Characteristics from within each CMRel's definition are highlighted to illustrate how they fit into that type.

THE LEVEL OF ENGAGEMENT

The level of engagement ranges from strategic interests and effects, through the operational level, to tactical *'on the ground'* impacts. While most militaries have a shared understanding of these terms, civilian meanings often differ. For the purposes of this analysis, the UN description is used, whereby *'strategic'* refers to international-level work, *'operational'* refers to work at the country-level or cross-sectoral areas within a country and *'tactical'* refers to district-level work or work in an individual technical area (ie, a single cluster).⁴⁵ This description has sufficient overlap with the military definitions that it provides a workable framework for CMRel discussions.

Predominantly strategic CMRel include DE, where activity short of the application of force is undertaken by a military to increase their nation's influence.⁴⁶ This influence may eventually support national interests through treaties or trade agreements.

Table 2 Examples of commonly described CMRels and relevant extracts from their definitions, grouped according to overarching type

Overarching type and key characteristics	Exemplar CMRel in use	Characteristics as they appear in the definition
Military-led Civil-Military Coordination: ▶ primarily serves military and/or national security objectives	NATO CIMIC	The coordination and cooperation, <i>in support of the mission</i> , between the NATO Commander and civil actors. ³⁹
	US Civil Military Operations (CMO)	The activities performed by military forces to establish, maintain, influence or exploit relationships between military forces and indigenous populations and institutions (IPI). <i>CMO support US objectives</i> for host nation (HN) and regional stability. ³⁸
	Canada CIMIC/COCIM	The coordination and cooperation, <i>in support of a mission</i> , between the military and civil actors. ⁴⁰
	UK Defence Engagement	To prevent conflict, build stability and gain influence. (It) <i>projects influence, promotes our prosperity and helps to protect our people ... in short, it is vital to UK interests.</i> ⁴¹
Civil-Military Healthcare Engagement ▶ emphasises health benefits as a primary outcome	US DoD Global Health Engagement	Promote and enhance PN stability and security; <i>develop military and civilian PN capacity</i> ; build trust, confidence and resilience; share information; coordinate mutual activities and maintain influence. ⁵⁹
	Global Health Security (GloHSA defn)	To <i>establish resilient health systems</i> in order to promote peace and security for all. (Emphasises) the interconnectedness between security and health, requiring a multisectoral approach. ²⁹
	Global Health Security Agenda	To help create a world <i>safe and secure from infectious disease threats</i> ... GHSA pursues a multilateral and multisectoral approach to <i>strengthen both the global capacity and nations' capacity</i> to prevent, detect and respond to human and animal infectious diseases. ⁶⁰
Civilian-led Civil-Military Coordination ▶ emphasises the primacy of civilian objectives and leadership	UN Civil Military Coordination	The essential dialogue and interaction between civilian and military actors... that is necessary to <i>protect and promote humanitarian principles</i> , avoid competition, minimise inconsistency and, when appropriate, pursue common goals. ¹⁸

CMRel, Civil-Military Relationships; DoD, Department of Defense; GHSA, Global Health Security Agenda; NATO, North Atlantic Treaty Organization.

From a civilian perspective, these strategic CMRel would include advocacy for respect of IHL on the international stage.

The operational level focuses on enabling activities such as interoperability and coordination. From a civilian perspective, an excellent example would be the UN OCHA Civil-Military Coordination Field Handbook, which describes how a coordinated CMRel is established and functions in country, especially after natural disasters. In terms of military terminologies, this would be well described by the USA's Department of Defense concept of CMO, where the outcome is defined in terms of US objectives for host nation or regional security.³⁸ UK DE has recently developed to include specific activities not normally considered 'influence related', such as capacity building and conflict prevention, and so also includes operational-level interventions.⁴⁷ DHE, by definition, serves the same purposes, and is undertaken by a medical unit within the health sector.⁴⁸

At a tactical level, interactions with local people might result in information and intelligence being shared with militaries, or by improving a military's freedom of movement in difficult-to-access areas. This fits Civil-Military Cooperation (CIMIC) as defined by NATO, where the purpose of CMRel interaction is 'in support of the mission'.⁴⁸ It also describes the IHL duties of

an occupying forces to ensure aid provision (even, in extremis, by direct delivery) to a civilian population in wartime.

The key types from Table 2 can now be mapped against the level at which the activity is most commonly seen (strategic to tactical) to generate Figure 1.

GAUGING THE VALUE: ALIGNMENT OF INTEREST AS A NEW DIMENSION

A simple description of CMRel types is of academic interest but attaches no sense of value to the CMRel. Given the controversies and debate around CMRel, any typology should attempt to convey some sense of which relationships might be beneficial and which have the potential to be contested or difficult.

UN OCHA believes the appropriate degree of CMO is largely determined by the degree of the affected area's physical conflict.^{18 25} CMRel defined as such may only require coexistence, which means nothing more than deconflicting activities and ensuring protected sites can be appropriately safeguarded under IHL where there is active conflict. This is usually advocated in contexts where any degree of humanitarian activity associated with a perceived party to the conflict may threaten a humanitarian organisation's perceived neutrality.

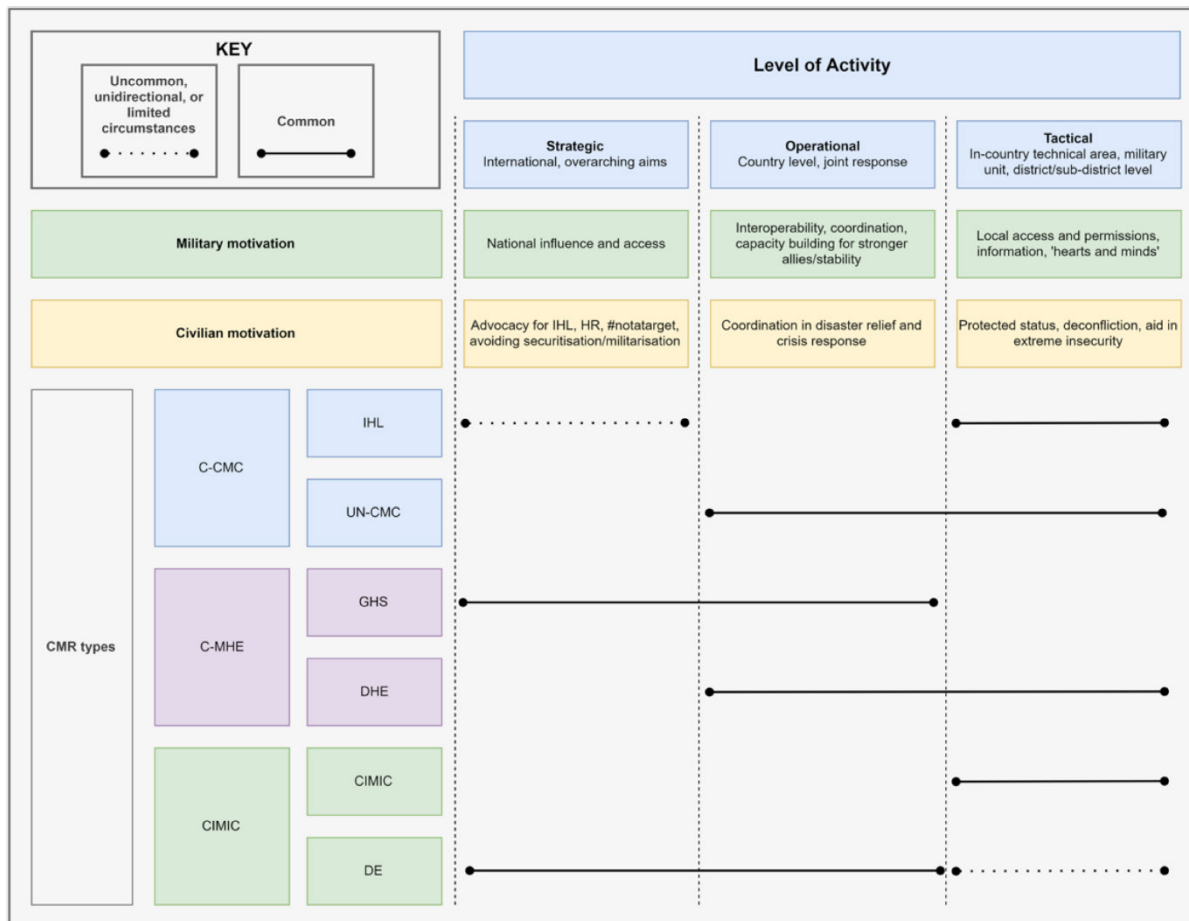


Figure 1 Civil-Military Relationships (CMRel) types mapped against objectives and level of activity (strategic to tactical). CMR, Civil-Military Relations; DE, defence engagement; DHE, Defence Healthcare Engagement; HS, Global Health Security; IHL, international humanitarian law.

However, while this guidance concentrates on level of conflict—contrasting peacetime disaster relief with complex emergencies (where conflict is an integral part of the context)—*alignment of interest* might be a more appropriate description.^{13 49} This is because low levels of an affected populations' trust or engagement with military personnel or bodies does not only arise during conflict settings.

Furthermore, ubiquitous access to the internet and media means that neutrality is not simply a matter of not taking sides in a conflict. Effective neutrality requires total disassociation from political agendas, but activities are increasingly identified as politically motivated even when all efforts have been made to avoid association. The recent attacks on the MSF Ebola treatment facilities in the ongoing DRC Ebola outbreak are cogent and worrying examples, as are a number of attacks on other humanitarian agencies by terrorist organisations in recent years.⁵⁰ Development activities in particular are often closely associated with donor government political objectives, and so even in ostensibly peaceful or non-conflict areas, CMRel might imply affiliation and shared political motives between humanitarian and civilian actors, militaries and governments.

Throughout the above examples, it is tacitly assumed that the relationship will be negative and therefore requires constraining, and this is undoubtedly often the case. However, there are clear examples of CMRel that should not be problematic and have resulted in significant synergies that existing dialogue does not consider, including operational planning on integrated UN missions.⁵¹ Furthermore, in UN OCHA guidance regarding permissive conditions where there is no violent conflict, civil-military cooperation is used to capture an expansive and inclusive range of CMRel. This might include information sharing, or task allocations that maximise the effect of resources, limit competition and otherwise facilitate synergies. This is frequently advocated in peacetime natural disaster responses. Equally, in some conflict settings, military personnel or bodies may be more trusted than other groups or agencies, particularly in their ability to provide not only relief but also protection. In these situations, common interest between militaries and affected populations may reflect a dimension whereby CMRel can make valuable and positive contributions, rather than acting as a tool to merely avoid negative impacts.

Thus, '*alignment of interest*' (which may be positive, neutral or negative) must be considered as an additional dimension. Three elements appear to impact '*alignment of interest*', and so on the positive or negative potential of the CMRel, those being purpose, proximity and perception.

Purpose

If all agencies involved in CMRel share a broadly common set of objectives (such as providing life-saving aid to a disaster-afflicted community), it is possible that there will be significant synergies, as long as the relationship is managed effectively. This is probably also true when purposes diverge by degree, as long as they are believed to be broadly aligned, for example, genuine capacity-building interests or improving basic population health. In contrast, where one activity seeks to improve health, and the other simply provides an excuse for a foreign military to undertake overseas training, there is likely to be a degree of friction. A similar distinction has been couched as '*complimentary or competitive goals*'.⁵² Critically, shared goals between civilian and military actors are not enough. What matters is the degree to which the affected population (or other local armed/political actors) value those same goals.

Proximity

The closer the physical proximity of civilian and military actors to the supported community, the more pronounced the effects of differences of purpose. If a military is building a school in one state to facilitate access to political leaders, while in another an NGO is building to meet a humanitarian need, the friction generated by the two activities will be less pronounced than if they were in adjacent villages. Similarly, the relationship will be far more constrained when both actors are side by side in a fragile state, compared with when they meet at an international conference setting strategic priorities. Tactical interactions will always be higher risk and more challenging than strategic ones.

The political reach of foreign militaries (and their distinct networks) may also make strategic interactions more productive, through perspectives, academic approaches, equipment, resources capabilities and even stakeholders different from those typically encountered by humanitarians.

Perception

The humanitarian principles of neutrality, independence and impartiality serve the important practical purpose of facilitating access to populations that are distrustful of other groups' motives for providing aid. Any actions that erode them may harm their operations or even place them at risk. For this reason, the principle of '*distinction*' between civilian and military bodies has been increasingly relevant in triple nexus contexts where militaries and civilians are situated in complex, highly charged environments full of conflicting narratives and agendas. The Inter-agency Standing Committee guidelines state that militaries should wear uniform and drive military-marked vehicles to make them visibly distinct from civilians for exactly this reason.⁵³

Distinction may also be important for militaries, in that a visible uniformed presence contributing to the development of a sector may support the military's influence objectives abroad, and could aid in bringing budgetary and popular support at home.

A combination of purpose, proximity and perception allows for the identification of areas where CMRel may be particularly problematic or beneficial. Therefore, '*alignment of interest*' is a more relevant analytic basis for establishing the degree and scale of CMRel, rather than level of conflict.

Establishing a new CMRel typology

Based on identified partners, underlying motivations in the grouping of terms in common use and the '*alignment of interest*' dimension, CMRel can be mapped onto the following six axes:

1. The civilian health objective (humanitarian relief vs development, capacity building, and risk reduction);
2. The military objectives for intervention;
3. The relevant levels of engagement (strategic, operational, or tactical);
4. The relative stability of the area where the CMRel is taking place (area context);
5. The grouped terms that are mapped against the above four axes;
6. The alignment of civilian and military interest (drawn from purpose, proximity and perception) that exists in these spaces.

Overlaying these dimensions generates six discrete operational spaces (Figure 2). The potential risk associated with CMRel can then be judged to be high (red), intermediate (amber) or low (green). In high-risk areas, synergistic CMRel are still possible, but there are likely to be several barriers which mean that

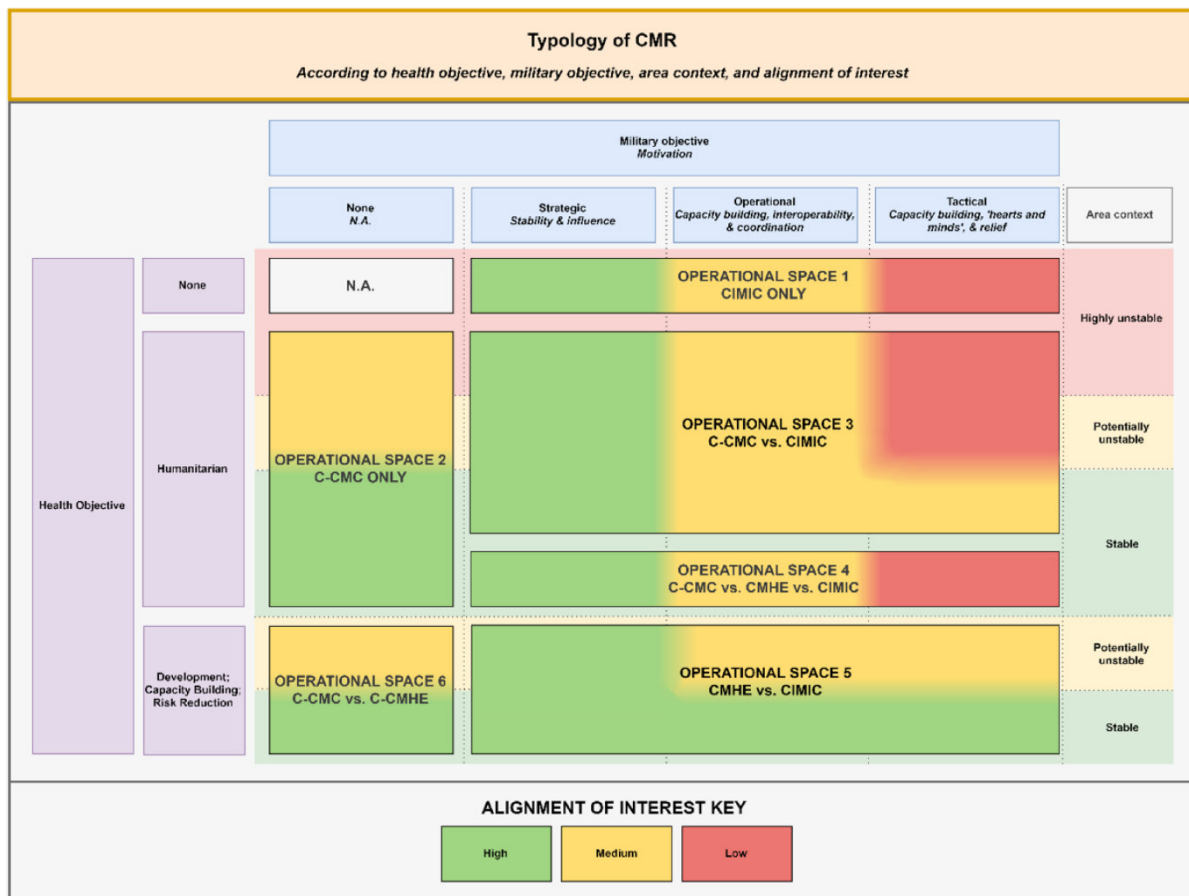


Figure 2 Typology of Civil-Military Relationships (CMRel) according to health objective, military objective and conflict of interest. CMHE, Civil-Military Healthcare Engagement.

damaging CMRel are more likely to occur and may be significantly detrimental. Equally, in green areas, harmful CMRel may still occur, but the conditions are such that if well managed, positive relationships are more likely.

EVALUATING FIT OF EXISTING TERMS MAPPED AGAINST THESE AXES

Overall, the typology appears internally consistent, in that the definitions of the terms match each situation described by the various axes. As such, it should allow a common terminology to help structure discourse about CMRel. Initial analysis also suggests the model has some external validity, as the highest-risk areas predicted by the typology align closely with those already observed and described in the literature. Targeted research in other contexts will be needed to validate the typology as a predictor of beneficial and problematic areas for CMRel.

SUMMARY

CMRel will become increasingly common as governments attempt to extend their influence and enhance their security, using all the means at their disposal, including medical units. Effective debate about what defines appropriate use of these capabilities is hampered by the range of motivations and operational parameters behind them, and worsened by a vast array

of similar and overlapping terminologies and acronyms. This typology allows the various CMRel to be effectively grouped, in a way that is comprehensible to both civilian and military policymakers. The addition of the 'alignment of interest' dimension further elevates the typology from a simple categorical description into a potential tool to predict the risks and benefits of CMRel in a given context.

Twitter Simon Horne @Triagemonkey

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^a The chapter's type-set references are also reproduced within this thesis' references section.^{11,28,35,156,176,181–187,223,345,350,352,353,356,357,362,371,372,442,443,445,464,501,510,597,705,814–840}

RESEARCH PAPER COVER SHEET

Please note that a cover sheet must be completed for each research paper included within a thesis.

SECTION A – Student details

Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone's Ebola Response		
Primary Supervisor	Dina Balabanova		

If the Research Paper has previously been published please complete Section B, if not please move to Section C.

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Stage of publication	In press

SECTION D – Multi-authored work

For multi-authored work, give full details of your role in the research included in the paper and in the preparation of the paper. (Attach a further sheet if necessary)	SH and STB were both responsible for developing the research concept and evaluated scenarios, for verifying research data, and for authorship of this manuscript. SH designed the questionnaire and undertook study recruitment.
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SECTION E

Student Signature	
Date	28/02/2022

Supervisor Signature	
Date	28/02/2022

Thanks is extended to the International Review of the Armed Forces Medical Services' editor-in-chief for granting permission to use the author's accepted manuscript version of this in-press article (received 24 February, 2022).

Understanding the risks of Civil-Military Relationships in Healthcare: a validated typology

Abstract:

Background: Civil-Military Relationships (CMRel) occur in a wide range of contexts and for many reasons. Whether they are harmful, neutral, or beneficial is disputed and context-dependent. A previously published typology suggested a framework for different CMRel across these contexts, and a tool - Civil Military Alignment (CMA) - for estimating associated risks.

Methods: Data about a range of CMRel scenarios was collected from 37 civilian and military participants via an anonymous questionnaire. CMA was ranked using Likert scales from no to most harm. Qualitative free text opinions on the scenarios were then analysed using NVivo and key themes coded, charted, and analysed.

Findings: There was near-complete agreement between military and civilian/other respondents. One scenario was identified as significantly higher risk by both groups when compared with the lowest risk scenario, while another was deemed riskier by the military ($p=0.02$) but not civilians ($p=0.07$). In 403 statements describing scenarios, groups used similar positive and negative word frequencies and value statements. Positive and negative impacts were identified across twelve domains. Six contextual factors set the baseline risk of the relationship, mitigated by adherence to eight principles.

Interpretation: Military and civilian/other personnel viewed the risks of different CMRel scenarios similarly, both quantitatively and qualitatively, validating the previously published typology and the use of CMA as a research and operational tool. This study suggests there can be positive CMRel in addition to harmful ones, and outlines key interventions to reduce CMRel risk and maximise benefit.

Introduction

Civil-military relationships (CMRel) in war are well described and regulated through international humanitarian law (IHL),¹ with humanitarian organisations maintaining distinction from any military activity by applying the principles of neutrality, independence, impartiality, and humanity.²

In contrast, disaster relief, peacekeeping, and stabilization contexts throw up myriad forms of CMRel that are less easily defined and understood. For example, the degree of conflict and the political affiliation or agenda of foreign militaries influences how ‘relatively neutral’ that military is seen to be, which limits the prospective collaboration of humanitarian partners. Transitivity, CMRel might be relatively expansive a peaceful region. Accordingly, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) describes a CMRel spectrum running from co-existence (deconfliction and distinction) to co-operation (co-ordination and task-sharing).³ However, the array of terminology used for the different CMRel that manifest across these contexts causes confusion, especially about the motive of any given military presence, as this terminology often nuances the way a military is likely to behave, what they seek to achieve, and how they will interface with the civilian sector (for example, whether they are operationally subordinate to the civilian mission).

To help resolve this confusion, a healthcare-focused typology was previously published that captured and clarified some of these contextually-dependent CMRel.⁴ It grouped different CMRel according to the main mission: Civil-Military Coordination (CIMIC), where the primary driver for the relationship is a military outcome; Civilian-led Civil-Military Coordination (C-CMC), where the civilian mission has primacy; and Civil-Military Healthcare Engagement (CMHE), where a healthcare outcome is the main objective of all parties involved. The concept of ‘Civil-Military Alignment’ (CMA) was proposed to further delineate where and how CMRel might be harmful or synergistic, and mapped across different contexts as a ‘heat map’ of risk (Figure 1). Some—such as the military use of CIMIC to win ‘hearts and

minds' in conflict—are widely described in the literature as high risk. Others—namely, military involvement in longer-term stabilisation type projects—are not well described.

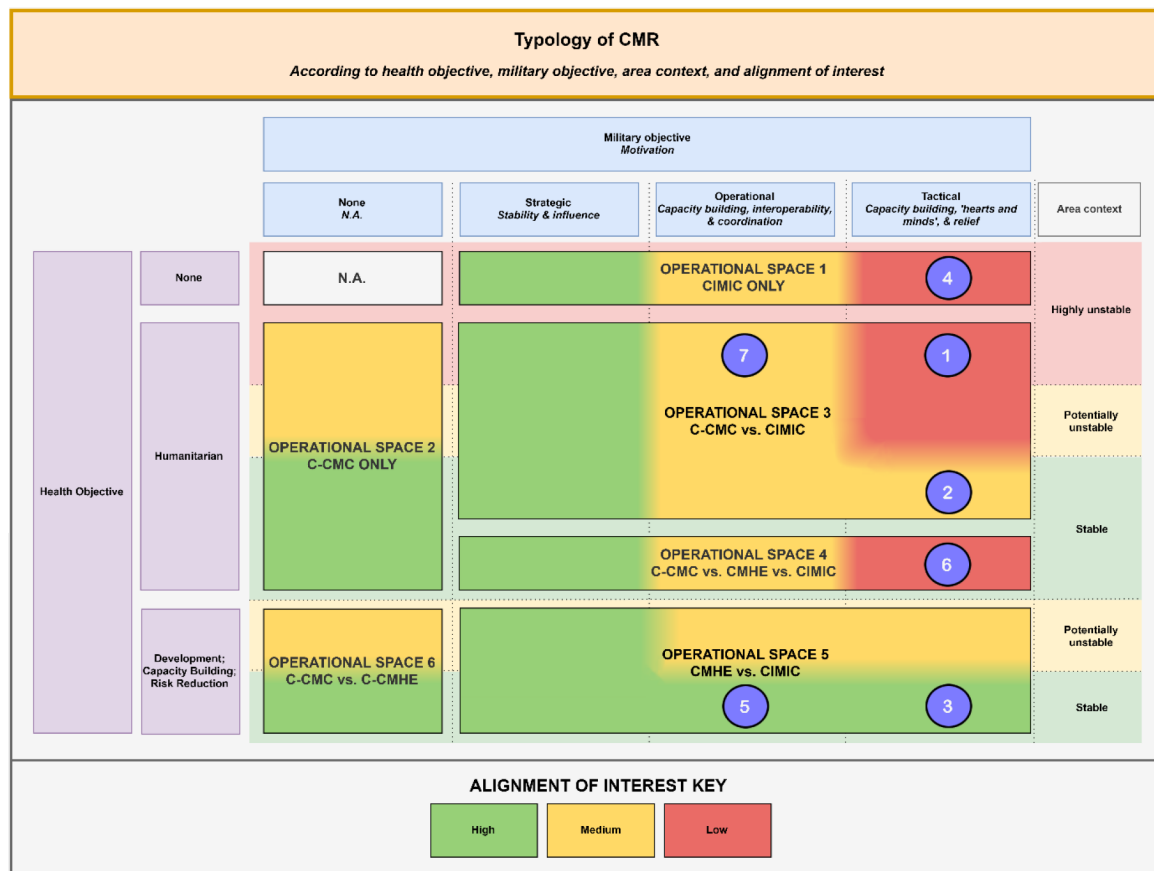


Figure 1: The previously-published typological risk map, with scenarios evaluated in this study as overlaid in blue

While the prior study proposed a new CMRel typology, the concept of CMA, and the associated 'heat map' of contextual risk, it did not test the typology. This study fills this important research gap, testing the typology against the lived experiences of civilian and military practitioners, thereby representing the first attempt to validate any CMRel typology. It establishes that respondents from different professional backgrounds rate the CMA of given scenarios similarly, which suggests CMA is a viable tool for the further study of these contexts. It also provides practical insights into understanding and developing CMRel further, something which will be critical to minimizing CMRel harm and maximizing CMRel benefit in an increasingly complex, fragile, conflict-affected, and multipolar world.

Methods

This study used a web-based questionnaire hosted on smartsurvey.co.uk. Recruitment occurred between May 2018 and May 2020 through a snowballing method: the questionnaire was advertised at courses, conferences, meetings, and online. Any civilian or military adult with experience or interest in aid, development, or peacebuilding was eligible for inclusion. Participation in the study was voluntary and anonymous. Consent was attained prior to completing the questionnaire.

37 respondents self-selected for participation (Figure 2). Their CMRel experience was self-reported on a Likert scale from 0 (no experience) to 5 (vastly experienced) across three contexts: humanitarian, civil-military and development. Most respondents were moderately or highly experienced in humanitarian (78%) and civil-military contexts (78%), but less so in development contexts (45%).

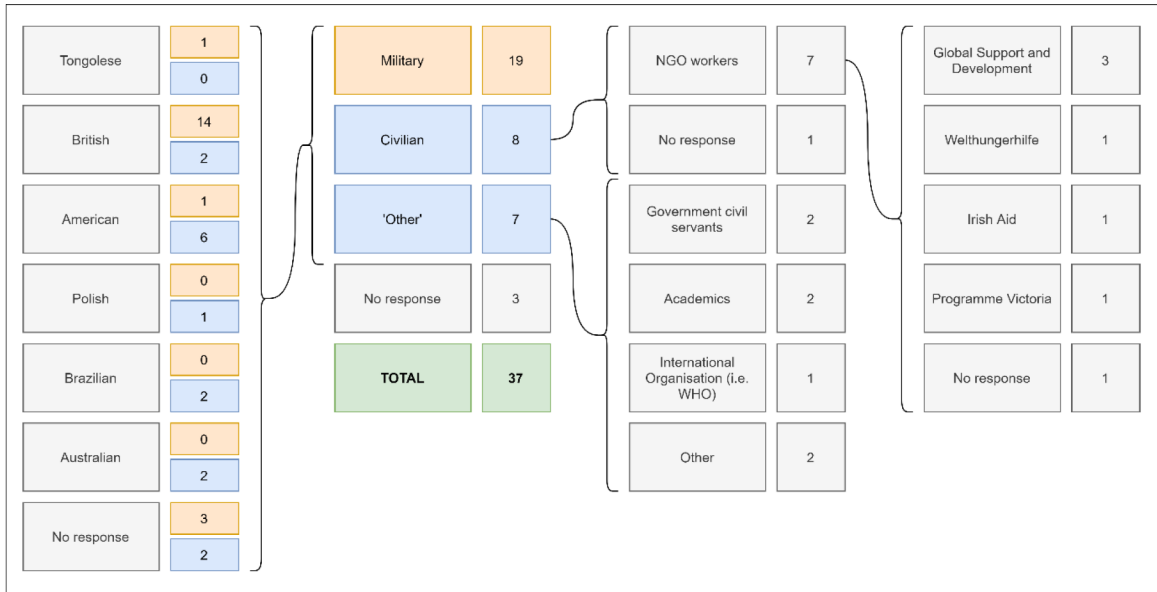


Figure 2: Respondent groupings and demographics

Seven areas of the previously published heat-map were chosen, covering a spectrum of high, medium, and low risk contexts (Figure 1). Purely strategic-level CMRel were not included as the typology predicted they would be non-contentious. A scenario was designed for each of the seven areas based on real activities that occurred in the last 20 years (Table 1). To test validity, two military and one civilian academic were asked to independently verify scenario placement. There was uniform consensus therein. Respondents quantitatively graded each scenario on the extent of harm they associated with the CMRel described from 0 (no harm) to -5 (likely severe harm) and then qualitatively elaborated in free text.

#	Example	Civil-Military Relationship (CMRel) Type	Predicted risk
1	Food distribution under International Humanitarian Law (IHL) in war (Tactical)	Civilian-led Civil-Military Coordination (C-CMC)	High
2	World Health Organization (WHO) coordinated vaccination programme	C-CMC	Medium
3	Long term health system development (Tactical)	Civil-Military Healthcare Engagement (CMHE)	Low
4	'Hearts and minds' counter-insurgency (Tactical)	Civil-Military Coordination (CIMIC)	High
5	Long-term development programme (Operational)	CMHE	Low
6	Uncoordinated opportunistic - for access (Tactical)	CIMIC	High
7	Interagency development - Peacekeeping (Operational)	CMHE	Medium

Table 1: Descriptions of the test scenarios, and risk as predicted by the typological map (Figure 1)

Accordingly, analysis included quantitative and qualitative methods. Numerical data was imported into Excel. Mann-Whitney rank sum tests were used to compare the perceptions of the various groups, and to compare responses between the scenarios. As no statistical significance was found between the replies of the civilian and 'other' groups, these were analysed together, as the 'other' group (which included two government civil servants, two academics, and a WHO respondent) fell within the civilian categorisation.

Qualitative data was imported into NVivo™ (QSR International). Word frequencies were extracted for each group, limited to the top 100 words, and excluding common exception words; stem-words were analysed together (e.g. buil-t, buil-ding). Similar terms were then manually grouped (e.g. 'army', 'military', 'troops', and 'forces' were all grouped as 'military'). These dominant groupings became the foundations of the thematic analysis. Value statement analysis was also undertaken, building on the concept described by Tricco.⁵ Potentially positive and negative terms in the top 100 words were reviewed in context, to determine whether they were indeed being used as unambiguous value statements. This allowed comparison of the frequency of positive or negative value statement by each group for each scenario.

The key terms identified above formed the basis of an iterative process of thematic derivation based on the process described by Schreier.⁶ First, similar terms were grouped as major dimensions. Those of lower frequency that seemed to capture novel or important concepts were also identified and initially coded as ‘other’. Subsequently, all data within each dimension was again grouped, the commonalities between them described, and the grouping named. Each named group of similar data thus became a described theme. As the source of each datum was already classified as military, civilian, or other, each theme was analysed according to how often it was expressed by each group.

Ethical approval for this study was provided by King’s College London Research Ethics as a Minimal Risk Registration (RS-17/18-8376). The United Kingdom (UK) Military component was covered by the UK Military Research Ethics Committee (MODREC, approval 782/MODREC/16).

Role of the funding source

Study sponsors were not involved in the study design; collection, analysis, or interpretation of data; in the writing of the report; or in the decision to submit the paper for publication.

Results

Quantitative evaluation of risks of each scenario

There is general consensus in medians for each group (civilian, other, combined civilian and other, and military) across the various scenarios (Figure 3), where 0 represents no risk and -5 represents likely severe risk. However, the military and civilian/other group disagreed about the degree of risk associated with the CMRel in Scenario 1 ($p=0.0268$). No other p value approached significance. Both the military ($p=0.05$) and civilian/other respondents ($p=0.02$) perceived a significant difference between the risks associated with Scenario 4 (*) and Scenario 5 (♣); Scenarios 5 (♣) and Scenario 6 (♠) were perceived as different by military respondents ($p=0.002$), but not the civilian/other group ($p=0.07$).

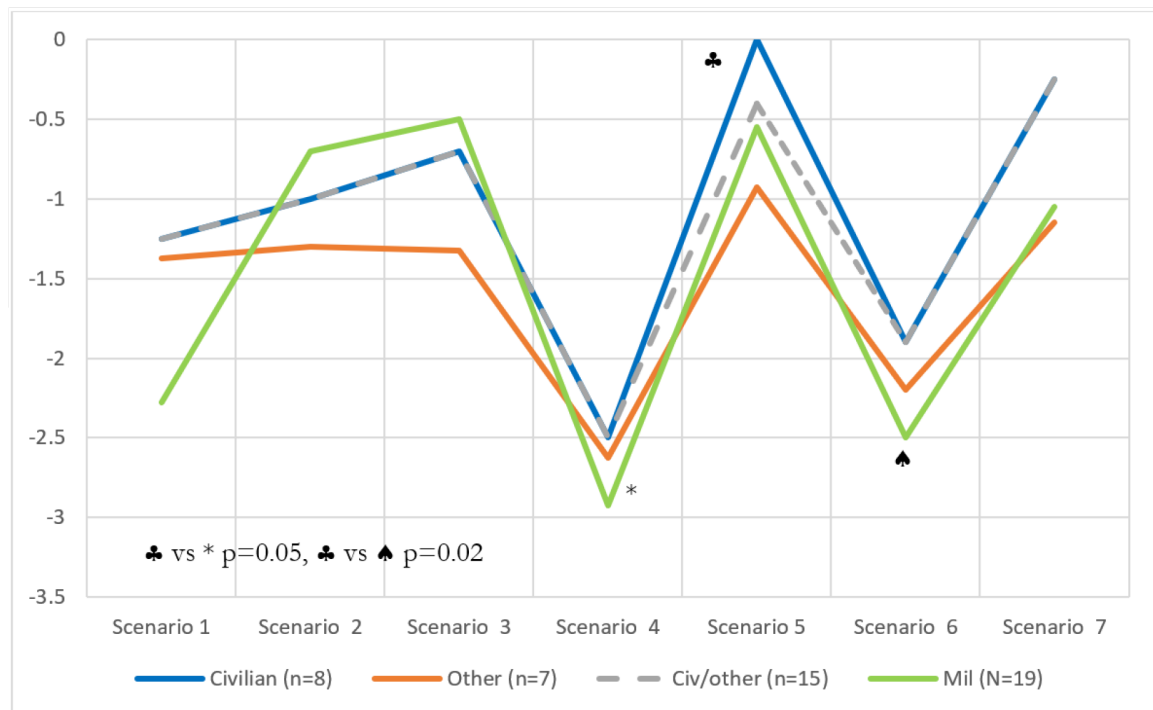


Figure 3: Median risk from 0 (none) to -5 (severe) posed to civilians in each CMRel scenario by respondent group

The use of value-based terms by the two groups was similar. Table 2 shows the most common value-based terms and frequency of use by group. A simple z-test of two proportions showed no significant difference between civilian and military perceptions of the scenarios.

Negative term	Frequency		Positive term	Frequency	
	Military	Civilian		Military	Civilian
Risk-s, -y	0.57%	0.20%	Good	0.61%	0.49%
Bad-ly	0.04%	0.39%	Well	0.38%	0.10%
Poor	0.04%	..	Positive-ly	0.19%	0.49%
Harm -ed-ing-ful	0.09%	0.10%	Benefit-s-ial-ing	0.05%	..
Impact-s-ing-ful	0.14%	0.39%	Build-s-ing	0.05%	..
Disrupt-ion-ing-ed-ive	0.05%	..	Help-s-ing-ful	0	0.10%
Tension-s	0.94%	..	Increas-e-ing	0.05%	..
Friction-s	0.61%	0.68%	Support-ed-ing	0.10%	0.59%
Blur-ed-ing	0.05%	0.05%	-	-	-
Problem-s-atic	0.05%	0.20%	-	-	-
Total	2.64%	2.01%	Total	1.32%	1.77%
P value (Z test): 0.45 (not significant)			P value (Z test): 0.46 (not significant)		

Table 2: Positive and negative value-term frequencies in military and civilian descriptions of the scenarios

123 value statements were coded: 73 positive, 42 negative, and 5 equivocal. Military respondents were concerned about harm in 19.8% of their replies, and civilian/other respondents in 20.6%. The frequency of value term use by scenario is shown in Figure 4.

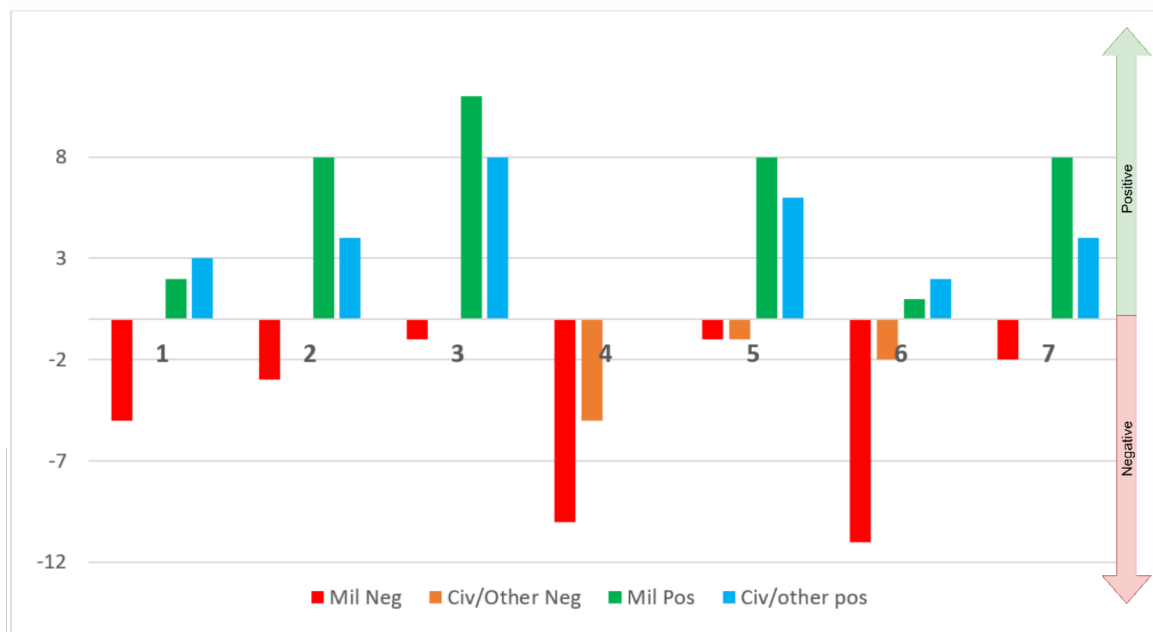


Figure 4: Value statement frequencies (military and civilian/other) by scenario

Thematic analysis of comments on the scenarios

Three main dimensions were used for the word frequency analysis of free text replies: impact, context, and principles. Impact was then subdivided into harm and benefit. There were 121 military text entries, and 68 in the civilian/other group—many of which were complex and touched on multiple themes. In total, 403 statements were coded: 135 for impact, 41 for context, and 227 for principles. Their detailed breakdown with themes is shown in Table 3.

Dimension	Theme	Statement count		
		Civilian	International Healthcare Actors (IHA)	Military
Impact (negative) on community, international health actors, or military	Unsustainable & expectation raising	13	-	-
	Insecurity & reprisal	9	3	-
	Reputational damage	-	5	4
	Undermine local services and capabilities	3	4	-
	Inappropriate care	5	-	-
	Undermine mission	-	-	3
Impact (positive) on community, international health actors, or military	Increased capacity	29	2	5
	Improved relationship with own military & government	8	-	-
	Boost to reputation & new role	-	-	8
	Greater understanding	-	3	4
	Increased operational impact	-	1	6
	Improved security & essential services	4	1	-
Principles	Co-ordinated	60		
	Culturally sensitive, appropriate	38		
	Sustainable	37		
	Civilian led and owned, community engagement.	34		
	Distinction	24		
	Humanitarian principles and International Humanitarian Law (IHL)	23		
	Last resort	8		
	Crossing the transition zone	3		
Context	Conflict and political tensions	12		
	Military acceptance - usual role, perception	9		
	Competing/Other agendas	8		
	Cultural, ethnic, and religious background	4		
	Temporal and spatial factors	3		
	Competition/pre-existing programmes	1		

Table 3: The coding hierarchy for identified themes and the number of mentions of each. For impacts these are grouped according to whether they are most relevant to civilians, International Healthcare Actors (IHA) or the military

The harm themes were more commonly referenced by the military respondents (32 mentions from 19 participants; mean 1.6 references/participant) when compared with 8 from the civilian/other group (0.5 references/participant). The beneficial themes (41 references) were more evenly distributed between groups, with 17 references coded from the civilian/other group (1.1 references/participant) and 24 from military respondents (1.3 references/participant).

Discussion

The utility of Civil-Military Alignment as a research tool

The quantitative risk attributed to each scenario shows that military and civilian respondents with an interest or experience in fragile, humanitarian, or conflict settings generally rate the risk of various contexts similarly. Indeed, both the ranking and estimates are similar between the two groups. Moreover, the word frequency and value statement analysis closely follow the same pattern of perceived risk associated with each scenario, providing additional evidence that findings are valid. This data provides robust evidence that the concept of CMA represents an appropriate tool to measure the difference in risk between various scenarios.

The remarkable concordance in terms of the perception of risk associated with scenarios implies that military personnel understand the implications of the actions they undertake, and also the wider context,

in order to make value judgements that broadly align with the civilians' answers. This finding echoes that of Bollettino, who examined knowledge of civil-military guidance after Typhoon Haiyan and found that civilian and military respondents had similar levels of knowledge about civil-military guidance and had similar views on the effectiveness and appropriateness of the relationship there.⁷ While the military respondents included in this study may not be representative of the military writ-large, this nevertheless demonstrates that military personnel can be sufficiently informed to appreciate the issues that concern civilian responders.

Validation of the previously published typology

The original typology predicted increased friction in contexts that were tactical (i.e. close proximity to the affected population), and also where the risk of conflict was high. These contexts were represented by Scenario 1 and Scenario 4.^{8,9} By contrast, Scenario 5 was designed to represent a minimally contentious area. All groups perceived Scenario 4 as being significantly more harmful than Scenario 5 in terms of quantitative score, and the value statement analysis reinforces this.

Scenario 1 is less clear cut. While there would seem to be a trend towards harm, the risk estimate is not significantly different from the 'benign' Scenario 5, and the value statements were more balanced. This may be because although the scenario is high risk in its tactical nature and context of conflict, it is a well described and regulated space under IHL, which may have moderated concerns about the harm it represents.

The typology also predicted that stable contexts with long-term health development programmes might see disruption from uncoordinated military development activities (Scenario 6). This is not a situation that appears to be described in the literature, perhaps because its impact is unlikely to be felt in violent terms but rather vis-à-vis disruption to programming. However, both military and civilian/other respondents considered this setting to be of significantly higher risk than Scenario 5. Again, the value statement frequency data appears to strongly support the risk estimates.

The thematic analysis, and predictors of benefit or harm

The thematic analysis explored what made scenarios seem higher or lower risk. The primary analysis dimensions were impact (sub-divided into harm and benefit), principles, and context. While the importance associated with each theme was not directly evaluated, the number of times it was mentioned plausibly indicates this. Therefore, themes were ordered by how often they were referenced in the data. The analysis also breaks down by who the impact was linked to, that is, whether an effect was likely to be felt predominantly by military personnel, the local population, international healthcare actors, or all three.

Impact

Harm

The potential negative impacts are unsurprising and generally well documented in the literature.¹ More interesting is the relative prominence of prospective harms, with risk of reprisal and the establishment of unsustainable programmes that generate unrealistic expectations of healthcare being the gravest concerns for both groups. Reputational harm is also scored highly by all respondents. Inappropriate care was described as either 'direct' or 'indirect'.² 'Inappropriate care' is plausibly linked to 'undermining local services', where the military activity displaces (or at least fails to properly engage with) the local health system or the activities of other actors. Finally, there was risk to the military mission—either because the

¹ See, for example, *The ICRC and civil-military cooperation in situations of armed conflict* (2000),¹⁰ or *Partners Apart: Managing Civil-Military Co-operation in Humanitarian Interventions* (2000).¹¹

² A 'direct' example being military doctors being ill-prepared/equipped to carry out a safe intervention; an 'indirect' example includes unsuitable military equipment being left behind.

activities distracted from the main mission, or were not received as well as hoped and subsequently undermined local support.

Benefit

Potential benefits arise from better training and improved essential services, typically because of infrastructure and equipment improvements. Here the military effect mirrors the intended impact of civilian health programmes, but increased capacity was mentioned as a benefit for all groups—with the military benefitting from enhanced ‘force readiness’ and civilian health actors potentially benefitting from new field-tested technologies, techniques, and training. Several respondents mentioned that better service provision from a (supported) host-nation military might serve to boost public confidence in the armed services and the government more generally. At the same time, it was felt to be beneficial for the foreign militaries involved, boosting their reputations, and potentially offering new roles. Finally, the international health actors and militaries were both predicted to benefit from better mutual understanding, which could lead to greater operational effectiveness.

Principles

Whether a CMRel was beneficial or harmful was felt to depend on the degree to which it aligned with key principles, most prominently coordination with other healthcare actors and the host nation’s health development plan. Both are widely described in the civil-military literature.^{12,13} These were closely followed by statements regarding sustainability, cultural appropriateness, and civilian ownership or leadership of interventions and service delivery. The next group of principles focussed on Humanitarian Principles and civil-military guidance—with the principles of distinction (from the IASC guidance),¹⁴ use of militaries as last resort (from the Oslo guidelines),¹⁵ and neutrality, independence and impartiality (from the Humanitarian Principles) all major themes. Finally, there were three references to effects of crossing the transition zone between military and civilian healthcare sectors (or vice versa), where capacity built in one sector subsequently improved capacity in another. This is likely to be more pronounced in countries where military hospitals also have civilian staff, where staff commonly move from one system to the other taking their knowledge with them, or where the military contribution to civilian health sector is large.

Context

Six themes were identified within context that would modify the impact of an intervention. Most prominent was tension in the area, whether physical conflict or political instability. This aligns well with the typology’s prediction that unstable areas are considered the highest level of risk. It also links to the later theme of temporal and spatial CMRel considerations—with tactical level activities deemed riskier, while more discrete and less visible alternatives were considered less so (thus reinforcing the principle of distinction). Another contextual factor was the popular perception of the military—particularly its ‘normal’ role—with activities closer to the norm being more palatable. Inextricably linked with this was past governmental and military behaviour. Other parallel or hidden agendas also featured, with support clearly linked with a political or military ambition deemed less helpful. Lastly, one theme considered how the presence of pre-existing and similar programmes might suffer from new competition.³

Limitations of this study

The initial thematic analysis was performed single handed, so the themes drawn out may be biased by individual interpretation. This was mitigated through a second round of inductive coding (according to

³ Findings are compatible with a previous study aligned with Scenario 7.¹⁶ Themes there were: capability and quality of care; medical rules of eligibility (vs impartiality); distinction; last resort and insecurity; capacity building (host nation and other partner organisations); limited mutual understanding; organisational resistance; and philosophical differences between civilian and military actors.

best practice)⁶ eight months later, that was then compared and contrasted with the initial code frame. The use of word frequency as the basis of the analysis with subsequent iterative grouping was also implemented to minimise bias. Together, these measures make it unlikely that key categories are being systematically missed or obscured.

Respondents were only asked about harm. This reflects an unconscious bias at the design stage, which incidentally reflects the state of the literature. Therefore, the quantitative data cannot show that a scenario is considered beneficial, only that it is less harmful. The qualitative data in, contrast, strongly suggests that there can be beneficial CMRel.

Finally, the sample size is small. The positive findings were statistically significant and so can be considered valid, but the study may have been underpowered to detect other differences in risk estimates. The concordance between qualitative and quantitative data strongly supports the findings, and the median time for completion was 27 minutes (a total of over 15 person-hours of data), mitigating this limitation.

Conclusion

This study established that the concept of CMA is easily understood, generates consistent results, and could be applied to the study of such relationships *in vivo*. It used qualitative and quantitative data to successfully validate a previously published typological analysis of the risks of CMRel. The responses confirm the risks associated with well-described contexts such as ‘hearts and minds’ activities in conflict areas. They also support the theory that longer-term military activities in stable contexts may be disruptive. Critically, this is the first evidence using the typology to suggest that CMRel may also be beneficial not only to militaries but local civilians and international healthcare actors in some contexts if carried out appropriately. Six context themes were identified as the main pre-determinants of risk, and adherence to eight groups of principles was deemed necessary to ensure maximum benefit and minimised harm during CMRel.

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SECTION A – Student details

Student ID Number	1603078	Title	Mr.
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Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone’s Ebola Response		
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SECTION E

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Civil-military relations: a review of major guidelines and their relevance during public health emergencies

Samuel T Boland ,¹ C McInnes,² S Gordon ,^{3,4} L Lillywhite³

¹Department of Global Health & Development, London School of Hygiene and Tropical Medicine, London, UK

²Department of International Politics, Aberystwyth University, Penglais, Aberystwyth, United Kingdom

³Royal Institute of International Affairs, London, UK

⁴Department of International Development, London School of Economics and Political Science, London, UK

Correspondence to

Samuel T Boland, Department of Global Health & Development, London School of Hygiene and Tropical Medicine Faculty of Public Health and Policy, London WC1E 7HT, UK; boland.sam@gmail.com

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ABSTRACT

The operational and policy complexity of civil-military relations (CMR) during public health emergencies, especially those involving militaries from outside the state concerned, is addressed in several guiding international documents. Generally, these documents reflect humanitarian perspectives and doctrine at the time of their drafting, and primarily address foreign military involvement in natural and humanitarian disasters. However, in the past decade, there have been significant changes in the geopolitical environment and global health landscapes. Foreign militaries have been increasingly deployed to public health emergencies with responses grounded in public health (rather than humanitarian) approaches, while public health issues are of increasing importance in other deployments. This paper reviews key international policy documents that regulate, guide or otherwise inform CMR in the context of recent events involving international CMR during public health emergency responses, grounded in analysis of a March 2017 Chatham House roundtable event on the subject. Major thematic concerns regarding the application of existing CMR guiding documents to public health emergencies became evident. These include a lack of consideration of public health factors as distinct from a humanitarian approach; the assertion of state sovereignty vis-à-vis the deployment of national militaries; the emergence of new armed, military and security groups and a lack of consensus surrounding the 'principle of last resort'. These criticisms and gaps—in particular, a consideration for public health contexts and approaches therein—should form the basis of future CMR drafting or revision processes to ensure effective, safe, and sustainable CMR during public health emergency response.

INTRODUCTION

Civil-military relations (CMR), especially those involving militaries from outside the state concerned, are guided and informed by various United Nations (UN) guidelines, frameworks and policy papers which have evolved incrementally since the 1990s. They generally address the role of international militaries in natural disasters; are international in flavour, rather than focusing on the use of national militaries and are written from a humanitarian perspective reflecting the primary international concern of the early post-Cold War period. Their relevance in a changed environment is thus questionable, especially where militaries are increasingly responding alongside civilian responders to non-conflict public health emergencies such as Ebola or COVID-19. Nonetheless,

Key messages

- ▶ Global guiding documents that inform civil-military relations (CMR) in humanitarian crises have not kept abreast of recent geopolitical changes.
- ▶ In particular, the applicability of CMR guiding documents during public health emergencies (as distinct from natural disaster response guided by standard humanitarian principles) is unclear.
- ▶ Gaps are evident—consideration must be given to the changing international environment, state sovereignty, new armed groups and the principle of last resort.
- ▶ CMR guiding documents should be reviewed on this basis in order to appropriately inform future CMR during public health emergencies.

UN CMR guiding documents are still relied on to inform and critique CMR during these events.

This paper assesses the appropriateness of the current UN CMR guiding documents for the use of militaries in responding to health challenges and concludes with recommendations to inform future revision.

METHODS

The focus of this paper is on those UN policy—what we term 'guiding documents'—in the context of both international and national uses of militaries in public health emergencies.

Key UN policy documents that regulate, guide or otherwise inform CMR were reviewed. Although there are myriad CMR guiding documents and policies from agencies such as Médecins Sans Frontiers, the International Committee of the Red Cross (ICRC) and various military bodies (eg, the USA, the UK and North Atlantic Treaty Organization), because of their centrality in defining CMR policy this review focuses on three documents from within the UN system (Table 1). These documents do not represent the full spectrum of CMR in the humanitarian community. However, they do represent the three core, consensus-driven and global guiding documents that have been adopted and accepted by the UN for wide international consideration and applicability (while part of the 'core four' UN CMR guiding documents, this analysis does not consider the 2013 Inter-Agency Standing Committee (IASC) Non-Binding Guidelines on the Use of Armed Escorts for Humanitarian Convoys. This is because the document addresses the use of armed escorts for



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Table 1 United Nations Office for the Coordination of Humanitarian Affairs guidelines on civil-military coordination

Last revision	Short title	Long title
2004	IASC Reference Paper	Civil-Military Relationship in Complex Emergencies
2006	MCDA Guidelines	Guidelines on the Use of Military and Civil Defence Assets to Support United Nations Humanitarian Activities in Complex Emergencies
2007	Oslo Guidelines	Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief

IASC, Inter-Agency Standing Committee.

humanitarian convoys specifically, rather than providing guiding principles for CMR in humanitarian settings more generally).

Core thematic similarities and distinctions between these documents were mapped to identify the historical and political contexts that informed their development, as well as the operational contexts they seek to inform. The outcome was then considered in the context of global events and conversations surrounding CMR during recent public health emergencies and draws on a March 2017 Chatham House roundtable event and report in which we were observer participants.¹ Roughly 50 participants attended from military, international (I) non-governmental organisation (NGO), governmental, UN and academic backgrounds, with representation from high-income, middle-income and low-income countries.

Criticisms of existing CMR guiding documents for public health emergency response raised during the roundtable were synthesised and explicated to identify gaps which were then used to identify key considerations that should inform future CMR policy documents.

BACKGROUND AND CONTEXT: REVIEWING THE CMR POLICY GEOGRAPHY

The civil-military regulatory domain is complex but comprises five broad groupings of policies specific to CMR²:

1. General guidance on CMR.
2. Guidelines related to a specific emergency.
3. Guidelines on particular elements of CMR.
4. Guidelines relating to specific bilateral arrangements.
5. Intragovernmental arrangements.

Most of the documents that concern international military deployments fall in group 1 and appear to assume the deployment of a Global North military to the Global South. Several key UN guidelines form the basis of most strategic discussion regarding CMR at the international level. Specifically, the UN Office for the Coordination of Humanitarian Affairs (OCHA) maintains three sets of guiding documents as mentioned in Table 1.

The historical and political grounding of each are therefore briefly outlined, followed by an analysis of the general themes shared between the documents.

The IASC Reference Paper

The Inter-Agency Standing Committee (IASC) Reference Paper (2004) is arguably the most comprehensive of OCHA's guidelines, complementing the earlier guidelines and providing guidance for the maintenance of humanitarian principles.³ It argues for the maintenance of the civilian character of humanitarian assistance, the use of military as a 'last resort' and a clear division of labour wherever possible.⁴ Starting from this position of 'difference', the IASC Reference Paper recognises that both civilian and military groups may 'pursue common goals...

(using) basic strategies (that) range from coexistence to cooperation' alongside the 'shared responsibility' of coordination (Figure 1).^{3 5 6}

While the IASC Reference Paper reaffirms the significance of the humanitarian principles (namely humanity, neutrality, impartiality and independence), it is relatively pragmatic in their application, recognising that a humanitarian imperative 'may at times necessitate a pragmatic approach' to CMR.³ However, the IASC Reference Paper contains further principles that limit the contributions of military, stipulating that military relief activities are 'by their nature and definition, not "humanitarian"'.³

Key elements of these principles are listed in Box 1.²

The MCDA Guidelines

The Military and Civil Defence Assets (MCDA) Guidelines were adopted in 1994 by consensus and revised in 2007. They were developed at the request of OCHA and the International Federation of the Red Cross and Red Crescent Societies in response to civil-military interaction in emergencies in the early 1990s, such as the Spitak, Armenia Earthquake (1988) and Operation 'Provide Comfort' in northern Iraq (1991–1996). The guidelines provide a model legal framework for the utilisation of MCDA in humanitarian contexts, and address situations such as man-made and environmental disasters in times of peace (Box 2).

They are intended to establish 'the basic framework for formalising and improving the effectiveness and efficiency of the use of military teams and expertise in international disaster relief'.⁷ Unlike the Oslo Guidelines, the MCDA Guidelines presume a viable host state or government, and also provide civil-military guidance in contexts of peace-enforcement and combat (Figure 2).⁸

The Oslo Guidelines

The Oslo Guidelines, developed in 1994, underpin most global policies and 'were intended to establish principles and standards that would improve (the) coordination and use of military and civil defence assets in response to natural, technological and environmental emergencies in peacetime'.⁵ Emerging under the auspices of the Consultative Group on Humanitarian Civil-Military Coordination, they enjoy a unique status of being internationally agreed and IASC-endorsed and are the 'leading international instrument concerning the role of militaries in the response to natural disasters'.⁹

Key elements of the Oslo Guidelines are mentioned in Box 3.

General themes shared among the guiding documents

These guiding documents are consistent in emphasising compliance with two humanitarian (rather than public health) principles: they emphasise action based on impartial needs assessments, free from discrimination; and the use of military assets only as a 'last resort'. They discourage dependency, encourage maximal civilian operational independence and control and advocate distinction between military and civilian activities. These principles should be maintained, even if they may circumstantially disadvantage beneficiaries. They are intended to regulate international third-party interventions and do not address the consequences of a host nation taking a different view. Health is placed within a broader humanitarian context, rather than defining public health emergency contexts.

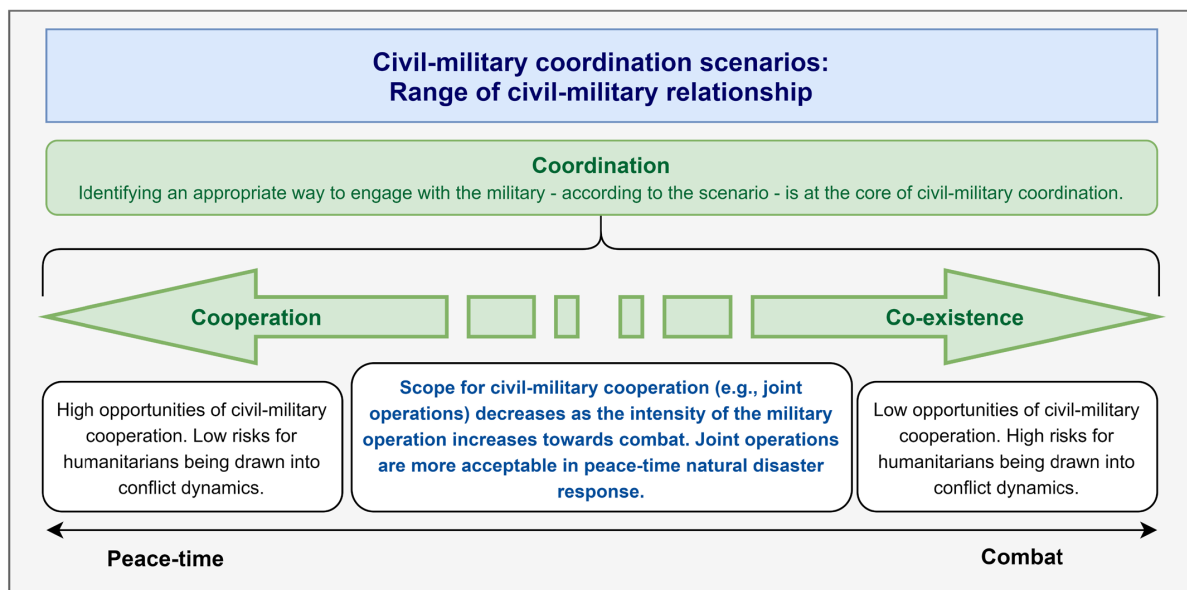


Figure 1 Civil-military coordination scenarios.

A related and recurring theme is that associating civilian organisations with military bodies may undermine civilian humanitarian activity and endanger the safety of civilian personnel.¹⁰ This is particularly relevant in conflict environments when civilians might be considered parties to the conflict.¹⁰ In such circumstances, CMR guiding documents suggest complete separation through co-existence.

However, even in complex emergencies, the delivery of aid by a military body may be legally or ethically mandated: the Office of the UN High Commissioner for Refugees' Guidelines cites Geneva Convention IV and the requirement for an occupying power to 'supply food and medicine' and 'maintain hospitals, and public health and hygiene'.¹¹ Consequently,

the IASC argues that guidance must be 'balanced by sound pragmatism'.¹⁰

A CHANGING POLICY GEOGRAPHY: DISCUSSION AND RESULTS

While key guiding documents offer a relatively consistent position regarding the role of militaries, their practicability is increasingly challenged. Experiences in countries like Haiti, Myanmar, Pakistan, Afghanistan and Iraq 'have all demonstrated continuing weaknesses in civil-military coordination'.¹² Furthermore, 'military and humanitarian actors have consistently failed to reach a common understanding of the role that each plays, the challenges they face and, critically, the priority needs of affected populations and how these can or should be addressed'.¹²

Crucially, the guidelines have not yet considered five imbricating complexities, which were all raised at the 2017 Chatham House roundtable, namely:

- ▶ The changing international environment.
- ▶ Civil-military public health emergency responses.
- ▶ The assertion of state sovereignty and voice.
- ▶ Non-military armed groups that are partner to CMR.
- ▶ A lack of consensus on the 'principle of last resort'.

Box 1 Summary of IASC core principles

The use of military assets is a last resort, and the 'military should avoid direct assistance unless it is the only way of providing life-saving assistance'.¹⁰

The civilian nature of humanitarian assistance must be retained wherever possible.

The 'distinction' between humanitarian assistance and military roles in security and relief must be maintained.

The 'military and civil defence assets of belligerent forces engaged in combat shall not be used to support humanitarian activities'.¹⁰

'Request for the use of military assets must be made by the (UN) Humanitarian (or) Resident Coordinator'.¹⁰

The 'use of MCDA should be planned to be limited in time, and include a clear exit strategy'. This is 'in order to avoid creating dependency on military support'.¹⁰

Countries providing 'should respect the UN codes of conduct and humanitarian principles'.¹⁰

'As a general rule, humanitarian convoys will not use armed or military escorts'.¹⁰

Box 2 Military and Civil Defence Assets (MCDA) definition

MCDA (as defined in the 1994 Oslo Guidelines) includes 'relief personnel, equipment, supplies and services provided by foreign military and civil defence organisations for international humanitarian assistance. Furthermore, "civil defence organisation" means any organisation that, under the control of a Government, performs the functions enumerated in Article 61, paragraph (1), of Additional Protocol I to the Geneva Conventions of 1949'.¹⁷

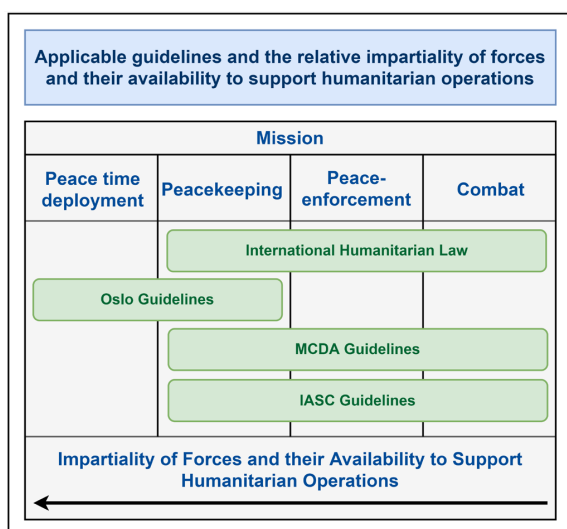


Figure 2 Applicability of the Office for the Coordination of Humanitarian Affairs guidelines. MCDA, Military and Civil Defence Assets.

These core issues are discussed in turn in the context of the UN CMR guiding documents, in order to robustly explicate these omissions and their consequences.

The changing international environment

The IASC Guidelines establish four mission scenarios (Figure 2), with differing policy frameworks that shape CMR and are adapted to the specific circumstances, mandates and rules of engagement of military actors.⁵ However, the scenarios raises a number of issues, both in terms of the categorisation of conflict, the actors that are addressed by the frameworks and the propensity for operational environments to experience substantive and dynamic political changes over the course of a protracted public health emergency compared with a natural disaster.¹⁰

The reality rarely matches the IASC's scenarios. For example, the 2004 Aceh Tsunami response placed humanitarians alongside a host-nation military that was both a responder to the crisis and an active participant in a counterinsurgency, akin to UN peace enforcement troops in North Kivu, Democratic Republic of the Congo responding to the ongoing Ebola outbreak there. These responses pose peculiar but increasingly common challenges: one force can be simultaneously subject to a mandate that bridges the IASC Guideline's 'peaceful' and 'conflict' mission contexts, posing significant challenges for humanitarian organisations. One recent typology found six unique operational spaces that CMR can exist within and between, including iterations of CMR across and even outside the mission contexts described in Figure 2.¹³

The guidelines also predate the increasing role of international militaries engaged in governmentally endorsed development work, for example, the United States Africa Command provision of militarised assistance in conflict-prone areas which are also subject to natural disasters. In this area of quasi-war, frequent humanitarian emergencies and state fragility, positioning humanitarian responders in relation to troops is inadequately addressed by existing guidelines.

Box 3 Key principles of the Oslo Guidelines

'Last resort': *foreign military and civil defence assets should be requested only where there is no comparable civilian alternative, and only when the use of foreign military or civil defence assets can meet a critical humanitarian need. The foreign military or civil defence asset must therefore be unique in capability and availability*.¹⁷

Foreign military and civil defence assets should 'be seen as a tool complementing existing relief mechanisms in order to provide specific support to specific requirements, in response to the acknowledged "humanitarian gap"'.²⁶

Military and civilian defence assets 'can be mobilised and deployed bilaterally or under regional or alliance agreements as "other deployed forces" or as part of a United Nations operation as "UN MCDA". All disaster relief... should be provided at the request or with the consent of the Affected State and, in principle, on the basis of an appeal for international assistance'.¹⁷

All relief actions 'remain the overall responsibility of the (Affected) State and are complemented by a foreign (military or civil defence force) operating (bilaterally or) within an international relief effort'.⁷

'Distinction': military personnel should be unarmed, but remain in military uniform.

Foreign military and civil defence assistance 'should be provided at no cost to the Affected State, unless otherwise agreed between concerned States or as regulated by international agreements'.¹⁷

'An Assisting State deciding to employ its (military and civil defence assets) should bear in mind the cost/benefit ratio of such operations as compared to other alternatives, if available. In principle, the costs involved in using (military and civil defence assets) on disaster relief missions abroad should be covered by funds other than those available for international development activities'.¹⁷

'As a general principle, UN humanitarian agencies must avoid becoming dependent on military resources and Member States are encouraged to invest in increased civilian capacity instead of the ad hoc use of military forces to support humanitarian actors'.¹⁷

Civil-military public health emergency responses

The failure to address public health factors or emergencies is a crucial omission and was consistently raised at the 2017 Chatham House roundtable.¹ Humanitarian responses in the 1980s and 1990s generally involved assistance to states that lacked significant public health infrastructure. Responses were generally limited to basic and temporary life-sustaining assistance such as evacuations or the provision of trauma care and food packages. However, increasingly assistance is to states which have developed infrastructure essential to public health (eg, power, water, communication and sanitation) with population public health interventions (eg, immunisations and environmental interventions to interrupt parasitic infections). There is also the emergence of 'pure' infectious disease emergencies, such as the 2013–2016 West Africa Ebola Epidemic and the ongoing COVID-19 outbreak.

The response to such emergencies includes the maintenance or repair of essential infrastructure, securing or initiating public health programmes and repairing or constructing new health-care, laboratory and quarantine/isolation facilities.

Box 4 Recommendations

Identify appropriate actor(s) and convene a high-level conference, possibly hosted by the Office for the Coordination of Humanitarian Affairs, with a view to reviewing existing civil-military guiding documents collectively, rather than addressing revision processes guideline by guideline.

Consider new guidelines or frameworks that specifically address the deployment of a foreign military to a public health emergency response, as distinct from a natural or sudden-onset disaster response, or identify ways of adapting existing guidelines that can accommodate these contexts; ensure this takes the changing international environment into account.

Alternatively, consider the development of a set of principles against which civil-military cooperation can be planned and assessed for each specific operation and intervention, in lieu of relying on guidelines to inform all civil-military activities.

Adapt civil-military guideline terminology and make it more flexible, so that it can accommodate the fluid environments and contexts in which protracted public health emergencies unfold.

Identify and address military, security and other armed groups not covered in existing international guiding documents.

Revisit the principle of 'last resort', to provide and include a more nuanced understanding that includes considerations weighed against the humanitarian imperative.

Ensure maintenance of civilian leadership in humanitarian activities, but consider military involvement as part of a multisectoral approach.

The breadth of this support requires a cross-sectoral approach, including health, security, economy, education and infrastructure. No one organisation can provide all components, and foreign and domestic militaries have become increasingly involved in supporting various health-related response elements such as coordination, logistics, information management, laboratories and communications, or through tactical interventions by helping secure or supply quarantines, hosting isolation facilities or providing armed escorts for civilian response workers. Crucially, this support is often provided over a sustained period of time, rather than temporary relief in response to a singular natural disaster, involving both militaries and NGOs. Many public health NGOs do not strictly adhere to humanitarian principles, instead choosing context-specific alignment with them. For example, the NGO GOAL Global provided accommodation and facilities to British military troops in the 2013–2016 West Africa Ebola Epidemic. This diversity of position is reflected by many non-UN guidelines: many are concerned with minimising civil-military overlap, some with maximising co-operation and some on addressing specific issues.²

There are ongoing efforts to develop appropriate frameworks that consider public health emergencies, including one by WHO, but this is neither published nor tested, and leaves significant gaps by not addressing the array of non-medical components of a public health emergency response (eg, logistics or coordination) that a military may support. UN OCHA has published a two-page document on understanding UN-CMCoord documents during COVID-19, but is extremely brief and ad hoc: it does not constitute core CMR guidance.¹⁴ At best, this reflects a diversity of position and opinion. At worst, this represents 'inconsistent and contradictory' stances.⁵ In short, 'while simultaneously calling for respect for humanitarian principles, in the recent past many humanitarian organisations have also willingly

compromised a principled approach in their own conduct through close alignment with... military activities and actors'.¹⁵ This may have been necessary, but is not addressed in guidelines.

The assertion of state sovereignty and voice

The guiding documents are silent on how to align the UN's mandate to support national governments and the common leadership or inclusion of a host nation's health authorities in responding to an emergency when foreign militaries are involved alongside domestic military and security services.

The Oslo Guidelines in particular apply to foreign militaries, providing no guidance on relations with domestic militaries, despite being 'one of the most problematic (CMR) areas..., particularly (in) a conflict in which the domestic military are a party'.⁹ In such contexts, several dominant civil-military norms such as 'last resort' are inappropriate or inapplicable, especially in contexts where partnerships between foreign and domestic militaries exist pre-crisis, or when military support is requested by the sovereign host nation, such as in Sierra Leone's Ebola response.¹⁶ Host-nation requests for military support are particularly problematic to CMR in an environment including a civilian response where the state authority is military.

The legitimacy of the CMR guiding documents are also undermined as the original drafting of the Oslo and MCDA Guidelines included only one sub-Saharan African country between them.^{7 17} There is therefore a real risk that the guidelines are (or are viewed as) a western construct imposing humanitarian norms on ex-colonies or in inappropriate contexts and ignores the increasing assertion of state sovereignty. This issue was raised by a number of participants from lower-income and middle-income countries at the Chatham House roundtable. Militaries were also excluded, and the guidelines thus enjoy only limited recognition among global militaries. Furthermore, the principle of co-production with potential beneficiaries is notably absent. This calls into question the guiding documents' relevance to many nations, including those at high risk of experiencing public health emergencies.

Other unaddressed military and security groups

Existing international guiding documents also fail to address numerous other armed groups, such as civil protection and defence groups, private security companies (PSCs) and non-state armed groups (NSAGs). This is particularly problematic when addressing infectious disease outbreaks which requires a response which involves all actors.

Civil protection and civil defence groups

The IASC Global Health Cluster Paper (2011) highlights the absence of an internationally agreed definition of civil defence or civil protection actors relationship(s) with host-nation military forces.¹⁰ The profusion of definitions and the increasing reliance on these actors as humanitarian responders has created a need to redefine and reconsider where these fit within the CMR context. Guiding documents should also address 'where these are civilian actors explicitly operating on the basis of humanitarian principles' such as with some police and gendarmerie.¹⁰

Private security companies

PSCs are increasingly involved in protecting humanitarian staff and facilities, have an increasingly role supporting military forces and are increasingly ubiquitous. Where acceptance, 'low profile', and remote programming strategies have failed or are deemed inappropriate, some humanitarian agencies 'have opted

for a deterrence model using armoured vehicles, fortifying offices and hiring armed security'.⁵ One estimate suggests that all major international humanitarian organisations have used armed PSCs at least once.⁵ The guiding documents do not address how civilian organisations can appropriately relate to PSCs in public health contexts.¹¹

Non-state armed groups

NSAGs are increasing in numbers and some control territory where civilian and humanitarian organisations operate. Historically, relationships between civilian groups and NSAGs were limited to issues surrounding humanitarian access, but some NSAGs are themselves providers of health and relief assistance, such as the so-called Islamic State's health services, and direct support to NSAGs has occurred in some relief efforts.¹⁶ Relations with NSAGs is complicated by difficulties in identifying the boundary between NSAGs and crisis-affected community leadership. Civilian actors are increasingly engaging with these groups but doing so is fraught with ethical challenges and legal risks exacerbated by developments in counterterrorism legislation, international sanctions, money laundering regulations and domestic legislation which at times contradict international humanitarian law.¹⁸ Importantly, militaries involved in public health emergency response may have a concurrent mandate to deter or combat NSAGs, complicating CMR for both military and civilian organisations operating across both domains. Matters are further complicated by the proliferation and dynamism of NSAGs and by occasional and often temporary alliances between militaries and some of these groups. While detailed guidance may be difficult to develop, nonetheless, it is a significant gap which means that current arrangements are ad hoc and legally questionable.

The principle of last resort and the humanitarian imperative

While a recurring theme of guidelines is that of military only as a 'last resort', there remain differences between practice and reality, not least because in sudden-onset emergencies, militaries (domestic and foreign) are often first responders simply because they can deploy quickly and the humanitarian need exceeds civilian capabilities. Civilian organisations may be poorly prepared or equipped, or they may choose not to intervene for reasons of cost, risk or politics, or capacity.¹⁹ Therefore, compliance with the principle of 'last resort' may preclude military support to crisis-affected populations when it is the most practicable, exigent and life-saving resource available. The issue is compounded by ambiguity and confusion in guideline language and interpretation. For example, when guidelines state that '*military and civil defence assets of belligerent forces engaged in combat shall not be used to support humanitarian activities*',⁷ they appear to contradict Geneva Convention responsibilities.

Incorporating the principle of 'last resort' into national doctrine also differs. For example, Canada and the UK have national CMR guidelines directly informed by the Oslo Guidelines, while Belgium, the Netherlands and the USA' CMR policies are not, unless requested by OCHA.²⁰ This ambiguity is also reflected in humanitarian positions. At the 30th International Conference of ICRC (2007), the Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance (the '*IDRL Guidelines*') were adopted. These suggested that '*military assets should be deployed for disaster relief or initial recovery assistance only at the request of and with the express consent of the affected state, after comparable civilian alternatives have been considered*'.²¹

This is a weaker position than 'last resort', and is a divergence from the humanitarian absolutism of the 1990s, even if it is a limited and reluctant embrace.

The principle of last resort is further complicated by the mechanisms for triggering the deployment of military resources. In theory, on the request of a disaster-affected state, a UN Disaster Assessment and Coordination team deploys to conduct an initial needs assessment, including an evaluation for the prospect of military support. However, states, UN agencies and other organisations '*routinely choose alternative means for channelling military assets*'.⁵ Thus, even requests made through the correct channels may not consider CMR arrangements. This is further complicated in areas of NSAG control, where a Humanitarian or Resident Coordinator holds no practical authority. More challenging is the finding that many key stakeholders are unaware of the guiding documents: for example, one evaluation of the response to the 2004 Aceh Tsunami found that very few actors—civilian or military—knew of the guidelines, and that '*some "humanitarian actors" by their actions appeared unaware of even the basic concerns regarding association with military forces*'.²²

Any globally focused guideline will have limited relevance without significant consensus between concerned groups and actors and there is a compelling need to challenge the powerful institutions of humanitarian governance to incorporate other voices in discussions over principles such as 'last resort'. Ultimately, the principle is arguably impracticable in the dynamic and urgent context of a rapid onset disaster, nor during the fluidity and unpredictability of a protracted public health emergency. Furthermore, it is impracticable when myriad military and security groups intervene with or without invitation, or as deployed by a host-nation government. This reality has largely been accepted by governments and militaries and is increasingly recognised and accommodated among international organisations (IOs) and NGOs.

CONCLUSION

At times, the existing guidelines, frameworks and guides offer duplicating, imbricating or conflicting guidance; at others, they do not adequately address existing or probable CMR in the context of a health emergency; neither have they kept pace with geopolitical developments. As such, while existing guidelines, frameworks and guides provide utility in many circumstances, none are consistently satisfactory. The myriad CMR guiding documents produced independently by other agencies and militaries do address some of these concerns, but nevertheless, the UN CMR guidelines should, but do not, represent cogent, consistent and aligned principles for CMR in the international arena.

While the guiding documents struggle to appropriately address the new challenges of CMR, their existence undoubtedly serves a purpose, as they should provide a common platform for humanitarian positions. There is evidence of the guidelines beginning to shape the strategic cultures of IOs, including within the UN and European Union which has committed to adherence to the MCDA guidelines, and has affirmed that its '*capabilities must be deployed in a way compatible with the work of humanitarian organisations*'.²³

However, these processes will remain inadequate for public health emergencies unless the criticisms and gaps of existing UN guiding documents are addressed including the lack of non-Western or military voices in the documents' drafting process; the difficulty adhering to some humanitarian principles in an increasingly dynamic and complicated space; a lack of consideration

for the increasing assertion of state sovereignty or for different professional and regional cultures; geopolitical developments including the increase in NSAGs and legal developments such as in counterterrorist legislation and the confusing, overlapping nature of the guidelines themselves.¹ Specific consideration is required for public health emergencies as a distinct phenomenon and consideration for various relevant actors. These gaps are compounded by a poor consensus regarding the 'principle of last resort', a lack of awareness or understanding of the guidelines by key actors, and by the proliferation of specifically public health emergencies.

Existing UN guiding documents must either be revised, or new documents created, which include public health requirements. While the 2018 IASC Recommended Practices for Effective Humanitarian Civil-Military Coordination of Foreign Military Assets in Natural and Man-Made Disasters represents an attempt to create new and practicable guidance, it still does not centrally consider or address any of these issues.²⁴ Given the increasing complexity and frequency of situations that involve concurrent civilian and armed-actor responses, a viable alternative may be to move away from guideline or guideline-type documents altogether, and to identify a set of internationally agreed principles against which civil-military cooperation can be planned and assessed for each specific operation and intervention. Developing principles may also overcome the argument that seeking to revise international documents that took significant effort and compromise to develop is a major and perhaps inadvisable process. UN OCHA's October 2014 briefing document Civil-Military Interaction and the Use of Foreign Military and Civil Defence Assets (MCDA) in the Context of the Ebola Crisis in West Africa is short, does not include a number of the gaps identified here, and is limited to only one operational context, but does indicate that the agency is prepared to address their global guidance according to new developments and concepts.²⁵ Similarly, while only two pages long and therefore extremely nascent in development and adoption, their March 2020 briefing document on CMR during COVID-19 'considers lessons observed from the SARS outbreak in 2002–2003 and the Ebola outbreak of 2014, among others' and is therefore further promising indication of willingness to substantively engage this discussion.¹⁴

In short, while it is inevitable that this complicated space will remain controversial and key elements of CMR guidelines will remain contested, it is crucial that these criticisms and gaps are considered and addressed in future CMR guideline and framework dialogue, revisions and development.

Twitter Samuel T Boland @samuelboland and L Lillywhite @LLillywhite

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ORCID iDs

Samuel T Boland <http://orcid.org/0000-0001-6470-5470>
S Gordon <http://orcid.org/0000-0002-7592-6428>

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^a The chapter's type-set references are also reproduced within this thesis' references section.^{34,188,270,271,350,351,353–359,427,446,448–451,846–852}

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Primary Supervisor	Dina Balabanova		

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The Next Ebola: Considering the Role of the Military in Future Epidemic Response

31 March 2017

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10 St James's Square, London SW1Y 4LE T +44 (0)20 7957 5700 F +44 (0)20 7957 5710
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Introduction¹

There are potential benefits to using militaries to deliver humanitarian assistance. These include their capacity for rapid, large-scale deployment. During infectious disease outbreaks such as the West Africa Ebola epidemic, these capacities may be important in the overall response, especially in contexts where health systems and governments are poorly resourced. However, the use of armed forces is also opposed by some actors. They have cited concerns that include: the erosion of humanitarian principles and the disruption of spaces in which other civilian partners work; a perceived conflict between military duty and medical ethics; an undermining of the social contract when external agencies deliver core services; a lack of cultural awareness among intervening military medic healthcare workers; and alleged excessive costs.

Chatham House hosted a roundtable meeting in London on 31 March 2017 to help inform the debate on military participation in future disease outbreak responses. The meeting, supported by the Rockefeller Foundation, included the presentation of recent Chatham House research on how the response was run in Sierra Leone, including the role of the military,² and was held under the Chatham House Rule³ to provide opportunity for critical reflection on the ethical, operational and other challenges inherent to a civilian–military response to a public health emergency.

The meeting's primary objectives were to:

- Identify those aspects of the Ebola response which, if addressed, would have enabled more effective civilian–military cooperation and response;
- Consider the spectrum of a future UK response to an infectious disease outbreak in sub-Saharan Africa; and
- Explore the acceptability, potential and ability of a UK contribution to a civilian–military response, in line with the recommendation of the International Health Regulations (IHR) review committee that military medical teams be available for deployment to a significant outbreak.

The following summary reflects arguments and comments made by meeting participants, who included civilian and military representatives of the UK government, and members of NGOs, academic institutions, intergovernmental organizations and several other bodies.⁴ The discussion, whether looking back at the West Africa Ebola epidemic or forward to the 'next Ebola' crisis, converged around six main themes. These themes are presented below, and followed by a round-up of the points most consistently made at the meeting.

Prevention, preparedness, early warning and rapid response

Several comments were made around the continuum of outbreak prevention, preparedness, early warning and rapid response. It was acknowledged that disease outbreak preparedness starts with health system resilience, which not only helps alleviate the need for international support for outbreak containment but is also the most effective means of outbreak prevention. It was broadly agreed that resilience requires effective health system infrastructure; a sufficient workforce; robust health information systems and other public health measures; effective early-warning mechanisms (i.e. disease surveillance); identified

¹ This roundtable summary was prepared by Samuel Boland.

² Ross, E., Honwana Welch, G. and Angelides, P. (2017), *Sierra Leone's Response to the Ebola Outbreak: Management Strategies and Key Responder Experiences*, 31 March 2017, Research Paper, London: Royal Institute of International Affairs, <https://reader.chathamhouse.org/sierra-leones-response-ebola-outbreak-management-strategies-key-responder#>.

³ 'When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.'

⁴ See Annex A for a complete list of organizations represented.

response triggers with civilian ownership; and adequate structures for reporting to the World Health Organization (WHO), as mandated by the IHR.

If a health system is resilient and disease surveillance structures function appropriately, public health preparedness will prevent the need for humanitarian intervention to an emerging disease threat. It was noted that, increasingly, this disease threat is not limited to the global south, given climate change and anti-vaccine movements; international trade and travel experts, as well as public health experts, argued that improving health system resilience, disease surveillance and overall public health preparedness everywhere must remain the primary focus of any disease outbreak response plan.

When prevention and preparedness systems fail, a rapid-response mechanism is required to efficiently contain and end the emerging public health crisis.

The WHO-coordinated Global Outbreak Alert & Response Network (GOARN), a collaboration of institutions and networks that pools human and technical resources for rapid outbreak identification and response, performs this function. However, interest in developing such capacity beyond GOARN has grown dramatically following the West Africa Ebola epidemic, as GOARN's staffing and deployment structures meant it could not sustain a high level of expertise for the duration of the outbreak. More than 20 other institutions are currently building some form of rapid support team (RST), though it is unclear to what extent they integrate and coordinate with GOARN and each other. Nonetheless, RSTs were considered an important addition to the global disease outbreak response toolkit.

RSTs, and those who fund and coordinate them, require watch lists curated with global disease surveillance data to effectively prepare their response to an emerging threat. For example, a US government agency, the Centers for Disease Control and Prevention (CDC), maintains a weekly disease outbreak bulletin; and the UK government has recently developed a weekly interdepartmental humanitarian early-warning note. However, these watch lists are not distributed or accessed in a comprehensive manner. Participants warned that the watch lists do not necessarily provide the information required by all rapid-response mechanisms, and that they are also necessarily limited by the quality of global disease surveillance data and global reporting structures.

Also, RSTs may not provide a number of other services, including rapidly scaled training, coordination structures and logistics needed at both the national and international level. To fill these gaps in Sierra Leone during the Ebola epidemic, the British military established military medical training facilities; these pre-deployment and in-country facilities were widely seen as an efficient and effective training tool. It was proposed that consideration be given to extending the use of UK training facilities to civilian responders.

It was agreed that the military (British and Sierra Leonean) also proved effective coordinators in the response; while the military does not have a monopoly on effective coordinators, the professional focus on adaptability and efficiency proved an effective and necessary addition to civilian coordination at a time when civilian agencies were overstretched. Participants agreed that the deep historical links between the British and Sierra Leonean militaries were crucial to the UK playing such a significant and effective supporting role, but said that it was unclear whether that level of military involvement would have been impossible without such a relationship.

One participant contended that it would not be possible to develop a country-by-country response framework, and others agreed that a generic planning framework or policy guidelines should be developed for rapidly assessing whether the context of a specific disease outbreak would benefit from

military support. It was proposed that this could parallel the Oslo Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief (Oslo Guidelines) if the challenges were felt to be sufficiently similar. Outbreak specialists contended that in any context military support to a disease outbreak response should be designed to complement civilian control under the IHR, and should be used as a last-resort mechanism when civilian resources and response structures are at risk of being overwhelmed. Some said that integration platforms, rather than military-specific response frameworks, are thus key.

Force protection, risk appetite and risk management

The discussion revealed that prospective military support to future disease outbreak response is complicated by military force protection needs and questions surrounding military risk appetite.

In the West Africa Ebola epidemic, early calls by civilian agencies for military support were grounded in an assumption that the high risk tolerance of the military would ensure the value of military involvement, particularly in light of the very low tolerance for the risk of infection among some civilian organizations that departed the area. It was noted that the use by the British and some other foreign militaries of the army medical training facility in York, in the UK, to rehearse safe practices and ensure the suitability of those deploying enabled the military to be fully operational on arrival; in contrast, civilian organizations required a long in-country training time prior to becoming fully operational.

Some argued that the British military was in fact ‘in an era of risk aversion’ following intense media coverage of British casualties in Iraq and Afghanistan. It was noted that in the West Africa Ebola epidemic, there was little appetite from some corners within the British government and military to engage with a threat of this type; this was reflected in the conservative nature of the roles assigned to the British military. Risk assessments, which informed blanket force protection standards, were calibrated to the lowest-qualified individual. Thus, while there was wide agreement that the British military provided an invaluable partner in the outbreak response in relation to coordination and logistics support, it was noted that the scope of its activity was necessarily limited. For example, while military personnel did treat patients in the health worker Ebola unit, they were unable to perform certain other high-risk tasks that civilians calling for their involvement had initially hoped they would take on, such as the handling of dead bodies, community patient care and patient evacuation.⁵

Military force protection also needs to consider the risk to flexible-response capabilities for war-related threats, it was noted. With only eight C17 aircraft, for example, the British military would strain the flexibility and adaptability of its global traditional military engagements were it to devote transport resources to a future disease outbreak response. One member of the British military stated that the forces ‘simply don’t have the level of strategic reserve that a lot of external agencies think’. It was proposed that this could present a conflict of interest for any military asked to provide support to a future disease outbreak response, and that this is a consideration that civilian agencies do not face.

Participants from across the board said that if UK ministers and the British military can accept increased levels of personnel and capability risk in future deployments not involving warfare, the military would be able to play a more active role.

⁵ The British military was involved in the coordination of dead-body management, but UK military personnel did not themselves clear the bodies.

Community engagement

Public health specialists and anthropologists argued that in a disease outbreak response, ‘understanding community is as important as virology’.

It was noted that in the West Africa Ebola epidemic, the British military had an established pre-crisis relationship with the Sierra Leone military that provided much of the local knowledge that the British military required to effectively respond, but that the application of this knowledge was limited by force protection measures that prevented the British military from interfacing directly with Sierra Leoneans outside the National Ebola Response Centre and District Ebola Response Centres.

Several civilian participants pointed out that many civilian agencies, which are not subject to such strict force protection measures, made little effort to engage and learn from Sierra Leoneans at the earliest stages of the outbreak. Indeed, while the British military openly acknowledged its lack of expertise in this context, many civilian public health experts assumed that they had all the knowledge and tools they needed despite the outbreak’s unprecedented and unknowable complexity and the specific cultural issues surrounding it. Such assumptions limited learning opportunities that could have provided information and knowledge crucial to the response, participants contended. The British military and some civilian agencies did involve anthropologists later in the outbreak to resolve some of these concerns, but early interventions often did not interface with those already on the ground. Participants viewed this as a key failing given that issues of cultural context and difficulties of community engagement can be overcome with established long-term relationships.

Several participants considered anthropology integration platforms an important addition to disease outbreak response toolkits, given the ability that anthropologists have to translate cultural contexts. This translation should not be limited to the development of locally meaningful messaging, but ideally should also include translation back to the language that international responders understand so that they can operationalize local knowledge, it was suggested.

It was argued that it may be easier for national military responders than for international military or international civilian responders to fill this role, provided that they are trusted and well received by civilians and have an effective working relationship with international responders. However, neither of these conditions can be assumed, given many examples where militaries are not trusted either domestically or internationally. It was accepted that the integration of anthropologists should be only one element of a comprehensive community engagement strategy.

Decision-making within organizations

Another discussion theme focused on the need to assign responsibilities for types of decision-making, both within organizations and between them, and to maintain that delineation throughout a response. This means clearly defining which decisions should be made at which level, i.e. by those at the strategic, or political, level; those at the operational, or coordinator, level; and those working at the tactical, or field, level.

Several participants across the board recognized the challenges that political interests and demands pose to responding in technically rather than politically appropriate ways.

Participants said that in the West Africa Ebola epidemic, UK ministers were sometimes involved in British military tactical decision-making processes and that this created tactical uncertainty and friction for the

British military. This was not unique to the military, as some in-country civilian agencies also struggled to effectively delineate and delegate decision-making within their organizations. In another example cited, a requirement to conform to international medical standard operating procedures, despite the existence of locally appropriate tested and ready solutions, delayed the opening of much-needed Ebola treatment centres.

Meeting participants broadly agreed there is a need to ‘put control in the field’, saying that empowering local decision-making enables better tailoring of disease outbreak response mechanisms, messages and measures to local needs. It was argued that, to some extent, concerns surrounding community engagement can be mitigated if strategic, operational and tactical response structures are appropriately delineated.⁶

As militaries are highly structured, identifying where such delineation should occur between strategic, operational and tactical decision-making to this end is reasonably straightforward. However, it was argued that, particularly in a joint civilian–military exercise, such hierarchical design can facilitate intra-agency mission creep when delineation is not respected. It was proposed that smaller and more loosely hierarchical civilian agencies may therefore have a greater ability to unilaterally operate at the local level. But, it was noted, such delegation to the local level is difficult for both foreign military and civilian organizations when the risk appetite is low. The need for effective means of communication across the various levels within organizations was also acknowledged, with possible instruments including dedicated social media platforms, information hubs and dedicated liaison staff.

Interagency coordination

It was suggested that just as placing responsibility for certain decisions in the right part of an organization is important, so is the division of responsibility among agencies. This was considered a first step towards better coordination and avoidance of duplication and competition between agencies.

Both civilian and military participants said that this requires a clear and respected mechanism for identifying organizational strengths, weaknesses and risk tolerance, and for assigning roles prior to a crisis emerging, so that coordination does not become competition. In turn, this requires peacetime interagency relationships, which could be nurtured through regular interagency training exercises. Such exercises would be valuable in establishing what role each agency would take and in creating interagency coordination links. However, several participants argued that due to high rates of staff turnover in many organizations, such exercises would need to occur with some frequency. Both civilian and military participants proposed that liaison officers should be integrated across organizations as permanent fixtures, so that interagency coordination in crisis is simply an extension of peacetime *modus operandi*.

It was considered that such interagency links are particularly important between civilian and military partners, as the organizational structure, workplace culture and professional terminology differ between the two. Increased interaction (involving study periods, desktop exercises and possibly field exercises) is required so that each partner can better understand how the other operates and structures itself. These links generally exist between state development agencies and their respective militaries, but do not exist

⁶ ‘Strategic’, ‘operational’ and ‘tactical’ are levels of war. The strategic level is concerned with top-level political interests and broad objectives, the operational level is concerned with campaign planning to realize them, and the tactical level is concerned with campaign execution (i.e. the day-to-day activity as planned at the operational level). In relation to the West Africa Ebola epidemic, these levels can loosely be understood as the activity that occurred at the international, national and district levels, respectively, though strategic, operational and tactical structuring can be applied to the necessary division of labour of any organization and institution more generally. For a longer discussion, see Dunn, M. (undated), ‘Levels of War: Just a Set of Labels?’, Clausewitz.com, <http://www.clausewitz.com/readings/Dunn.htm>.

for many international organizations and NGOs, which perform the bulk of disease outbreak response activity.

Most participants agreed that for disease outbreak response operations, any supporting military should recognize that terminology appropriate for a conflict operation can cause unease among civilian partners. It was noted that with the Ebola epidemic in West Africa, where there was not an active conflict, many civilians raised concerns about terminology such as ‘command and control’ instead of ‘coordination’, ‘force protection’ instead of ‘staff safety’, or ‘battle captain’ instead of ‘operations manager’. One civilian participant argued that terminology focused on a perceived threat leads to punitive and authoritarian cultures of response, which some contend are not the most effective.

Philosophy, perception, public relations and pragmatism

It was noted that many global health advocates supported the ‘securitization of health’ in the 1990s to shift resources from defence to global health rather than to bolster the presence of militaries and the security sector in the delivery of humanitarian aid.

Some civilian participants considered particularly extensive military support to humanitarian response to undermine the humanitarian principles of neutrality and impartiality. Also, militaries tend to be expensive, and both civilian and military participants said cost should be a consideration. It was considered important to note that the response in Sierra Leone, including the military’s role in it, evolved through trial and error rather than resulting from design. According to several participants, this experience shows that there is likely to be little value in designing a template for future civilian–military intervention in an outbreak.

There was universal agreement that disease outbreaks are far more complex than the medical problems they present, and that civilian medical and public health experts will remain best placed to resolve the latter. Both military and civilian participants said that non-medical challenges of coordination, communication, planning and logistics pose real difficulties to civilian responders, who do not necessarily have the capability, resources or authority to mount a centrally coordinated large-scale response to a disease outbreak.

Participants had mixed views on the utility of the Oslo Guidelines for planning military engagement in future health crisis response. The Oslo Guidelines outline how foreign military and civil defence assets can provide last-resort support to disaster response, but in many countries militaries are the only organizations with these capabilities and will thus necessarily be first-resort solutions. Thus, despite the challenges the use of militaries poses to humanitarian principles, several civilian participants said that humanitarian organizations need to reconsider their philosophy, with one participant saying: ‘Prejudices around who are appropriate actors ... are limiting our capacity to respond’ to disease outbreaks. Such hesitation was also mentioned in relation to the commercial sector, which in some cases could offer similar much-needed capacity.

In summary, it was broadly agreed that if a disease outbreak occurs within a permissive environment, and civilian prevention and preparedness systems risk being overwhelmed,⁷ military organizational structure and organizational strengths in communications, logistics and coordination mechanisms have the potential to fill key gaps in a future civilian-led disease outbreak response.

⁷It is unknown how disease outbreak response should or would occur within a kinetic non-permissive environment such as Syria.

Conclusion

All participants agreed that the Ebola outbreak in Sierra Leone offered a unique context that contributed to the British military's success in supporting the response. The British military had a strong pre-crisis relationship with Sierra Leone; the country was not experiencing significant political turmoil; and Sierra Leonean people generally hold their own military and the UK – and its military – in high regard.

Nonetheless, participants noted that many of the challenges faced in the West Africa Ebola epidemic, and the solutions to them, are not dissimilar from those that arise in peace support operations and natural disaster responses, within which militaries are frequently considered to be valuable partners. Questions remain around the ability of international militaries to adapt their force protection requirements, to engage as needed at the local level, to empower on-the-ground decision-making, and to coordinate effectively with civilian and local military partners. However, it was noted that these issues are by no means unique to the military.

The West Africa Ebola epidemic provides evidence that permissive contexts do exist within which militaries can be appropriate players in disease outbreak response. Meeting participants proposed that even in less receptive environments, militaries may be able to provide peripheral support to civilians for some activities, such as facility construction and training. Several participants said that, particularly considering these and the other unique strengths of militaries, objections to their inclusion may need to be reassessed if future disease outbreak responses are to operate as efficiently and effectively as possible.

Summary of key points

The following key points emerged from the discussion:

- Disease outbreak response preparedness should begin with bolstering health system resilience and civilian coordination structures.
- A tool should be developed for rapidly assessing whether the response to a specific disease outbreak would benefit from military support.
- Militaries are well placed to rapidly scale up disease-tailored training, both to in-country and international medical responders, and should be considered as partners for this purpose.
- Consolidated outbreak watch lists should be distributed between all prospective civilian and military partners in a future disease outbreak response, in addition to the interdepartmental and internal watch lists currently maintained by several organizations.
- Pre-crisis military force protection frameworks should be adapted for non-conflict engagements, and include some degree of acceptable risk to both personnel and capabilities.
- Anthropologists should be included in civilian and military disease outbreak response teams, to leverage their insights into local culture and practices and engage communities more effectively.
- Militaries should be sensitive to the impact of their use of military language when working with civilian organizations.
- Platforms to educate the civilian and military sectors about each other's organizational structures and culture should be developed.
- Dedicated civilian–military liaison officers should be integrated across organizations as permanent fixtures, enabling civilian–military coordination in crisis to be simply an extension of existing interagency coordination structures.
- There is little value in developing a template for military integration into health crisis response, but consideration should be given to reviewing the Oslo Guidelines, with a focus on appropriate contexts for direct military engagement in disease outbreak response.

Annex A: List of representatives

British government

Ministry of Defence
Department for International Development
Public Health England
Stabilisation Unit

Non-governmental organizations

Anthrologica
Médecins Sans Frontières
Save the Children
Africa Governance Initiative

Academic institutions

King's College London
London School of Economics and Political Science
London School of Hygiene & Tropical Medicine
University of Sheffield
University of Sydney

Intergovernmental organizations

International Committee of the Red Cross
United Nations Mission for Ebola Emergency Response
World Health Organization

Other

International SOS
Royal United Services Institute
Sierra Leone National Ebola Response Centre
US Army

Annex B: Timeline of British military involvement in the West Africa Ebola epidemic

Date	Event
25/05/14	Sierra Leone declares first Ebola case.
30/08/14	President Koroma declares state of emergency.
08/09/14	WHO declares Public Health Emergency of International Concern.
02/09/14	MSF appeals for civilian and military support.
Early 09/14	Senior WHO officials and UK government determine British military is best placed to provide robust command and control.
18/09/14	United Nations Security Council declares outbreak a threat to global security.
20/09/14	Statement of UK policy: DFID to lead British response, with British military and military medical beds to serve as a magnet for civilian volunteers.
21/09/14	Operation GRITROCK deploys.
17/10/14	National Ebola Response Centre (NERC), under control of the Sierra Leone minister of defence, replaces Ebola Operations Centre.
21/10/14	British military medical regiment deploys to train local healthcare workers.
Late 10/14	Operation GRITROCK-supported District Ebola Response Centres (DERCs) are established across Sierra Leone.
05/11/14	Kerry Town Treatment Unit opens, a collaboration between Save the Children and the British military, funded by DFID.
09/12/14	British Royal Engineers prepare to hand over nine Ebola treatment centres.
20/12/14	British military reservists and Canadian military deploy to Sierra Leone.
03/15	Operation GRITROCK scales down, leaving command and control structures in place.
05/15	Operation GRITROCK personnel return to NERC and DERCs following a spike in cases.
07/11/15	Sierra Leone declared Ebola-free for the first time since the start of the outbreak.
13/11/15	Operation GRITROCK personnel leave Sierra Leone.
01/16	UK government civilian team leaves Sierra Leone; NERC and DERCs decommissioned, with responsibilities divided among government departments.

^a The chapter's type-set reference is also reproduced within this thesis' references section.²¹

RESEARCH PAPER COVER SHEET

Please note that a cover sheet must be completed for each research paper included within a thesis.

SECTION A – Student details

Student ID Number	1603078	Title	Mr.
First Name(s)	Samuel Timothy		
Surname/Family Name	Boland		
Thesis Title	Examining the origin, nature, and effect of military support to Sierra Leone’s Ebola Response		
Primary Supervisor	Dina Balabanova		

If the Research Paper has previously been published please complete Section B, if not please move to Section C.

SECTION B – Paper already published

Where was the work published?	N.A.		
When was the work published?	N.A.		
If the work was published prior to registration for your research degree, give a brief rationale for its inclusion	N.A.		
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Where is the work intended to be published?	TBD
Please list the paper’s authors in the intended authorship order:	Samuel T. Boland, Rob Grace, Josiah Kaplan
Stage of publication	Not yet submitted

SECTION D – Multi-authored work

<p>For multi-authored work, give full details of your role in the research included in the paper and in the preparation of the paper. (Attach a further sheet if necessary)</p>	<p>All authors contributed substantially and equally to this manuscript throughout, including its: conception; design; analysis; interpretation of the data; drafting; and substantial revisions. All authors have approved the submitted version and have agreed both to be personally accountable for the author’s own contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.</p>
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SECTION E

Student Signature	
Date	28/02/2022

Supervisor Signature	
Date	28/02/2022

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Civil-Military Engagement During Public Health Emergencies: A Comparative Analysis of Domestic Responses to COVID-19

Samuel T. Boland (✉ samuel.boland@lshtm.ac.uk)

London School of Hygiene and Tropical Medicine Department of Global Health and Development <https://orcid.org/0000-0001-6470-5470>

Rob Grace

Brown University

Josiah Kaplan

University of Oxford Department of International Development

Research Article

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Abstract

Background

Despite the central role that domestic militaries regularly play in supporting civilian disease outbreak responses, the dynamics of domestic civil-military engagement (CME) during major health emergencies remain largely under-explored in public health, humanitarian, and security literatures. Previous research has found, furthermore, that existing international and domestic civil-military guidelines hold limited relevance during public health emergencies, including epidemics and pandemics, currently evidenced by the observable lack of coherence and high variance in both international and domestic military approaches to supporting COVID-19 responses worldwide.

Methods

This article presents a comparative analysis of three of these approaches—in China, the United Kingdom, and the Philippines—and maps these countries' military contributions to the COVID-19 response across a number of domains.

Results

Analysis of these case studies provides important insights into the ways that CME exists in unacknowledged contexts and forms; how militaries, particularly domestic forces acting as first responders, play an important role in major health crisis contexts; the confusion surrounding how to understand various non-military armed and security actors; and how pandemics, in particular—and other types of largescale health emergencies more broadly—represent a unique domain for CME that tests both the international system and international norms.

Conclusion

This paper concludes with policy, guidance development, and research recommendations for improved practice for localised CME during public health emergencies.

Introduction

“We are at war against a vicious and invisible enemy. One that cannot be seen by the naked eye. In this extraordinary war, we are all soldiers”.¹

So said Filipino president Rodrigo Duterte on March 16, 2020 in a press conference discussing the country's response to the COVID-19 pandemic. In China, the COVID-19 response had been framed as a “people's war”.² In the United States, President Donald Trump referred to himself as a “wartime president”.³ On the one hand, the “war metaphor” is rhetoric wielded to demonstrate a firm political commitment to confronting the pandemic.⁴ On the other hand, the discourse of war has complemented and reinforced the robust array of functions that national militaries—as well as police, paramilitary militias, and gendarme—across the globe have served in governments' efforts to manage the global COVID-19 outbreak. In every aspect of responding to the pandemic—coordination, planning, logistics, direct medical care, research on vaccines and treatments, regulating and enforcing mobility restrictions—militaries and other armed actors have played an important role.

What does the COVID-19 experience mean for domestic civil-military engagement (CME) during public health emergencies? Various sets of principles—notably those of the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA)—exist for bounding the role that international military forces play in supporting civilian actors during humanitarian responses activities.⁵ These principles aim to maintain overall civilian direction of the response, and ensure that international military contributions are deployed in concordance with established humanitarian principles and as a ‘last resort’.⁶ But in the case of domestic military support within a country's own public health emergency response, these principles do not necessarily apply.

In the context of COVID-19, domestic militaries have served as first responders. As countries' own national civilian public health capacities were quickly overwhelmed by the pandemic, operational military support was redirected toward logistical and medical support as part of the COVID-19 response. Additionally, defense industries and science capabilities typically reserved for domestic national security priorities were redirected toward surveillance, research, and production of personal protective equipment (PPE). A fair amount of policy attention has been directed toward international armed forces operating amidst humanitarian crises. However, public health emergencies have not been linked to this field of analysis and thinking. Moreover, the complicated dynamics of health and humanitarian responders engaging with domestic militaries has been under-examined as well. In this sense, the COVID-19 response—and other types of largescale public health emergencies more broadly—falls within a nexus between two crucial gaps in research, as well as policy analysis and thinking, the first being largescale health emergencies as a distinct type of response context in which civilian and military responders interact, the second being how civilian responders can shield themselves from politicization while engaging, coordinating, and collaborating with domestic (as opposed to international) military actors. As this article later explains, the COVID-19 response reflects many of the same dynamics discernible in the field of humanitarian-military relations. Conversely, the COVID-19 response yields lessons from which the broader field of humanitarian-military relations can learn. Moreover, many of the very same military actors deployed domestically during the COVID-19 response have been, or in the future likely will be, deployed internationally in the context of other types of humanitarian responses, such as natural disasters. The same holds true for certain civilian responders who have worked domestically on the COVID-19 response. Hence, there is discernible value in analytical cross-pollination between, on the one hand, the broader field of humanitarian-military relations, and on the other hand, the CME dynamics at play during largescale public health emergencies.

The pandemic has, ultimately, offered the largest natural experiment of comparative national responses to a shared public health crisis in modern history. From a CME perspective, what insights can a comparison of individual country's COVID-19 experiences tell us about the how military and civilian actors engage in such contexts? And what lessons can be drawn for future policy and practice?

Methods

This article seeks to examine both questions through a comparative analysis of CME in three illustrative country case-studies: China, the United Kingdom (UK), and the Philippines.

First a broad overview of the field of CME during large-scale health emergencies is provided, highlighting the state of research in this area and the linkages with the broader field of humanitarian-military relations. Following this, the three case studies are elaborated—based on a desk review of open-source material—with a focus on CME in response to COVID-19. The third section discusses several themes that arise from an analysis of the case studies. Finally, concluding remarks and recommendations for policy and guidance development are offered, as are considerations regarding avenues for further research relevant to improved understanding of CME in future public health emergencies.

Background

CME during large-scale health emergencies represents a small but emerging area of research and practice.⁶ Military actors have played a substantial role in myriad natural responses to disasters triggered by natural hazards, both domestically and—especially since the 1990s—as part of international missions. Examples include Hurricane Mitch in Central America in 1998, the 2004 Indian Ocean tsunami, the 2010 Haiti earthquake, the 2010 floods in Pakistan, Typhoon Haiyan in the Philippines in 2013, and the 2015 Nepal earthquake. Militaries have also been involved in stabilisation and counter-terrorism activities that blur lines between military and humanitarian objectives, such as the U.S.-led military operations in Afghanistan and Iraq; forced displacement crises including in Kurdistan in 1991, Kosovo in 1999, and Bangladesh in the context of the Rohingya refugee crisis; and public health emergencies, such as the 2013–2016 Ebola outbreak in West Africa and the 2018–2020 Kivu Epidemic in the Democratic Republic of the Congo.

International guidance for good practice regarding humanitarian civil-military coordination (CMCoord) includes the Oslo Guidelines (applicable in “natural disasters”), the Military and Civil Defence Assets (MCDA) Guidelines (relevant during complex emergencies), the 2004 Inter-Agency Standing Committee (IASC) reference paper (also relevant during complex emergencies), and various agency-specific guidelines.⁵ Key CMCoord principles aim to ensure the civilian, principled nature of humanitarian response when international military assets are used. Various analysts have, at the same time, articulated grave concerns about blurred lines between humanitarian and military objectives, as well as the importance of humanitarian principles in navigating these difficulties.⁷

Despite this growing body of research on humanitarian-military relations, significant empirical gaps remain in basic areas in this field. First, the literature has only just started to explore the full range of CME—such as innovation and knowledge exchange, for example—that fall beyond operational coordination.⁸ An underexplored challenge is how to manage CME across a wide range of issue areas, including operational coordination, humanitarian access and security, and humanitarian protection.⁹ In complex emergencies, these challenges can be particularly acute, as humanitarians grapple with managing humanitarian notification systems and questions surrounding the appropriate use of armed escorts in insecure environments.⁹ Second, scarce scholarship exists that probes the actual dynamics and impact of CME, including the uptake (or not) of existing guidelines, practices adopted for managing CME effectively, the factors that shape local perceptions, and considerations regarding how to evaluate whether CME has been successful or not.^{10,11}

These literature gaps are particularly acute for CME in contexts of large-scale health emergencies, including pandemics. What are the different ways CME manifests in epidemic or pandemic contexts? What are the impacts of these interactions? Scholars have just begun exploring these questions (e.g. Horne and Boland, 2020).¹² Moreover, there is a lack of CME guidelines specific to large-scale health emergencies as a distinct form of crisis.⁵ A disease outbreak also often brings militaries into a policing function—namely, to regulate quarantines or lockdowns—but there have not been connections made with the broader literature on this issue, an especially crucial gap given the risks of bringing militaries into roles that fall outside their traditional areas of competence (e.g. Dunlap, 1999).¹³ This research gap persists even though military policing in the context of disease outbreaks is a role that militaries have played for centuries.¹⁴ In the COVID-19 response specifically, the emerging literature on CME has highlighted familiar challenges from the field of humanitarian-military relations, including the lack of adequate collaboration and coordination between military and civilian health and humanitarian responders, human rights concerns stemming from militaries' law-and-order function, and the challenge for the military of engaging in a health response while still retaining readiness for its more traditional functions.¹⁵ The literature has also begun to examine the different roles militaries have played,^{15–17} as well as lessons learned in leadership and coordination from past experiences.^{18–20}

However, this literature has not delved into various non-traditional aspects of humanitarian-military interaction—for example, knowledge-production and sharing—that can be important aspects of military engagement in health emergencies, as this article later examines. Additionally, a notable aspect of COVID-19 responses has been intensive involvement of national militaries or other local security actors. Although there have been some examples of international military deployments to respond to COVID-19,²¹ the predominantly local nature of responses highlights a particular gap in existing research and guidance, which focuses on the use of international military assets and does not delve into comparative analysis of domestic issues that arise during large-scale public health emergencies. The illustrative case studies below, and the analysis that follows, aim to highlight and start to fill this gap.

Results

This section presents three case studies to illustrate some of the commonalities and differences in CME during COVID-19. These empirical observations are drawn from China, the UK, and the Philippines. In each of these contexts, militaries played a significant, wide-ranging role in the COVID-19 response.

Additionally, these contexts constitute a range in terms of the role that CMCoord principles have played in framing coordination between civilian and military responders. At one end of the spectrum is China, where the role of CMCoord principles in the response has been non-existent. In the middle is the UK, where principles of CMCoord (in particular, the principle of 'last resort') have been formally integrated into the domestic governmental response architecture. At the other extreme is the Philippines, which is a humanitarian response context with a significant international humanitarian presence and where CMCoord principles have been explicitly used to frame humanitarians' engagements with local military actors.

China

Overview

The world's first cases of COVID-19 were identified in Wuhan, Hubei Province during early December 2020. In response, China quickly positioned the People's Liberation Army (PLA) at the centre of a national response defined by close, highly-visible CME.²² A limited body of publicly available data and analysis makes detailed assessment of China's experience in coordinating military and civilian components of its COVID-19 response challenging, especially as related to a critical evaluation of topics such as human rights abuses. Available evidence suggests that, on the whole, the PLA's role in helping manage the pandemic has been largely well-coordinated and effective. However, the early response featured some initial challenges in the interoperability of China's discrete emergency management and national defence systems, and technical challenges were also confronted.²³ Widespread human rights concerns have also been voiced related to China's approach to enforcing lockdowns resulting in inadequate access to food and healthcare.²⁴ Looking forward, COVID-19 has also proven to be a critical test of the PLA's recent modernisation efforts and the further centralisation of China's future approaches to public health emergency response.²⁵

Governance structures

China places CME at the centre of a whole-of-government approach to national defence mobilisation.²⁶ Article 4 of China's National Mobilization Law, in particular, states that "national defense mobilization shall stick to the policies of combining civil with military, combining peacetime production with wartime production and embedding military in civilian (*sic*)".²⁷ This relationship is further supported by the PLA's central strategic doctrine of 'military-civil fusion'.²³ In the context of COVID-19, China's approach mobilised all available resources and personnel across military, reserve, and militia forces in addition to civilian enterprises, all framed within a strategic goal of "putting in place a defence line across the whole of society and relying on the people to win the battle" against COVID-19.²⁸

To this end, the country's massive nationwide campaigns for pandemic prevention and control activities has been overseen by China's Party Central Committee (PCC)'s Central Military Commission (CMC).²⁹ The CMC has, in turn, overseen deployment of the PLA's reserve forces, militia, and province-level military commands, hospitals and medical programs.³⁰ This control has been extended and augmented through a parallel structure of provincial, district, country, and municipal national defence mobilisation commissions designed to support local efforts.²⁵

Forms of military contributions to the COVID-19 response

The PLA's first—and most highly visible—role was in providing emergency support to front-line treatment within Wuhan in the outbreak's first wave through the deployment of several thousand military health workers in January, 2020.²⁸ By early February, these same personnel began receiving patients at two civilian health centres, and by mid-February the PLA had built and staffed two large COVID-19 field hospitals that would later admit over 7,000 COVID-19 patients.^{31,32}

The newly-formed PLA Joint Logistics Support Force (PLA-JLSF) took responsibility for deploying most units and medical services across five theatre commands, with local theatre commands overseeing their own joint logistics and medical support centres.³³ As the first real-world test of the PLA-JLSF since its establishment in 2016, Chinese military logistics proved effective in rapidly deploying hundreds of thousands of military medical personnel and militia to outbreak locations throughout China, the region, and to global allies.²⁵ The PLA's cadre of specialised military healthcare personnel provided direct clinical care in military-established field hospitals, monitored the outbreak, and oversaw distribution of PPE and other supplies.

The Chinese defence industry also produced huge volumes of PPE and medical supplies and reinforced supply chains. They also contributed to international PPE exports via World Food Programme (WFP) and World Health Organisation (WHO) mechanisms.³⁴ More than forty medical companies were ordered under military mobilisation directives to expand their production with support from military personnel,²⁵ as well as tech companies manufactured and distributed autonomous robotic systems for unmanned distribution, diagnosis, and disinfection work.^{35,36}

The collective scale of PLA logistics support during COVID-19 is hard to overstate, especially when the militia are also considered: potentially millions were deployed across China.²⁵ Chinese militia—which function as an auxiliary reserve force for the PLA—supported the response through logistics, distribution, and the communication of public health messaging in local communities. Indeed, the familiarity of militia units with local communities proved advantageous in leveraging grassroots engagement, both for public health messaging and maintaining a narrative of social stability in face of unrest.^{25,37}

The PLA also contributed to COVID-19 research and surveillance through its medical universities and a specialised medical centre run by the PLA Strategic Support Force. PLA medical research benefited from recent modernisation reforms across military medical institutions for improved military readiness, including increased recruitment of civilian scientists, international exchanges with military and civilian medical practitioners, and greater investment in research facilities. This has also included some controversial approaches to technology transfer, including exploitation of scientific cooperation arrangements for military or dual-use applications.²⁵ Further, PLA scientists helped to develop the world's first COVID-19 restricted-use-approved vaccine with peer-reviewed results published as early as July, 2020.³⁸

In short, the PLA has supported a wide range of CME knowledge and research support functions during COVID-19. More broadly, PLA personnel also leveraged learned experience acquired through previous pandemic response missions, which was worked into both support to civilian authorities and prevention and control measures and training within PLA ranks. The PLA began the response with a recent history of highly relevant experiences in medical and humanitarian CME acquired from prior missions. Therein, PLA medical cadres' response showed significant maturation in CME doctrine, good practices, and operational effectiveness relative to past responses, particularly its response to the SARS pandemic (2002–2004), Ebola in West Africa (2013–2016), earthquakes in Sichuan (2008) and Yushu (2010), and the Indian Ocean Tsunami (2004).²⁵

Finally, China actively engaged in international military assistance to regional and international COVID-19 response efforts. The PLA provided vaccines, test kits, and PPE to a wide range of other countries throughout Asia and South Asia, the Middle East, Europe, and South America.^{25,37} Beyond material supplies, PLA military medical personnel also shared expertise acquired in recent pandemic missions, particularly China's SARs and Ebola responses. In Sierra Leone, for example, the Chinese Military Medical Expert Group—already familiarised with the context from the West Africa Ebola response—supported Sierra Leone health authorities with their COVID-19 response.³⁹

United Kingdom

Overview

The British military's contributions to the COVID-19 response arguably began before the pandemic, through ongoing military medical support to the National Health Service (NHS), scientific contributions through the Ministry of Defence (MoD) Defence Science and Technology Laboratory (Dstl), participation in training exercises and civil-military workshops, and a history of support to local councils' coordination and planning bodies during major incidents.⁴⁰ COVID-19-related support began in January, 2020, when British citizens in Wuhan were repatriated via a military facility.⁴¹

This marked the first in a rapidly growing number of support streams as the crisis unfolded. Significant and varied assistance has been activated through the Military Aid to Civil Authorities (MACA) policy across myriad domains. In mid-March 2020, this support was formalised under two interrelated military operations (for domestic and international roles, respectively) and included formation of the 10,000–later-23,000-strong—COVID-19 Support Force (CSF) of standby military personnel, many of whom had been recalled from cancelled international training programmes.⁴² Standby personnel numbers have fluctuated with the outbreak. As of March, 2021, 14,000 military personnel remain on standby with 2,600 actively engaged in support to 56 separate MACA requests.⁴³ This represents the “biggest ever homeland military operation in peacetime”.⁴⁴

Governance structures

In 1964, the UK introduced the MACA framework as well-defined and structured provision through which civilian governmental departments can request domestic military support.⁴⁵ These requests must be a ‘last resort’, when support is required that cannot be provided by a public or private civilian agency because the capability does not exist or cannot be deployed with sufficient scale or speed. It must also be considered too expensive to develop this skill in a civilian agency.⁴⁶ Military personnel responding to a MACA request fall under both civilian and military law and therefore have “no powers over and above those of ordinary citizens... [and] have the same personal duty as anyone else to abide by the law at all times”.⁴⁶ MACA is invoked with some frequency in the UK for issues ranging from flood response to terrorism to strike-breaking.⁴⁷ Therein, UK governance surrounding military support to civilian authorities was both well established and frequently exercised prior to the COVID-19 pandemic.

Forms of military contributions to the COVID-19 response

The British military's contributions to the COVID-19 response span a wide array of domains, though notably this excludes law enforcement and maintenance of public order.

The military is actively involved in the production of ‘soft’ knowledge, including the countering of COVID-19 disinformation by anti-propaganda and psychological warfare experts. Other forms of soft knowledge include assistance between military medics—trained for and experienced in rapid-onset trauma and mass casualty events—and civilian doctors in the NHS, academic knowledge exchange, or CME and contact workshops.⁴⁸ Contributions to hard sciences and research are also myriad. Notably, two MoD-funded Dstl biosafety level 4 laboratories research dangerous pathogens including COVID-19 and provide unique and unprecedented laboratory capabilities and training; some Dstl staff were seconded to Public Health England (PHE).⁴⁹ Further support includes 3D printing and production of PPE to testing the NHS contact tracing app in military bases.^{50,51}

Support to logistics and the provision of a large, disciplined, and flexible workforce to back-stop overwhelmed civilian services is substantial. Logistically, this includes domestic and international airlift including repatriations, medical evacuations, and medically critical supply chain (the latter also done on behalf of the WHO and WFP as requested by UN OCHA); manufacturing of PPE and disinfectants; repurposing of military sites to open up additional patient beds and morgue spaces; and the construction (and operation) of testing sites, vaccination centres, and field hospitals.^{42,43,52} Additional support from the at-times 23,000-strong CSF has included driving oxygen tanks and ambulances;^{53,54} medical secondments to the NHS (indeed, “very few defence medics are not currently deployed or working in the NHS”),⁵⁵ and personnel to support testing and vaccine sites, contact tracing call centres, and NHS supply depots.

Support to coordination and planning is largely actioned through ‘local resilience forums’, otherwise civilian inter-agency bodies at the local level which are mandated to plan and execute responses to events like flooding. For COVID-19, military planners and liaison officers are embedded in these forums to provide support, expertise, and to serve as a liaison for the request of further military assets.⁵⁵ The military also provides a “philosophy of planning” which contributes

to coordination and planning in diffuse but important ways.⁵² Further contributions includes deployment of NATO's Allied Rapid Reaction Corps to support planning in London, and military crisis planners to backstop overwhelmed NHS trusts.^{56,57}

The British military's contributions to politics and diplomacy in the COVID-19 response are diffuse and as-yet somewhat undefined in the literature, but their clear, present, and substantial role certainly demonstrates—at least optically—an unambiguous reflection of the emergency and crisis context to the general public, which is reinforced with celebratory discourse from government sources despite how it also evidences a lack of resilience amongst the government's civilian institutions even though the UK is a high-income and stable liberal democracy.⁵⁸ Examples of diplomatic efforts include international support such as the delivery of medical aid to Ghana, provision of military planners and other personnel to the Cayman Islands and Turks and Caicos, and various support streams to British Overseas Territories.⁵⁹

The Philippines

Overview

The Philippine government was initially slow in their response to COVID-19. However, after community transmission grew in March 2020, President Duterte shifted from downplaying the virus to embracing militarised rhetoric in order to publicly demonstrate a commitment to defeating COVID-19.⁶⁰ By April, President Duterte had declared various broad quarantines and a country-wide "State of Calamity",⁶¹ banned travel to and from Manila, and was granted additional emergency powers.⁶² The Defence Secretary was placed in charge of the newly-formed COVID-19 National Task Force (NTP).⁶³

State of emergency measures also gave the Secretary of Health the ability to request support from the Armed Forces of the Philippines (AFP) and the Philippine National Police (PNP), which were "directed to undertake all necessary measures to ensure peace and order in affected areas".^{64,65} Subsequently—both by request and requirement—the AFP played a significant and varied role in the COVID-19 response.

Governance structures

The Philippines is prone to disasters triggered by natural hazards, and the AFP has long played a role in response efforts. Governmental coordination entities include the Inter-Agency Technical Working Group for the Management of Emerging Infectious Diseases (IATF-EID) as well as the Office of Civil Defense, which is the Secretariat of the National Disaster Risk Reduction and Management Council (NDRRMC) and is responsible for coordinating the use of military assets in disaster response.⁶⁶ However, the COVID-19 National Task Force was given responsibility to lead the government's response—including militarily—through the emergency powers outlined above. Coordination within the COVID-19 National Task Force has been necessary between its civilian and military entities as well as with international humanitarian organisations participant in the national disaster management cluster system.⁶⁶ This is further complicated by a new anti-terrorism law that was adopted in summer 2020 that criminalises "material support" for people designated as terrorists, a provision in the that could conceivably encompass certain types of COVID-19 programming.^{67,68}

Forms of military contributions to the COVID-19 response

Tens of thousands of AFP personnel have been deployed as part of the COVID-19 response effort.⁶⁹ As noted, the AFP has extensive past experience and a defined mission supporting responses to disasters triggered by natural hazards and subsequent reconstruction, and possesses unique capabilities relative to civilian actors such as the size of its labour force, its airlift and heavy transport capabilities, and its ability to access hard-to-reach locations throughout the country.⁶¹ Therein, to many Filipinos, the AFP's deployment during the COVID-19 is familiar.⁶¹ Nevertheless, COVID-19 still represents new territory for the country's tradition of CME which demand further elaboration.

On a large scale, the AFP has transported medical and laboratory equipment and supplies, personnel, and food assistance.⁶⁹ It has also deployed thousands of military medical personnel to treatment and quarantine centres, dropped COVID-19 information leaflets from aircraft, and supported the Office of Civil Defence through voluntary donations of military salaries.^{70,71}

The AFP and PNP have played a significant security, policing, and enforcement role in the response. This role has entailed checkpoint monitoring—including mandatory health screenings—and aerial monitoring.^{60,69,71,72} Despite the mandate to implement and enforce lockdowns, initially there was little-to-no guidance (public or otherwise) for how to do this while ensuring adherence to human rights, and this aspect of the response has therefore attracted fierce criticism from local and international actors.⁷³ Indeed, the AFP and PNP—with a blurred distinction between them in terms of their roles and responsibilities, as well as a lack of visible distinction in terms of uniforms—has been widely reported to be responsible for killings, mass arrests, and detainee abuse adjacent to these roles (e.g. Human Rights Watch, 2020 and UN News, 2020).^{74,75}

Retired military personnel who had transitioned into high-level civilian government leadership positions have played a significant role in implementing the Philippines' National Action Plan. The COVID-19 National Task Force is chaired *and* vice-chaired by *ex*-military personnel; the latter, a former AFP chief of staff, also leads the Department of the Interior and Local Government; another former AFP chief of staff is currently the 'COVID-19 policy chief implementer'; and yet a third former AFP chief of staff is the 'COVID-19 Response Overseer' as well as being the Environment Secretary.^{76,77} Criticism herein has included lack of technical expertise and suggestions that medical experts should play a central role in leading the response.^{61,78}

Overall, the military has played a very visible role in the Philippine government's COVID-19 response. President Duterte has also employed wartime rhetoric and imagery, appearing in public with uniformed military personnel. This poses a challenge for humanitarian organisations operating in the Philippines and aiming to maintain their impartiality, neutrality, and independence. The Humanitarian Country Team has directly translated international CMCoord guiding principles into this domestic context to inform how humanitarian organisations in this context should engage with the AFP. Operational Guidance published by the

Philippines Humanitarian Country Team—which is akin to advice as it is not binding or enforceable—includes provisions outlining how humanitarian engagement with the military during COVID-19 should not compromise humanitarian principles or place vulnerable populations at risk, and how military contributions must remain a last resort.⁷⁹ This element is particularly pertinent given the ongoing armed conflict in Philippines: the government and the Communist Party of the Philippines (CPP) both unilaterally announced a ceasefire in the pandemic's early weeks, but the ceasefire did not hold.^{80,81} Violence in Mindanao has continued over the course of the COVID-19 outbreak.⁸² There has also been ongoing violence between the government and Islamic State-affiliated groups, including bombings in Jolo city in August 2020.⁸³ In the country's conflict-affected areas, military involvement in the COVID-19 response gives rise to concerns that civilians could become collateral damage should anti-government militants seek to strike targets where military actors are present.⁸⁴

Discussion

CME exists in unacknowledged contexts and forms

Analyses of military contributions to civilian humanitarian responses have generally focused on describing and problematising more easily quantifiable forms of support, particularly logistics, troops, and *materiel*. Militaries are also recognised, as a secondary contribution, for their coordination and planning capabilities, as well as for the provision of security, policing, and enforcement in kinetic or complex emergencies. In turn, principle-based guidance surrounding CME and best-practice—at both international and domestic levels, and as specific to individual humanitarian agencies—focuses predominantly on marking boundaries and setting parameters for these specific areas of engagement.⁵

In practice, however, there is a much wider range of modalities in which militaries and civilians interact and exchange support during emergencies. This point is clearly evidenced during the COVID-19 response worldwide as militaries have engaged in these activities across the full range of operational contexts from complex emergencies to stable democracies.

In particular, pandemics and other health emergencies rely on collaborative approaches to surveillance, data, and scientific research. During these whole-of-society crises, knowledge exchange—including both formalised transfer of health intelligence, and the 'soft' diffusion of expertise and innovation, between military and civilian practitioners—represents a particularly important but under-acknowledged domain of CME.^{8,12} As an active sphere of CME, military-civilian knowledge exchange should presumably be subject to the same principle-based scrutiny as more explicit, quantifiable types of interaction, such as logistics and material support.

The preceding case studies evidence how these military contributions to the wider public health evidence base—including surveillance and scientific research around vaccine development, PPE product innovation, and codification of good clinical practices, among other contributions—have been critical to COVID-19 responses in each country. In China, much of the COVID-19 CME occurred outside of direct operational support, instead taking place in contexts of research and innovation, such as through the PLA military medical establishment's active leadership role in research and vaccine development. These contributions to hard and soft sciences were echoed in the UK, such as through extensive scientific work, research, and development at the Dstl, to trialling civilian contact tracing technologies in military bases, to diffusing a culture of coordination and planning and participation in civil-military learning and workshops. This knowledge exchange existed before COVID-19, as was the case in China, but has been reinforced throughout the pandemic as both a resource to be utilised and a tool—in some ways one of CME integration rather than division—to be further developed. In the Philippines, the military has likewise accrued extensive experience as a capable response partner and deployed this expertise widely as part of the COVID-19 response.

CME through knowledge exchange, rather than material contributions, can also be seen in the adaptation of concepts and models of military planning and coordination into all three country's COVID-19 response efforts. Applying structures explicitly from military organisations to civilian practice is common to national emergency response models and pre-dates COVID-19. Nonetheless, the impact of this conceptual diffusion from military to civilian spheres in shaping the character of civilian humanitarian and health response activities deserves greater critical engagement within the study of CME. Here, critical scholarship on analogous issues may offer a useful point of reference.⁸⁵

Current frameworks for understanding both domestic and international CME primarily focus on functional, operational areas of intersection between civilian and military responders. This framing, we argue, overly-constrains the wide spectrum of ways in which we can observe such engagement during crises that are as complex and multi-dimensional as a global pandemic. The implication is that a more expansive framework for CME is needed, one that considers the domains of soft knowledge diffusion, hard sciences and research, and knowledge exchange, in addition to more typically assessed contributions to logistics and personnel, coordination and planning, and security, policing, and enforcement, among others.

In public health and humanitarian emergencies, domestic militaries are often 'first responders' rather than a 'last resort'

COVID-19 responses in all three countries feature military actors who have been asked to perform various and often crucial support functions as a provider of 'first', rather than 'last', resort. The concept of international militaries as providers of 'last resort' during humanitarian emergencies is foundational to humanitarian principle-based CMCoord guidance, although it is intended to apply only to international MCDA (as in the Oslo and MCDA guidelines, for example).⁸⁶ In theory, the demarcation between 'last resort' international military support, versus a country's often 'first resort' deployment of its own military in disaster response, is relatively clear in policy language. In practice, however, many humanitarian organisations' own guidance on engagement with national militaries is heavily informed by the principle of such engagement only as a 'last resort' (as in the Philippines COVID-19 response), and many countries also hold principle-based constraints bounding military contributions to civilian relief efforts (as the UK case demonstrates).

This ambiguity is illustrated by the diversity of attitudes towards military contributions in all three countries, each of which offer a comparative reference point for differing institutional and cultural relationships towards CME which underlay their COVID-19 responses. In China, the military was both seen to be and

explicitly acknowledged as the country's 'first responder' throughout the course of the pandemic. While civilian authorities initially led the response in Wuhan during the outbreak's initial days, the military was quickly directed to assume responsibility as a result of local civilian administrative dysfunctions. This close CME as a means of first resort has been long-established in China's existing CME doctrine and strategic national defence mobilisation architecture, which was echoed in the UK where the military played a central role in supporting civilian health workers and local planners. As in China, the UK military was formally brought into the response from the very beginning of the country's outbreak through pre-established doctrinal mechanisms which facilitate and indeed encourage CME during domestic crisis response. Importantly, 'last resort' is a listed requirement for these MACA requests under UK doctrine, but at the same time, other criteria (such as affordability considerations) mean that functionally military support is actioned quickly and early, especially with the surfeit of capacity and personnel resulting from cancelled international exercises. In the Philippines, the rapidity with which the military was folded into the response was grounded in its well-established tradition of acting as a key stakeholder in past and ongoing responses to disasters triggered by natural hazards, as well as the formalised role of the military in the national disaster response coordination architecture.

In the context of China, the authorities appear to have made an early assessment of perceived limitations in the planning, command and control capacity of Wuhan's civilian public health system as a justification for shifting towards military-led response. A particularly intriguing question—albeit one that is difficult to answer in the still-evolving COVID-19 pandemic that—is the impact this modality will have on planning assumptions around civilian agencies' role in future pandemic responses, as well as responses to other types of largescale health crises, going forward. Much will rest on the degree with which China's lessons-learning from this process emphasise the PLA's contributions as having augmented, versus having displaced or made redundant, traditional civilian leadership.

The Chinese, UK, and Philippine experiences during COVID-19 suggest that domestic-led responses to public health emergencies—particularly at the scale of an epidemic or pandemic—call for reconsidering foundational expectations around CME. Many countries across the world claim long-established traditions of employing military support as means of first resort in domestic and regional responses. As the pandemic's scale forced regular state providers of international aid to prioritise resources for their own domestic responses, governments deployed their own or other's military assistance under existing domestic legal frameworks.

Existing literature and guidance on humanitarian-military relations has been largely centred around contexts of 'natural disasters' and complex emergencies, with a focus on engagement with international militaries, and a reference point to the foundational principles of humanitarian practice (such as humanity, impartiality, independence, and neutrality). There is a need, however, for further critical analysis of how applicable such premises and assumptions are to public health emergencies as a specific form of disaster—which, while sharing many similarities to humanitarian crises, are more consistently defined by domestic-led responses that entail state civilian leadership, robust military involvement, and sometimes a subordinate role for civil society.⁵

All three contexts—China, UK, and the Philippines—are distinct from one another. The Philippines, even before COVID-19, was an ongoing humanitarian response context in which responders have directly referenced CMCoord principles. China and the UK, where there is no largescale humanitarian presence, differ from the Philippines in this regard, although in the UK (and not in China), principles of CMCoord (including the principle of last resort) are embedded in the domestic response architecture and have informed governmental decisions about incorporating military actors into the response. Nevertheless, in all three contexts examined in this article, civilian actors have navigated a response context that is politicized and securitized to a certain degree. In this sense, civilian responders in all three contexts have grappled with the fundamental challenge that humanitarian principles, and CMCoord principles more specifically, were designed to mitigate: how to maintain the overall apolitical nature of a largescale disaster response. The key question that these contexts evoke is how response actors in a domestic setting can navigate this same overarching tension.

The political environment of CME

Humanitarian civil-military debates often focus on technical issues decoupled from recognition or analysis of the broader political environment in which militaries are deployed and used for supporting civilian response. Much of the concern around preserving civilian humanitarian independence stems from recognition that militaries—as extensions of state power—come to emergencies with their own political agendas that may not conform to humanitarian principles. The COVID-19 crisis illustrates the complexity and diversity of how military contributions to the wider public health response played out in practice, set within the context of wider political considerations. The preceding analysis provided examples of this point from three countries; the fact that nearly every country in the world confronted similar questions suggests that these challenges speak to a much wider potential empirical base of comparison.

In China, for instance, COVID-19 has highlighted the position of PLA medical institutions as key agents of Chinese health diplomacy and military diplomacy. China's Secretary of the Central Political and Legal Affairs Commission Guo Shengkun put it plainly: "during the pandemic, we seized important achievements in a short time and have posed a great contrast between 'China's orderliness' and 'the West's chaos'.⁸⁷ This suggests an insight into the motivating factors driving militarisation of an ostensibly civilian emergency response domain and underscores the political environment in which any CME activity inherently takes place.

It is further relevant that, in the Chinese context, the pandemic was explicitly described in terms of military conflict, and that this framing in turn structured expectations for the response in terms of military approaches, even blurring or erasing conceptual distinctions between 'military' and 'civilian'. China Military Online, for instance, described COVID-19 and the response to it as "nothing short of a war".⁸⁸ Similarly, in the Philippines, President Duterte used the military and their role in COVID-19 as a rhetorical device to support the projection of government control and authority. Here, the UK again offers a counterexample, where the role of the military has certainly been celebrated but has not necessarily been elevated as a central tenet of the domestic response. This perhaps contributes to and evidences different political calculus playing out in upper middle-income autocracy, lower-middle income populist democracy, and high-income liberal democracy, in China, the Philippines, and the UK, respectively.

These case studies suggest analysis of CME should not be limited to a technical or indeed operational discussion: it must feature complementary political contextualisation and analysis as a matter of course. Contributions made by militaries and military personnel to humanitarian and health responses are, by definition, highly political, with priorities shaped by the political environment of military actors, states, as well as domestic and international civil society actors, and should be recognised as such. Indeed, the discourse surrounding COVID-19 represents a rhetorical space into which military concepts and mental models are diffused. These models, in turn, shape the nature of civilian humanitarian response: for example, the explicitly martial rhetoric adopted by China and Philippines is a means of mobilising (civilian) society in the COVID-19 response. It is too easy to hand-wave this as the decision of a sovereign nation: politically foregrounding the role of the military clashes with key international CMCoord principles, including the use of international military assets as one of 'last resort', and any response should maintain unambiguous civilian leadership. Although CMCoord guiding documents apply these principles to the use of international military and civil defence assets, in practice, many humanitarian practitioners consider them to be either applicable or key points of reference in guiding humanitarian organisations' engagements with domestic armed actors as well. This was evidenced, for example, by the Philippines Humanitarian Country Team context-specific guidance for COVID-19, which applied international CMCoord principles to humanitarians' interactions with the AFP.

The need for disaggregation between 'military', police, and gendarme

Most literature and guidance tends to refer collectively to 'militaries', which obscures important distinctions that different security and armed actors play in the midst of public health emergencies.⁵ These related actors can be categorised in a number of different ways. Of fundamental importance is to maintain, in discussion and analysis, differentiation between international and domestic militaries. In some instances of military contribution to the COVID-19 crisis, such as China's multiple military support missions to allied governments, an international military provides assistance beyond their national borders at the request of and with the permission of a host nation. In other instances, this support occurs domestically, which represents a fundamentally different conceptual and legal question, especially when considering how to balance sovereign decisions that counter civil-military guiding documents.

Further, within any specific military, different branches or departments may have very different cultures, doctrinal approaches to emergency response, capabilities, and ways of operating. For example, military medical services are often quite distinct from combat engineers or an artillery brigade and can often be deployed independently.¹² And critically, a military's medical and public health capabilities, as distinct from other capabilities, require distinct consideration in pandemic contexts.

It is particularly crucial to differentiate between militaries and police, gendarme, and paramilitary forces, as well as, in some contexts, non-state armed groups. Where they exist, each of these groups has contributed to the COVID-19 response. They are, however, frequently grouped into one conceptual space in the literature, despite the fact that these groups are neither military, nor necessarily armed.

In China, for example, the militia played a prominent role in carrying out massive community-engagement efforts at scale, and therein filled an important role within the overall COVID-19 response. Here, the militia functioned as a distinct actor-type compared to active and reserve forces. In the Philippines, the national police and the military both have served a 'law-and-order' function, including monitoring checkpoints and curfew compliance, and there has not been a sharp distinction between the two, in terms of their overlapping functions, as well as how they appear (police have worn military-style camouflage uniforms even when operating in urban environments).⁸⁹ The UK offers an interesting and important counterexample to the Chinese and Philippines case studies: the police and militaries are deliberately and obviously highly separate institutions. In most cases, police officers are unarmed, for example, and there is no gendarme to 'bridge' the police and military domains. While the military was widely involved in supporting the COVID-19 response, to date, it has never been involved in ensuring or enforcing public order, and military personnel enjoy fewer legal protections than their civilian security counterparts. Perhaps this results in a higher degree of acceptance by the general public within a liberal democracy, as the military role is more clearly understood as deployed uniquely in response to a specific emergency, though this requires further qualitative evaluation.

What these case studies consistently evidence is that—aside from the importance of ensuring this level of disaggregation is afforded proper attention in analysis of humanitarian CME—the broader country and regional context in which police, military, and 'militarised police' are operating must also be considered. As they sit somewhere between civilian and military, the latter may create particular risks in some contexts as popular perception may not maintain this admittedly confused distinction. For example, civilian populations in complex emergencies may be far less receptive to gendarme carrying out support functions than populations in consistently stable contexts, as they are rightfully more sceptical of underlying motives and safety (e.g. Oppenheim *et al.*).⁹⁰

These observations underscore that military and police operate as complementary stakeholders in an escalated spectrum of responses that occur in pandemics, as well as across a wide range of humanitarian operations. While the literature has traditionally explored each respective actor-type's relations with civilian counterparts in isolation, such analysis should be better joined up to build a better holistic understanding of security actor's roles in a pandemic response ecosystem as a whole.

Pandemics as a unique crisis domain and 'stress test' the civilian international system

While the preceding points are illustrated case study observations related to COVID-19, they highlight concepts and issues that have long remained under-addressed in the broader debate, discussion, and literature around humanitarian CME.

There are, however, a number of distinct factors in how militaries and civilians interact in the context of epidemics.⁵ In most disease outbreak contexts, the WHO draw on their World Health Emergencies Programme (HEP) rosters, relying on deployments of an international experts. Yet the *pandemic* nature of COVID-19 highlights a fundamental flaw in this structure: as the crisis drew these experts back into their domestic contexts, this resource—a core component of the international architecture developed to respond to disease outbreaks—was unavailable at precisely the time it was needed most. Countries throughout the world have thus fallen back to their domestic capacities and resilience at hand, which frequently meant a turn to military resources. This observation has

profound implications for future CME and response. First, it calls for more direct engagement with health emergencies in existing CMCoord guidance. This realm has not been entirely neglected. For example, context-specific guidance has been produced, including global guidelines for COVID-19 produced by the United Nations Civil-Military Coordination Service.⁵ However, the issues identified throughout this section suggest a wider array of challenges worthy of greater attention, within the broader context of a fundamental re-evaluation of domestic disaster response frameworks in the wake of COVID-19.

Further, the pandemic demands consideration of an unresolved but fundamental question: is the scale of this crisis unique, or—as global megatrends like climate change, urbanisation, globalisation, and protracted crises and displacement occur—can and should countries and the international community anticipate more instances of future ‘global mega-crises’ which overwhelm international response architectures once again? Countries that have found their own domestic civilian resiliency to be lacking during COVID-19 will need to address these capacity constraints in the immediate, medium, and long term.

The role of the military will undoubtedly be central to any such conversation, regardless of context but especially in the Global South, where domestic civilian capacities (and resources for further developing them) are lacking. Further, given the strong professional overlaps in and alignment between military medical and civilian health sectors, CME during health emergencies and pandemics may even represent comparatively fruitful spaces for fostering this domestic capacity around shared health priorities.¹² Therein, COVID-19 is a clear wake-up call to the need for better recognising CME as a priority issue for future public health emergencies and can no longer remain an academic after-thought or policy post-script.

Conclusions

The preceding discussion has important implications for both research and policy on humanitarian CME. First, this paper suggests the need for research and analysis on this topic to better consider major health emergencies as a specific type of complex humanitarian crisis, with distinct implications for developing appropriate, tailored good practice. This priority can be supported by expanding comparative analysis of military involvement in COVID-19 responses in additional countries to contribute to further CME lessons-learning in the context of pandemics.

Second, particularly in the context of future global mega-crises and health emergencies in which international humanitarian response architecture and norms (in their current form) are overwhelmed, it is likely that militaries will play an increasing role in supporting domestic, regional, and even international resilience. Our case studies suggest that nations will increasingly deploy military assets as first response. Existing CMCoord guidance does not address the particular complexities for humanitarian organisations of operating in such environments. As this paper has noted, CMCoord guidance focuses on the use of international MCDA in humanitarian response. In contexts where there is robust civilian governmental leadership and extensive domestic military involvement, in what ways can and should local and international humanitarian organisations interact with these response structures while still retaining the civilian, principled nature of their own operations? This question deserves more attention and analysis.

This point, in turn, offers an imperative to reconceptualise mechanisms for effective CME. Decision-makers should review existing international civil-military guiding documents with a view to addressing these points and creating specific guidance for health emergencies including pandemics and epidemics. They should assume militaries will be a central stakeholder during resilience planning for future global mega-crises and health emergencies on the basis of these capabilities and capacities, with rigorous consideration for any risks and consequences that may result. Distinct capabilities and capacities of militaries in response to these mega-crises and health emergencies must be clearly identified and inventoried. And ‘military actors’ should also be disaggregated between domestic and international, as well as between military and other non-military armed groups and security actors.

The gravity of the challenges faced in CME during COVID-19 explored in this article, as well as the likelihood of future epidemics or pandemics impacting a globalised planet, suggest the importance of pushing this research, policy, and guidance forward. Over the past hundred-or-so years, the world has confronted multiple outbreaks of coronaviruses, Ebola, and influenza, and even as the COVID-19 pandemic persists, global leaders have begun preparing for the next pandemic.⁹² Working toward more effective management of CME during large-scale disease outbreaks—and indeed, building an evidence base of practices to manage and surmount key challenges—should be a key component of these efforts.

The case studies presented in this article, and the analysis and recommendations offered, aim to contribute to this broader effort. The observations drawn from these illustrative examples are necessarily limited in generalizability, but nonetheless raise several important issues and questions that are timely for the immediate lessons-learning process to follow COVID-19 in the coming years. Additional case study research, illustrating the richness of a truly global diversity of country experiences in domestic CME during their own COVID-19 responses, can provide welcome further context. Such empirical detail will become more available as the post-factor evidence-base surrounding the pandemic continues to emerge, and its analysis can ultimately inform operational insights to guide domestic and international civil-military coordination ahead of future potential pandemics and other global mega-crises.

Abbreviations

Acronym	Definition
AFP	Armed Forces of the Philippines
CMC	Central Military Commission
CMCoord	Humanitarian civil-military coordination
CME	Civil-military engagement
CPP	Communist Party of the Philippines
CSF	COVID-19 Support Force
Dstl	Defence Science and Technology Laboratory
HEP	Health Emergencies Programme
IASC	Inter-Agency Standing Committee
IATF-EID	Inter-Agency Technical Working Group for the Management of Emerging Infectious Diseases
MACA	Military Aid to Civil Authorities
MCDA	Military and Civil Defence Assets
MoD	Ministry of Defence
NDRRMC	Secretariat of the National Disaster Risk Reduction and Management Council
NHS	National Health Service
NTP	COVID-19 National Task Force
PCC	Party Central Committee
PHE	Public Health England
PLA	People's Liberation Army
PLA-JLSF	People's Liberation Army Joint Logistics Support Force
PNP	Philippine National Police
PPE	Personal protective equipment
UK	United Kingdom
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
WFP	World Food Programme
WHO	World Health Organisation

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^a The chapter's type-set references are also reproduced within this thesis' references section. 34,40,141,199,254,309,358,374,383,394,479,657,707,728–735,853–901,901–921

Summary of other relevant peer-reviewed publications (including in press and working papers)

Table 1: Summary of relevant peer-reviewed publications	
Title	A community-based confinement strategy to reduce the spread of Ebola Virus Disease: an analysis of the 2018–2020 outbreak in the DRC
Author(s)	Mory Keita, Johnathan Polonsky, Steve Ahuka Mundeke, Michael Kalongo, Ilumbulumbu Adama Dakissaga, Hamadou Boiro, Julienne Ngoundoung Anoko, Lamine Diassy, John Kombe Ngwama, Michel Kasereka Tosalisana, Samuel T. Boland , Alexandre Delamou, Abdou Salam Gueye, Ibrahima Soce Fall, Antoine Flahault, Stephanie Dagrón, Olivia Keiser
Type	Peer-reviewed academic journal article
Status	In revision
Status date	30/05/2022
Publication	BMJ Global Health
Link	N.A.
Abstract or description	Despite tremendous progress on Ebola Virus Disease (EVD), challenges remain in the implementation of strategies to quickly stop outbreaks. The Democratic Republic of the Congo (DRC) experienced its tenth documented EVD outbreak from 01 August 2018 to 25 June 2020. This study aimed to investigate the effectiveness a community-based confinement strategy to reduce the spread of EVD. A comparative study was designed to investigate the effectiveness of a community-based confinement strategy. The primary outcome was the number of secondary confirmed case in the two groups. Secondary outcomes included delay between symptom onset and isolation, case fatality rate, survival rate, and vaccination rate. Data were analysed using various quantitative methods (depending on the nature of the data collected). A total of 27,324 EVD contacts were included in the study. 585 contacts were confined and followed up (‘the intervention group’), and 26,739 were followed up without confinement. The confined group generated 32 confirmed cases in the first generation, while the unconfined group generated 87. Conversely, the 32 confirmed cases from the confined contacts did not generate any secondary cases, whereas the 87 confirmed cases from the non-intervention group generated 99 confirmed secondary cases. Results for the secondary outcomes showed significant difference between the two groups. This study demonstrated that the community-based confinement strategy used in DRC is effective for the rapid cessation of EVD transmission, which is relevant for discourse on the importance of community-oriented and innovative contact tracing strategies. Further, given how devastating an EVD epidemic can become, the early implementation of this or similar strategies should be prioritised.
Title	Investing in preparedness and early warning systems for the rapid control of epidemics: analysis of health system reforms and their effect on Ebola Virus Disease epidemic response in Guinea
Author(s)	Mory Keita, Ambrose Talisuna, Dick Chamla, Mahamoud Sama Cherif, Barbara Burmen, Jonathan Polonsky, Fode Amara Traore, Jean Traoré, Samuel T. Boland , Jean Paul Kimenyi, Mamadou Balde, Saikou Yaya Kollet Diallo, Amadou Bailo Diallo, Daniel Yota, Togbemabou Primous Godjedo, Tieble Traore, Alexandre Delamou, Georges Alfred-Kizerbo, Stephanie Dagrón, Antoine Flahault, Olivia Keiser, Abdou Salam Gueye
Type	Peer-reviewed academic journal article
Status	Working paper
Status date	30/05/2022

Publication	To be decided
Link	N.A.
Abstract or description	The 2014–2016 West Africa Ebola Virus Disease (EVD) Epidemic devastated Guinea’s health system and constituted a public health emergency of international concern (PHEIC). Following the crisis, Guinea applied important lessons-learned, investing in the establishment of basic health system reforms and crucial legal instruments for strengthening national health security. These reforms were in line with the WHO's recommendations for ensuring better preparedness for (and therefore response to) health emergencies, and were tested in the subsequent EVD outbreak that occurred in 2021. In this paper, we critically analyse preparedness activities conducted in the country before, during, and after the 2021 event that may have contributed to the rapid control of that outbreak and the ability to efficiently detect new ones. Findings confirm the utility of the preparedness activities for the early detection and efficient containment of the 2021 outbreak, which therefore underlines the need for all countries at risk of infectious disease epidemics invest in similar reforms as a matter of priority. Doing so promises to be not only cost-effective, but also life-saving.
Title	COVID-19 and Lassa Fever co-infection in an Ebola suspected patient in Guinea
Author(s)	Mory Keita, Mahamoud Sama Cherif, Billy Sivahera, Samuel T. Boland , Freddy Banza-Mutoka, Mamadou Kourouma, Jean Paul Kimenyi, Adama Kaba, Moussa Kone, Lamine Diassy, Angelo Loua, Enogo Koivugui, Alseny Modet Camara, Ibrahima Sory Fofana, Youba Kandako, Victorine Soua Dore, Josue Dobo Onivogui, Tamba Jacques Millimono, Fode Diakite, Mamadou Oury Balde, Bienvenu Houndjo, Ngoy Nsenga, Ambrose Talisuna, Alexandre Delamou, Olivia Keiser, Georges Alfred-Kizerbo, Abdou Salam Gueye
Type	Peer-reviewed academic journal article
Status	Published
Status date	20/01/2022
Publication	The American Journal of Tropical Medicine and Hygiene
Link	https://doi.org/10.4269/ajtmh.21-0713
Abstract or description	In this case report, we describe a clinical presentation and therapeutic history of a unique case diagnosed with Lassa fever and SARS-CoV-2 in a 23-year-old man from Yomou prefecture in southeast Guinea identified with suspected EVD in the midst of an ongoing Ebola Virus Disease (EVD) outbreak. He was admitted to the N’zérékoré ETC where his clinical condition deteriorated significantly. Laboratory testing was conducted urgently. The patient had a negative EVD polymerase chain reaction (PCR) test but a positive Lassa fever test—further, the patient tested positive for SARS-CoV-2 by reverse transcriptase PCR (RT-PCR) assays. Laboratory examination also indicated a serious haematological and biochemical deterioration of the patient. This case substantiates the need for systematic differential diagnosis during epidemic-prone diseases outbreaks to better manage severely unwell patients admitted.
Title	Civil-Military Engagement During Public Health Emergencies: A Comparative Analysis of Domestic Responses to COVID-19 (included as Appendix B-1, pages 385–402)
Author(s)	Samuel T. Boland , Rob Grace, Josiah Kaplan
Type	Peer-reviewed academic journal article
Status	Working paper
Status date	31/01/2022

Publication	To be decided
Link	https://www.researchsquare.com/article/rs-801094/v1 (preliminary preprint)
Abstract or description	Background: Despite the central role that domestic militaries regularly play in supporting civilian disease outbreak responses, the dynamics of domestic civil-military engagement (CME) during major health emergencies remain largely under-explored in public health, humanitarian, and security literatures. Previous research has found, furthermore, that existing international and domestic civil-military guidelines hold limited relevance during public health emergencies, including epidemics and pandemics, currently evidenced by the observable lack of coherence and high variance in both international and domestic military approaches to supporting COVID-19 responses worldwide. Methods: This article presents a comparative analysis of three of these approaches—in China, the United Kingdom, and the Philippines—and maps these countries’ military contributions to the COVID-19 response across a number of domains. Results: Analysis of these case studies provides important insights into the ways that CME exists in unacknowledged contexts and forms; how militaries, particularly domestic forces acting as first responders, play an important role in major health crisis contexts; the confusion surrounding how to understand various non-military armed and security actors; and how pandemics, in particular—and other types of largescale health emergencies more broadly—represent a unique domain for CME that tests both the international system and international norms. Conclusion: This paper concludes with policy, guidance development, and research recommendations for improved practice for localised CME during public health emergencies. ³⁹
Title	Proposing a new typology of armed and security actors relevant to humanitarian-military relations manifested during humanitarian and public health emergency responses
Author(s)	Samuel T. Boland, Rob Grace
Type	Peer-reviewed academic journal article
Status	Working paper
Status date	24/02/2022
Publication	To be decided
Link	N.A.
Abstract or description	Several global guiding documents are maintained by the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) that seek to inform humanitarian-military relations (HMR) and delineate best practices. However, none effectively address how HMR should manifest with the full range of armed actors that might be relevant to humanitarian and public health emergency response. This includes, for example, non-state armed groups (NSAGs) and militarized police. Insufficient consideration for the diversity of armed actors has been highlighted in the literature as a specific gap in both HMR policy and research. Accordingly, this paper examines 175 semi-structured qualitative interviews drawn from three HMR case studies, with a view to identifying and landscaping these HMR factors. The HMR case studies are an Ebola outbreak in the Democratic Republic of the Congo (DRC); a displaced-persons crisis on the Jordan-Syria border; and natural disaster and COVID-19 epidemic responses in the Philippines. The paper finds that the diversity of armed actors extends to not only their type but also their HMR capabilities (i.e., their operational and logistical capacity); their knowledge of and experience in engaging HMR principles; and their degree of political will to do so. These factors—applied to diverse armed actors—interweave to create a number of unique HMR opportunities and also unique HMR challenges, which have significant import for HMR during humanitarian and public health emergency response. The paper then proposes a new typology of these HMR factors with significant utility for both policy and research domains.
Title	Navigating the (in)congruence of humanitarian and crisis-affected community perspectives on armed actor interventions in humanitarian and public health crises

Author(s)	Samuel T. Boland, Rob Grace
Type	Peer-reviewed academic journal article
Status	Working paper
Status date	24/02/2022
Publication	To be decided
Link	N.A.
Abstract or description	Humanitarian-military relations (HMR) frequently manifest in response to humanitarian and public health emergencies. Relevant HMR guidance and discourse exists that seeks to inform best practices and overcome operational challenges. However, little systematic research has been done to collect and examine the perspective of crisis-affected community members on the role of armed and security actors performing or supporting humanitarian and public health interventions. This remains a significant gap in the literature, guidance, and discourse, particularly because crisis-affected community members constitute the theoretical beneficiaries resulting from HMR during the response to humanitarian and public health emergencies. Accordingly, 175 semi-structured qualitative interviews were conducted across three research sites and four contexts where HMR occurred in the response to crisis: an Ebola response in the Democratic Republic of the Congo (DRC); forced displacement on the Jordan-Syrian border; and natural disaster and COVID-19 responses in the Philippines. Interviews were conducted with civilian responders (n=62); armed and security actors (n=20); and crisis-affected community members (n=93). Interviews were transcribed and coded inductively, then analysed using grounded theory. In this paper, findings on the (in)congruence within and between research groupings' perspectives are first landscaped (with a view to delineating convergence and divergence of civilian and military responder perspectives when compared with crisis-affected community members), and implications and recommendations for policy and research are then discussed.

Table 1: Summary of relevant peer-reviewed publications

Summary of other relevant publications

Table 1: Summary of other relevant publications (in order of date published / status date)	
Title	Ebola Virus Disease Surveillance in Sierra Leone: Port Loko and Kambia District Ebola Response in the West Africa EVD Epidemic
Author(s)	Samuel T. Boland
Type	Undergraduate dissertation (The University of Chicago)
Status	Accepted
Status date	27 April 2016
Publication	N.A.
Link	N.A.
Abstract or description	The West Africa Ebola Virus Disease (EVD) Epidemic is the worst outbreak of EVD in recorded history. While much has been published regarding the international and national-level EVD responses, there is a dearth of literature on more local structures, successes, and failures. This paper therefore seeks to understand how the EVD response unfolded in the Port Loko and Kambia districts of Sierra Leone. 43 District Surveillance Officers, the epidemic's frontline responders, were surveyed. From this, it was found that political deference to the World Health Organisation and their focus on technical epidemiology over logistical and operational needs had a strong and negative impact on the efficacy of both district's EVD response. A number of policy recommendations follow. Most significant is the need to establish an Integrated Disease Surveillance and Response network in conjunction with the improvement of Sierra Leone's existing District Health Information Systems 2 architecture. Doing so will empower Sierra Leone's government to take the lead in future outbreak responses. ⁴⁷²
Title	Assessing the Impact of Enhanced Active Surveillance of Ebola Virus Disease (EVD) During Operation Northern Push—Port Loko and Kambia Districts, Sierra Leone
Author(s)	Ahn-Minh A. Tran, Adam Hoar, Alyssa J. Young, Allison Connolly, Samuel T. Boland , Tom Sesay, Carlos A. Kamara, Osman Barrie, Ivonne Camaroni, Mary-Anne Lieshout
Type	Conference paper
Status	Accepted
Status date	21 April 2016
Publication	The Royal College of Surgeons in Ireland (RCSI) Global Health Conference
Link	N.A.
Abstract or description	An analysis of 'enhanced active surveillance' in Port Loko and Kambia districts of Sierra Leone. 'Enhanced active surveillance' was an experimental approach wherein epidemiological analysis was applied to social science data (related to community acceptance and engagement with the Ebola response), which was then used to complement case and contact tracing data to map local areas according to the risk of undetected Ebola transmission. That information was then used to target Ebola response resources and outreach. ⁷⁶⁸

Title	Strengthening Community Surveillance of Ebola Virus Disease in Sierra Leone
Author(s)	Anh-Minh A. Tran, Adam Hoar, Alyssa J. Young, Allison Connolly, Mary-Anne Hartley, Samuel T. Boland , Brooke Mancuso, Guddu Kaur, John Esplana, Erin Polich, Laura Fisher
Type	Conference paper
Status	Published
Status date	24 March 2016
Publication	Online Journal of Public Health Informatics
Link	https://doi.org/10.5210/ojphi.v8i1.6583
Abstract or description	Port Loko District in Sierra Leone had over 1,400 confirmed Ebola cases since the start of the outbreak. Stronger surveillance systems were critical for the early detection of potential EVD cases, thus containing further spread of the epidemic. Community structures such as clinics, village/section chiefs, community Ebola responders, religious institutions and community social mobilisation teams were critical to developing robust integrated surveillance systems that could report significant EVD events to the District Ebola Response Centre. This ensured that all significant events were investigated. Continuous engagement of community and section structures proved critical in stopping the spread of EVD in Port Loko. ⁹²²
Title	The Reminiscences of Samuel T. Boland
Author(s)	Samuel Robson (interviewing Samuel T. Boland)
Type	Oral history
Status	Published
Status date	18 June 2018
Publication	David J. Sencer CDC Museum Global Health Chronicles
Link	https://globalhealthchronicles.org/items/show/7897
Abstract or description	An extended interview as part of the CDC Ebola Response Oral History Project and retained as a digital exhibit at the David J. Sencer CDC Museum. The project interviewed 146 Ebola Response Workers (ERWs) to document their stories, experiences, and lessons learned. ⁹²³
Title	Lessons from the Ebola Outbreak in Sierra Leone
Author(s)	Samuel T. Boland , Gillian McKay
Type	Blog
Status	Published
Status date	8 August 2018
Publication	Africa@LSE
Link	https://blogs.lse.ac.uk/africaatlse/2018/08/08/lessons-from-the-ebola-outbreak-in-sierra-leone/
Abstract or description	This blog post was in response to another titled ‘What will happen when there is another epidemic? Ebola in Mathiane, Sierra Leone’ that was posted to Africa@LSE and From Poverty to

	Power. The blog post concluded with the following: Instead of limiting external intervention in future outbreaks, we should continue to research and consider how best to learn from the experiences of communities like Mathiane to demonstrate the need for earlier, better resourced, more coordinated, and more engaged interventions. International, national and community responses should not be seen as separate: we believe that all these levels have a part to play in an effective response, one in which communities and their leaders are true partners in stopping transmission. In such a response, communities will be able to take advantage of the intervention’s operational resources and technical expertise, and combine these with their own lived experience to ensure that the support they get is appropriate, acceptable and tailored for their unique situation and needs. ⁴⁹⁹
Title	Health Systems Responses to Controlling Infectious Diseases
Author(s)	Samuel T. Boland
Type	Book chapter
Status	Published
Status date	23 September 2018
Publication	Applied Communicable Disease Control (Liza Cragg, Will Nutland, James Rudge)
Link	https://www.mheducation.co.uk/applied-communicable-disease-control-9780335262922-emea-group
Abstract or description	Published chapter in the Open University Press and London School of Hygiene & Tropical Medicine collaborative series ‘Understanding Public Health’. The chapter details how health systems have or might control infectious diseases. ⁹²⁴
Title	More of the same won’t solve Congo’s Ebola crisis—let locals lead
Author(s)	Susannah Mayhew, Samuel T. Boland , Dan Cohen, Gillian McKay, Esther Mokuwa, Paul Richards, Ahmed Vandi
Type	Opinion article
Status	Published
Status date	18 July 2019
Publication	The Guardian
Link	https://www.theguardian.com/global-development/2019/jul/18/congo-ebola-crisis-let-locals-lead-world-health-organization-public-health-emergency
Abstract or description	An opinion piece regarding the role and function of the World Health Organisation (WHO) in the contemporaneously ongoing 2018–2020 Kivu Ebola Epidemic, calling for greater localisation of the response, including, namely, a partial shift of the WHO’s role as an implementing partner to ‘coaches’ of local response staff and community-led initiatives. ⁵⁰⁰
Title	Covid-19 has forced a reckoning—the UK has much to learn from low income settings
Author(s)	Samuel T. Boland , Gillian McKay, Benjamin Black, Susannah Mayhew
Type	Opinion article
Status	Published

Status date	14 May 2020
Publication	The BMJ Opinion
Link	https://blogs.bmj.com/bmj/2020/05/14/covid-19-has-forced-a-reckoning-the-uk-has-much-to-learn-from-low-income-settings/
Abstract or description	The scale of the COVID-19 pandemic outstrips the capacities of almost all nations, including the wealthiest. Tangible examples of low cost, high impact strategies can be drawn from countries that have recently experienced large epidemics. Crucially, they employed a top-down response guided by experts alongside a ground-up strategy of locally driven and owned interventions. ⁶⁵⁹
Title	Pandemics constrain resources even of wealthy nations
Author(s)	Benjamin Black, Samuel T. Boland , Susannah H. Mayhew, Gillian McKay
Type	Evidence submitted for Parliamentary Review by the House of Commons Health and Social Care Select Committee
Status	Published
Status date	May 2020
Publication	Parliament of the United Kingdom
Link	https://committees.parliament.uk/writtenevidence/4546/pdf/
Abstract or description	As above. ⁶³⁴
Title	Global Challenge Governance: Time for Big Modelling?
Author(s)	Tibor Toth, Georgios Theodoropoulos, Samuel T. Boland , Ibad Kureshi, Adam Ghanda
Type	Conference paper
Status	Published
Status date	22 July 2020
Publication	2019 IEEE 18 th International Conference on Cognitive Informatics & Cognitive Computing (ICCI*CC)
Link	https://ieeexplore.ieee.org/document/9146059
Abstract or description	Global emergencies such as epidemics present immense governance challenges to national, political and operational decision-makers. Modelling and Simulation has been identified as a crucial force multiplier in the development and implementation of preparedness and response measures for epidemics and pandemics outbreaks. Recent years have witnessed an explosion in modelling and simulation tools for this domain while emerging technologies such as IoT and remote sensing enable data collection as an unprecedented scale. However, fragmentation and siloing of these efforts hamper their effectiveness. This paper argues that the complexity and scale of the challenge calls for an integrated 'Big Modelling' approach which would bring all the different elements together to enable a holistic view and analysis and outlines a computation framework that can act as a catalyst in this direction. ⁹²⁵

Title	Armed Forces Medical Services; Armed Non-State Actors; Healthcare in Fragile Settings
Author(s)	Samuel T. Boland
Type	Book chapters
Status	Published
Status date	2020
Publication	A Practical Handbook for Professionals Working in Health Emergencies Internationally (Robert Koch Institute)
Link	https://www.incontrol-handbook.org/
Abstract or description	Three chapters on civil-military related or civil-military adjacent issues published in the Robert Koch Institute’s ‘A Practical Handbook for Professionals Working in Health Emergencies Internationally’. ^{926–929}
Title	For COVID-19 vaccines to succeed, we must build trust
Author(s)	Tjada D’Oyen McKenna (with Samuel T. Boland contributing)
Type	Opinion article
Status	Published
Status date	13 January 2021
Publication	Devex
Link	https://www.devex.com/news/opinion-for-covid-19-vaccines-to-succeed-we-must-build-trust-98895
Abstract or description	Vaccination efforts against COVID-19 are finally underway. In a global effort that is only as strong as its weakest link, support will be desperately needed to achieve what UNICEF has described as ‘one of the largest mass undertakings in human history.’ But as we grapple with the logistical obstacles of vaccine delivery for low-income countries, the challenges go beyond the need for cold chain storage, airfreight distribution, and the supply of needles and vials. One of the biggest hurdles in reaching the world’s most vulnerable people will be convincing them that vaccines, and the people providing them, can be trusted. Winning this trust will require an enormous, united effort from governments, public health experts, humanitarian groups, and local community leaders. ⁹³⁰
Title	Overcoming the Trust Deficit: Engaging Communities to Succeed in Vaccinating the World Against COVID-19
Author(s)	Tori Hill, Kari Reid, Ryan Sheely (with Samuel T. Boland , D’Ante Bryant, Nicole Grable, Lynn Hector, Anayo Ozowuba, Miji Park contributing)
Type	Report & associated policy brief
Status	Published
Status date	22 March 2021
Publication	Mercy Corps

Link	https://www.mercycorps.org/research-resources/trust-deficit-vaccinating-world-covid-19
Abstract or description	The development of several vaccines to combat COVID-19 marks an important milestone towards ending the ongoing pandemic. In addition to ensuring that vaccines are distributed equitably and efficiently across the globe, policymakers, public health experts, and humanitarians must also overcome vaccine hesitancy, especially in contexts where public trust in government institutions is weak and reliable information on the benefits of vaccination is lacking. Closing gaps in government accountability combined with deep, inclusive, and sustained community engagement can generate trust among communities in vaccines and vaccination providers. ⁹³¹
Title	Humanitarian-Military Relations in Complex Emergencies: Evidence, Insights, and Recommendations
Author(s)	Maria Carinnes P. Alejandria, Samuel T. Boland , Hank Brightman, Rob Grace, Adam C. Levine, Alexandria Nylen, David Polatty, Zein Tayyeb (note: authorship in alphabetical order, not extent of contribution)
Type	Report
Status	Published
Status date	25/05/2022
Publication	Brown University Watson Institute for International & Public Affairs Center for Human Rights and Humanitarian Studies (CHR&HS)
Link	https://watson.brown.edu/chrhs/files/chrhs/imce/partnerships/Civ-Mil/PRM%20Report%205_26.pdf
Abstract or description	The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) estimates that in 2021 a record 235 million people worldwide needed humanitarian assistance. As the need for humanitarian assistance continues to grow, so has the diversity of actors involved in humanitarian response. Scant evidence-based research has been conducted into the ways that militaries and humanitarian actors coordinate during different types of emergencies. Even less understood are the perceptions held by affected populations regarding various types of military and humanitarian responders. This study asks the following questions: 1) What best practices and solutions have been implemented to overcome the coordination barriers between civilian and military actors during humanitarian operations?; and 2) What are the relative perceptions held by affected populations interacting with and/or receiving assistance from militaries, security forces, and humanitarian agencies? This study draws on 175 interviews with humanitarian actors, military/security personnel, and affected communities in complex humanitarian emergencies across three contexts: The Democratic Republic of Congo (DRC), Syria/Jordan, and the Philippines. The DRC case explores civilian-military humanitarian coordination during the public health response to the Kivu Ebola Epidemic. The Philippines case study investigates two separate disaster responses – the Taal volcano eruption and the COVID-19 pandemic. Lastly, the Syria/Jordan case examines these dynamics in the refugee crisis at Rukban along the Jordanian-Syria border. All three cases include in-depth analysis of community perceptions of the response. This study documents best practices for overcoming coordination barriers between civilian and military actors during humanitarian operations and offers recommendations for creating more inclusive responses.
Title	Humanitarian-Military Relations in Complex Emergencies: Practical Guidance for Policymakers and Humanitarian Planners
Author(s)	Samuel T. Boland , Rob Grace
Type	Report
Status	Published

Status date	25/05/2022
Publication	Brown University Watson Institute for International & Public Affairs Center for Human Rights and Humanitarian Studies (CHR&HS)
Link	https://watson.brown.edu/chrhs/files/chrhs/imce/partnerships/Civ-Mil/PRM%20Policy%20Guidance.pdf
Abstract or description	This Brown University Watson Institute for International & Public Affairs Center for Human Rights and Humanitarian Studies (CHR&HS) policy report presents several in-depth case studies on humanitarian-military relations (HMR): natural disaster and COVID-19 response in the Philippines; an Ebola response in the Democratic Republic of the Congo (DRC); and the response to forced displacement on the Syrian-Jordanian border. 175 qualitative interviews were collected with humanitarian, military, and crisis-affected community stakeholders, with a view to understanding the convergence and divergence between the groups' perspectives on pertinent HMR challenges and possible resolutions to them. Findings were interpreted with a view to identifying recommendations relevant to HMR, which includes the redoubling of efforts to cultivate an HMR Community of Practice; concretization of modes of ethical decision making; greater investment in robust high-level diplomatic organizational engagement; continual adaptation and resourcing of evidence-based guidance, and relatedly, planning; the leveraging of research towards innovative conceptual thinking and knowledge sharing; and finally, the foregrounding of crisis-affected communities as HMR participants. Research was funded by the United States State Department Bureau of Bureau of Population, Refugees, and Migration (PRM).

Table 1: Summary of other relevant publications (in order of date published / status date)

Relevant history and context of the case study (extended version)

Introduction to the chapter

The purpose of this section is to provide some background history necessary for contextualising the thesis' aim, objectives, questions, and findings. A particular focus is given to elucidating historical factors from both before and during the 2013–2016 West Africa Ebola Epidemic that are relevant to Sierra Leonean relationships with, and perspectives on, national and local governance, armed actors, and the United Kingdom (UK).

Relevant historical factors prior to the 2013–2016 West Africa Ebola Epidemic include the burgeoning slave trade after the first European expeditions to what is now Sierra Leone; the arrival of British colonisers and the establishment of the British colonial administration; the formation of a unique Krio identity in Freetown and the growing urban-rural divide; and the calculated intensification of Paramount Chiefs' power and influence by the British colonial administration. Further relevant historical factors include the country's "deceptively quiet decolonisation" and subsequent independence;⁴¹ the formation of the All People's Congress (APC) and Sierra Leone People's Party (SLPP) political parties;⁴¹ the lead-up to the 1991–2002 Sierra Leone Civil War; and the war itself, including the localisation of violence, major events, and consideration of Britain's central role in ending the conflict. Of key relevance is the post-war but pre-Ebola Virus Disease (Ebola) outbreak reform of Sierra Leone's security services, in particular the professionalisation of the Republic of Sierra Leone Armed Forces (RSLAF). This effort was largely instigated, led, and funded by the UK.

Properly contextualising this thesis also requires giving an overview of the 2013–2016 West Africa Ebola Epidemic itself. This includes a brief history of the virus from its discovery in 1973; details on how the outbreak began in December, 2013; what response measures—including militarily—were taken in the subsequent weeks and months leading up to the UK's intervention in September, 2014; and discussion of how the outbreak unfolded thereafter, including key details regarding this civil-military intervention, up to the outbreak being declared over in June, 2016. This section also includes details on the basic structure and organisation of the Ebola response in Sierra Leone as it developed over time, and a timeline of key events including those relevant to the deployment and scale-down of intervening military forces. The section ends with a brief discussion of relevant developments that have occurred since the end of the outbreak, which is followed by a summary and conclusion of the chapter.

Where the data is available, histories particular to the Western Area Urban, Port Loko, and Kambia districts—the geographic focus of this study's data collection—are given special attention.

Relevant history and context prior to the 2013–2016 West Africa Ebola Epidemic

The European discovery of Sierra Leone, the origins of Freetown, and the slave trade

The name ‘Sierra Leone’ comes from some of the first Portuguese explorations along the West African coast in the late 15th century: the mountains (*leoa*) that rise over the now-capital Freetown appeared from a distance like a lion (*serra*) at rest.^{932,a} However, despite the burgeoning trade routes and trading posts that developed along the West African coast, the territory was not permanently inhabited by Europeans for some time. Indeed, many argue that the proto-modern Sierra Leonean state was not established until 1787, when black settlers from Europe (predominantly London) and the Americas arrived and formed a settlement known as Freetown.⁴¹ The city “owed its existence” to British abolitionists focused on “the idea of ‘repatriating’ emancipated slaves” to Africa.⁴¹

Therein, from its creation, the Freetown colony had substantial links to Britain, which therefore became the city’s predominant European influence. In 1821, the Sierra Leone Colony was officially incorporated into British West Africa, though for some time, British interests beyond Freetown were limited.^{41,42} The city grew substantially in the 19th century with the continued arrival of ‘recaptives’—enslaved Africans on Portuguese and Spanish slave ships that were intercepted in the Atlantic by the British Navy and taken to the city.^{41,b–c} Despite this, however, slaves were taken from Sierra Leone as late as 1850, and while trading slaves was officially outlawed in 1896, slavery itself was legal until 1928.^{41,d}

The formation of the Krio identity and the growing urban-rural divide

The distinction between the arriving settlers, recaptives, and other local Africans who moved to Freetown “blurred”, and from this “motley collection” emerged a cohesive Krio identity.⁴¹ Importantly, this group held status and political power that indigenous Sierra Leoneans did not, even being granted British citizenship in 1853.⁴¹ Accordingly, Krios held a “vocal allegiance” to Britain,⁴¹ and saw themselves as socially superior to indigenous Sierra Leoneans.⁴¹ There is some evidence that British colonial administration intentionally fostered these ethnically charged divisions,⁴¹ and tensions between Krios in Freetown and indigenous Sierra Leoneans elsewhere in the country were not insignificant.^{251,933} While the power of Krios later waned (in some ways, through machinations of the British colonial administration), in many ways this paternalistic attitude and urban-rural power differential exists to this day.⁴¹

^a While archaeological evidence suggests the area has been permanently inhabited for at least 2,500 years, little is known about it before the arrival of European explorers at this time.⁹³²

^b There was no effort by the British to repatriate freed slaves to where they had been taken from.

^c ‘Recaptives’ were still subject to British rule, bringing into question the degree of freedom they entertained.²⁵¹

^d Domestic slaves were so important to Paramount Chiefs that British administrators “adopted a very cautious approach” to full abolition.⁴¹

Indirect rule and the reifying of chiefs' role in society

While initially the British colonial administration primarily concerned itself with Freetown, the infamous Berlin Conference of 1884–1885 “changed everything”.⁴¹ Britain claimed the remainder Sierra Leone as a protectorate,⁴¹ and thereafter, exercised far greater control over the territory.⁴¹ This included the further centralisation of state functions and bureaucracy in Freetown, the demarcation of land into a nation state, and the creation of an army for exerting control throughout the country.⁴¹ Taken together, “the idea of a country, a state, and a public realm were deliberately and somewhat successfully introduced”.⁴¹

However, the British colonial administration had only partial control and limited resources with which to govern.⁴¹ Therefore, they decided to encourage the “gradual reifying” of chieftaincy structures,⁴¹ which included efforts to “solidify and politicise” ethnic identities.⁴¹ Indirect rule was thus made possible through the “strengthen[ing of] tribal patriotism”.^{41,e} Chiefly traditions and structures were reinforced far beyond their historical precedent or were even “invented”,⁴³ forming many of the governance structures that exist to this day.^{41,43–45} That is not to say that there were not instances of resistance by chiefs,^{54,251} for example and notably in the 1898 Hut Tax War. Generally, however, chiefs welcomed the authority of the British colonial administration with which they built relationships and through which they consolidated their authority.^{41,f} The modern state’s “patron-client system with the state as the ultimate patron, the chiefs as middlemen, and the people as clients was thus born”.^{41,g}

Accordingly, today Sierra Leone has two parallel and interweaving political structures (Figure 1, page 417). One is democratically elected. The other—the chieftaincy structure—is a hereditary vestige of the British colonial administration’s efforts to control the hinterland. Unelected chiefs have seats in parliament, can raise taxes, control elements of the judicial system, and allocate land.^{934,h} Both systems interweave to govern the people of Sierra Leone,^{53,i} and the country is therefore simultaneously “a version of democracy” while also being one that is “underpinned by fragile institutions and firmly entrenched patronage, chieftaincy, and ethno-regionalism”.⁴¹

Decolonisation and independence

Sierra Leone’s independence in 1961 was “deceptively quiet” and “amounted to a rather conservative version of change”.⁴¹ However, in the decade leading up to independence, chiefly patronage politics were even further reinforced.⁴¹ This “supplant[ed] narrow elitist Krio politics” of Freetown that had “some

^e Through the slave trade and later mining, indigenous Sierra Leoneans encounters with outsiders were “primarily extractive” in nature.⁵³

^f Some have even called Paramount Chiefs “decentralised despots” on this basis.⁴¹

^g Paramount Chiefs and the system of governance that exists today is not, therefore, uncomplicated, static, or fully indigenous. Chiefs were central to the way that the pre- and post-colonial government exercised power,⁴¹ even if they have also, at times, been central to “democratising the countryside and decentralising the state”.⁴¹ Further, the demarcation of chiefdoms encouraged landlord-stranger dynamics and systems of dependence to develop.^{46–48} Taken together, therefore, Sierra Leonean value systems are wholly “bound up” in the chiefs’ roles.⁴¹

^h This is a particularly important resource due to the population’s reliance on agriculture for their livelihoods.

ⁱ This often raises a number of tensions between the two systems.⁵³

sense of citizenship, liberal democracy, and the rule of law”, and so “disconnections and divides in the body politic were considerable”.⁴¹ In Sierra Leone’s northwest—the thesis’ area of study—this resulted in a “marked breakdown in reciprocity [and] abuse of the chiefs’ considerable local power”.⁴¹ Unrest proliferated. In 1955, riots broke out in Port Loko “aimed at chiefs” who had “enriched themselves” in various ways and spread to the rest of the country.⁴¹ “Considerable force” was used to put down the riots, and many people were killed.⁴¹ The chieftaincy structure survived and “maintained its relevance”, but also “its vulnerability to abuse”.⁴¹

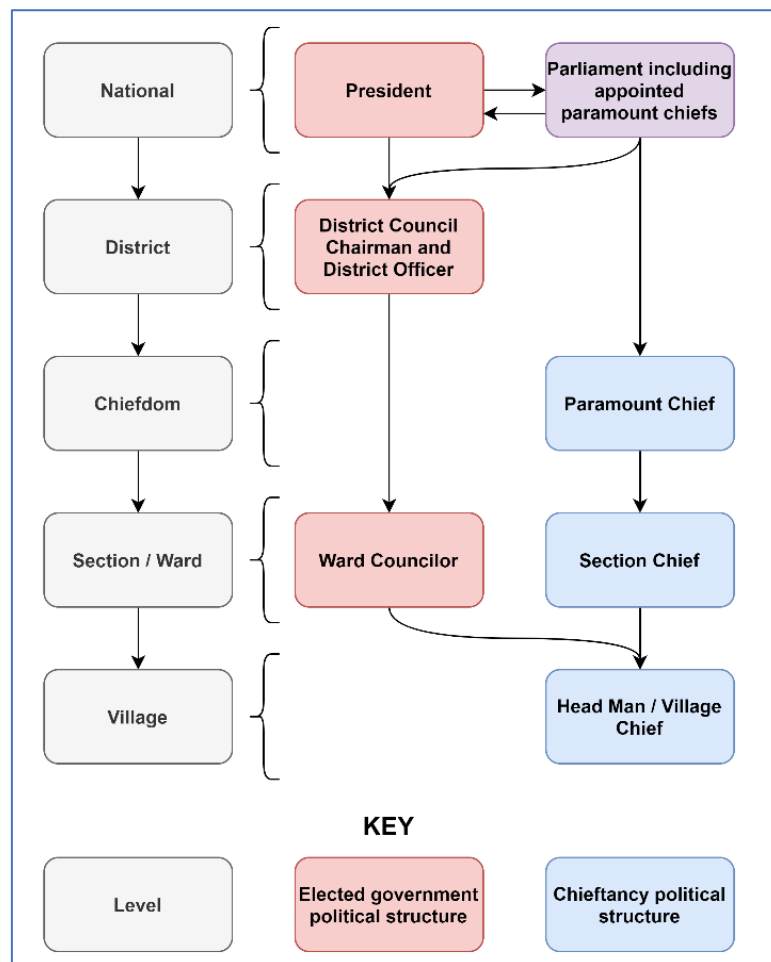


Figure 1: Sierra Leone's governance structure (Source: author)

Therefore, while the lead up to independence was relatively peaceful between Britain and Sierra Leone, Sierra Leonean power brokers—especially Paramount Chiefs—further reinforced their position in society, including through the use of violence. This required that chiefs maintain—at least nominally—a positive relationship with the British colonial administration, so that the latter would not dismantle their power and governance structures prior to independence. Therein, the relationships between both Krios and Paramount Chiefs with Britain are not only historically intertwined but are also plausibly quite positive, as through their historical relationship with the British colonial administration, both entertain a degree of privilege and power that exists to this day. However, relationships between these power

brokers and the communities they supposedly represent are more ambiguous and less assuredly magnanimous.

The formation of the APC and SLPP political parties

Sierra Leone has a number of ethnic groups (Figure 2), the largest being the Temne (mostly in the country's north and northwest) and the Mende (mostly in the country's south and southeast). These ethnic groups generally coalesce around a shared political affiliation, generally supporting the APC and SLPP, respectively.⁷²⁶

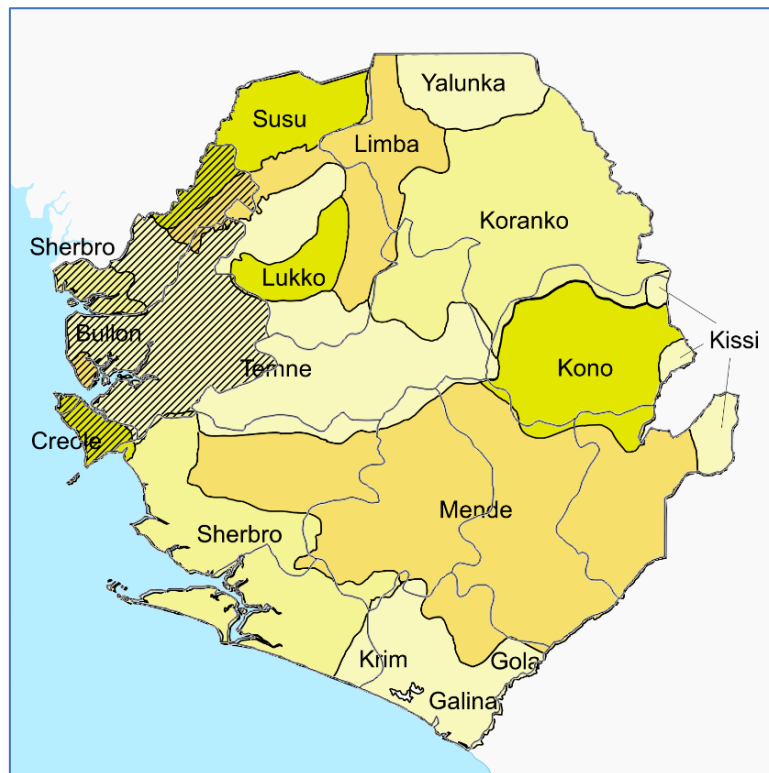


Figure 2: Map of Sierra Leone and its major ethnic groups with field research sites marked by dashed areas (adapted by author)⁹³⁵

The SLPP was formed in 1951 in an attempt to address the marginalisation of the country's southern and eastern provinces by a state "dominated" by Krios.⁴¹ This effort had some success: the first president of Sierra Leone was an SLPP candidate, and the party held power from 1961 to 1967. However, the APC—with its traditional strongholds of Western Area Urban, Port Loko, and Kambia districts—has held power for much of Sierra Leone's history as an independent nation:⁷²⁶ from 1968 to 1992, and again from 2007 to 2018. This includes a period from 1978 to 1991, in which the APC was the country's sole legal party following a "heavily rigged" referendum in which all opposition parties were declared illegal.^{51,j}

^j The one-party system was hurriedly dismantled in the early days of the 1991–2002 Sierra Leone Civil War, when a new constitution was passed that reinstated multiparty democracy. However, this came too late to prevent the outbreak of war, and the government was overthrown shortly thereafter.

Therefore, the APC-supporting areas of Sierra Leone—this project’s research sites (Figure 2, page 418)—were politically privileged for much of Sierra Leone’s history, including throughout the 2013–2016 West Africa Ebola Epidemic. It is important to note, however, that while this degree of political privilege may apply to district capitals (where admittedly, the bulk of research was conducted), this characterisation grossly understates intra-district diversity. Kambia District, for example, shares a long border with Guinea, and the navigation of citizenship, juxtaposition of strangers, and claims to the state are highly complex and often fraught.^{55,251} Nevertheless, “allegiance to their ‘so-called’ weak state” is strong for many Sierra Leoneans²⁵¹ including those in Kambia District.^{251,936}

The 1991–2002 Sierra Leone Civil War

The 1991–2002 Sierra Leone Civil War began on March 23rd, 1991 when the Revolutionary United Front (RUF) (a non-stage armed group (NSAG) with connections to Charles Taylor) attempted to overthrow Sierra Leone’s government (GoSL).⁴⁹ Over its eleven years, the war displaced over two million people and resulted in the deaths of between 50,000 and 300,000 people.^{41,49,60} The war has important implications for the origin, nature, and effect of military interventions during the 2013–2016 West Africa Ebola Epidemic in Sierra Leone, especially as the war ended only eleven years before the outbreak began. Many Sierra Leoneans are therefore old enough to remember the war in which many senior RSLAF personnel were active combatants.

Further complicating the war’s effect on the origin, nature, and effect of military actors during the Ebola outbreak is the British Armed Force’s central role in ending the war, as well as the post-war security-sector reform (SSR) and professionalisation of Sierra Leone’s military as initiated, directed, and funded by the British government (HMG). The latter provided the newly formed RSLAF with the capabilities, training, and resources they would exercise in their support to the Ebola response, while also developing important relationships between HMG and GoSL as well as the British Armed Forces and RSLAF specifically. The 1991–2002 Sierra Leone Civil War further served to limit the resilience of the country’s health system, as much health system infrastructure was destroyed and not substantially rehabilitated thereafter, thereby limiting the country’s preparedness for the forthcoming Ebola outbreak.

Factors leading to war

Many factors led to the 1991–2002 Sierra Leone Civil War, ranging from the move to authoritarian one-party rule in 1978 (page 420); increasingly rampant corruption, mismanagement, and cronyism within GoSL; and the deconstruction of state institutions and services (including state bankruptcy resulting in the inability to pay civil servants).^{13,41,49–52,k} In short, citizens were systematically deprived of basic access

^k These factors are part of a wider socio-political and socioeconomic history of neo-colonialism and neoliberalism, which is itself relevant to the introduction of Ebola as an uncontained outbreak in 2013; the exclusion of local actors from the formally organised Ebola response; and the perceived need to deploy militaries in response to it. These factors are discussed earlier in the thesis (e.g., Chapter 6, pages 111–144).

to healthcare, employment, and education services.^{41,53,54} This “long history of social exclusion and predatory politics” is despite Sierra Leone’s extraordinary mineral wealth:⁵⁵ in addition to valuable commodities such as iron ore and gold, alluvial diamonds—which require no significant infrastructure to extract—were discovered in Kono District in 1930.^{41,55,56} The implications of this discovery for Sierra Leone “were to reverberate through [its] subsequent... history”.⁴¹

Initially, access to the diamond trade was relatively controlled, as early on the British colonial administration entered into a long-term country-wide mining deal with a DeBeers subsidiary that oversaw mining operations and secured their mines.⁴¹ However, in 1984, DeBeers ceased operations in the country, and GoSL quickly lost control of the country’s diamond mining region in the south and east. Illicit extraction proliferated.^{41,49} By the end of the 1980s, “almost all” of Sierra Leone’s diamonds were being smuggled out of the country.⁵⁷

This confluence of factors—rampant corruption, authoritarian rule, the collapse of public services, systemic poverty, and profoundly lucrative illicit trade in easily extracted diamonds—resulted in both significant and widespread demand for political change, as well as an opportunity to realise significant profits if certain territories could be controlled.^{49,58} Exacerbating this fragile situation was Charles Taylor’s ongoing insurgency in Liberia that displaced tens of thousands of people from the country to Sierra Leone’s border regions.^{41,49}

Sierra Leone’s newly formed RUF—which, as above, maintained a connection to Charles Taylor—seized the opportunity presented by this precarious situation: often by threat of violence, many internally displaced persons (IDPs) and refugees were coerced into diamond mining. This provided the funds the RUF required to purchase arms through Taylor’s networks. Many—particularly poor and disenfranchised young men—saw an economic and social opportunity in joining the RUF and became rebel soldiers.^{41,49,57,59} Others were not given the choice and were forcibly conscripted into the RUF’s ranks. This included children as young as 10.⁴⁹

Taken together, by 1991, Sierra Leone’s population was demanding political change, and the RUF had the funds, weapons, and soldiers to try and realise it using violent force.

The localisation of violence and major events

The 1991–2002 Sierra Leone Civil War officially began on March 23rd, 1991, when the RUF started their attempt to overthrow GoSL.⁴¹ While they did not succeed in taking Freetown, the government’s response to the rebellion was mismanaged and ineffective, and the RUF took and retained control of a significant portion of the country.^{41,49} This included the country’s east and south, the location of much of Sierra Leone’s alluvial diamonds. The illicit extraction and trade of these diamonds allowed the RUF to continue building strength.⁴⁹ Despite several attempted peace agreements, two *coups d’états*, and the interventions of West African troops and United Nations (UN) peacekeepers, the conflict persisted (Table 1).

Even relative to other armed conflicts, the 1991–2002 Sierra Leone Civil War was truly horrific in its nature. Numerous human rights violations, war atrocities, and crimes against humanity occurred, including the use of child soldiers and the widespread utilisation of rape, sexual slavery, mutilation, and mass killings of civilians as tools of war.^{49,60,61} Rebel operations had names such as ‘Operation No Living Thing’ and ‘Operation Pay Yourself’.⁶²

Governmental forces in the Sierra Leone Army (SLA) were also brutal and indiscriminate: like the RUF, they ransacked villages for personal profit, and committed a considerable number of war crimes.^{41,49} SLA troops became known by civilian populations as ‘sobels’—soldiers by day, rebels by night. Over time, the RUF and SLA became hard to distinguish.¹³ A third armed group, the Kamajors, developed as a grassroots community defence militia which was formalised into the Civil Defence Force (CDF), but over time they too became involved in war crimes and other atrocities.^{13,49,63} Ultimately,^{50,52,53,58,64} all sides of the conflict “systematically perpetrated violence” against the country’s civilian population.⁵³

Date	Event
23 March 1991	1991–2002 Sierra Leone Civil War begins
1991–1992	RUF takes control of much of Sierra Leone
29 April 1992	Successful military <i>coup d'état</i>
March 1995	Executive Outcomes (EO) contains the RUF
22 November 1996	Abidjan Peace Accord signed
December 1996	UN terminates EO contract
Spring 1997	RUF regroupes and renews attacks
May 1997	New Armed Forces Revolutionary Council (AFRC) forms military junta with RUF
February 1998–March 1998	Economic Community of West African States (ECOMOG) troops retake Freetown
March 1998–July 1999	Stalemate and continued violence
07 July 1999	Lomé Peace Accord signed
July 1999	RUF second-in-command resumes military activity and violence
December 1999	UN Mission in Sierra Leone (UNAMSIL) troops begin arriving in Sierra Leone
December 1999–May 2000	UNAMSIL humiliated by losses to RUF
April 2000–May 2000	RUF advances on Freetown

Table 1: Key events in the 1991–2002 Sierra Leone Civil War prior to UK intervention

This violence occurred throughout Sierra Leone, including in Kambia, Western Area Urban, and Port Loko districts. As these are the thesis’ primary data collection sites—and as interviews involved asking

respondents about their perception of armed forces—a brief description of the localised violence which occurred in the three districts is given.

Kambia District

In the first years of the war, hundreds of thousands of refugees passed through Kambia District on their way to Guinea,¹ or settled in the then-peaceful district as IDPs.^{61,937} However, the area was not immune to the war's atrocities for long: in 1995, the RUF abducted a large number of children from Kambia District, many of whom were made to become child soldiers.⁶¹ Various other brutal events followed. For example, in February, 1996, a campaign was launched in which 60 villages were attacked, resulting in dozens of abductions and deaths, including the execution of civilians.⁹³⁸ The RUF also systematically destroyed government buildings, health centres, and schools.⁹³⁹

By 1999, the RUF had achieved a number of military victories in Kambia District, and occupied every major town.^{13,41,49} In fact, their control of the district was so complete that in May, 2000, the RUF used Kambia District as a platform to attack refugee camps inside Guinea. This forced many Sierra Leoneans back into Kambia District, many of whom were then abducted, beaten, raped, or killed by the RUF.⁹³⁸ Guinean forces responded by bombing Kambia's numerous border towns using heavy artillery and helicopter gunships.⁹³⁸ Fighting between Guinean and RUF forces in Kambia District intensified and continued as late as March, 2001.⁹³⁸

Despite the military campaigns by Guinea and the SLA, the RUF held much of Kambia District until disarmament at the end of the war.^{61,68} Ultimately, the UN High Council for Refugees (UNHCR) concluded that the district was one of the “most devastated areas” in the war.⁶⁸

Western Area Urban District

As the seat of government, Freetown—comprising the Western Area Urban District—experienced considerable political turmoil and violence throughout the 1991–2002 Sierra Leone Civil War. There were two successful *coups d'états* during the war, as well as numerous occasions when the city was overrun by rebel forces.^{41,49,58} Violence was rife. In April 1996, for example, medical staff at Connaught Hospital reported “an alarming number of patients suffering mutilation”,⁹⁴⁰ and in February, 1997, the RUF-aligned AFRC military junta started Operation Pay Yourself, which was little more than a “wave of... reprisals” against civilians in the capital.⁹⁴⁰ The CDF and Kamajors responded by seeking out AFRC soldiers and burning them alive.⁹⁴⁰

In January 1999, rebels attacked Freetown once again.⁵⁸ In their attack and subsequent retreat from the city, thousands of civilians were killed, abducted, raped, or deliberately mutilated by the rebels.⁹³⁹ Many

¹ The border between Kambia District and Guinea is highly porous, with 49 recognised crossings. This presented a challenge to conducting disease surveillance during the 2013–2016 West Africa Ebola Epidemic.⁶³²

civilians were even forced to commit atrocities “under penalty of their own mutilation or death”.⁹³⁹ Further, hospitals, schools, and religious institutions were systematically destroyed as had occurred in Kambia District.⁹³⁹ Further still, after the AFRC and RUF forces were driven out of Freetown, there was “vigilante-style extrajudicial killings” by civilians as well as ECOMOG forces.⁹³⁹ 200,000 Freetowners were made homeless by the violence.⁹³⁹

In short, like much of the country, the Western Area Urban District experienced sustained and indiscriminate violence during much of the war, and civilians were left traumatised by the actions and presence of armed actors on all sides of the conflict. However, unlike elsewhere, citizens of the capital were also made very aware of the role that some international armed forces—namely ECOMOG and the British Armed Forces (as to be described)—played in protecting the city, mitigating further violence, and ultimately, in ending the war (pages 423–425).

Port Loko District

Port Loko District also experienced a significant amount of violence during the 1991–2002 Sierra Leone Civil War. Notably, in October, 1998, an AFRC splinter group sprung up in the district—the infamous West Side Boys. The group was “known for wearing bizarre clothing... and being almost perpetually drunk”.⁹⁴¹ They set up roadblocks throughout the district and were readily violent.⁹⁴¹ Indeed, they caused much of the violence in the later years of the 1991–2002 Sierra Leone Civil War,^{938,941} actions which amounted to “pure banditry”.⁹⁴² They indiscriminately attacked villages in Port Loko District, and publicly executed, enslaved, mutilated, and raped numerous civilians.⁹³⁸ On one occasion, they reportedly forced almost a hundred civilians into a house before burning it to the ground.⁹³⁸ Their leader was so “vicious” and “notoriously unstable” that he was reportedly feared even within the RUF.⁹⁴²

Aside from the West Side Boys, civilians in Port Loko District also faced targeted violence from other groups.⁹³⁸ Attacks began in earnest in 1999 and escalated once more in April and May, 2000, with the RUF committing systematic “rape, murder, abduction, forced conscription, and amputation” in both Port Loko and Kambia districts.⁹⁴³ A Human Rights Watch (HRW) report also noted a number of CDF abuses in Port Loko District, including summary execution, torture, and the forced conscription of children.⁹⁴³ In May, 2000, as ECOMOG forces advanced into Port Loko District,^m retreating rebel forces burned a number of villages to the ground.⁹³⁹

These vicious attacks in Port Loko District in April and early May, 2000 caused many deaths and displaced a significant number of civilians from the area.^{938,943} They also triggered the events that would finally bring the 1991–2002 Sierra Leone Civil War to an end.

Britain’s role in ending the war

^m Britain supplied vehicles, weapons, and ammunition to ECOMOG.¹³

Port Loko District is home to a particular and unique strategic asset of Sierra Leone's: the international airport. Freetowners who travel to the airport by road rather than sea must take a specific highway that passes through much of Port Loko District. In May, 2000, the RUF advanced once again on Freetown and took control of this highway.^{13,65} Fearing this threatened their ability to evacuate British citizens from the capital (and only several months after then-British Prime Minister Tony Blair's infamous Chicago speech setting out what would become known as the Blair Doctrine advocating interventionism in foreign policy),⁶⁶ HMG decided to intervene militarily. Under Operation Palliser, 1,200 British troops were tasked with securing the airport and re-establishing control of the highway linking it to Freetown.⁶⁵ Coincidentally, the day before British troops arrived in-country, the RUF attacked a number of UNAMSIL bases in Sierra Leone and abducted several hundred UN peacekeepers.^{13,58} Therefore, while en route to the country, the British Armed Forces' mission mandate "shifted dramatically" from securing the airport to "taking a key role in securing peace".⁶⁷

The British Armed Forces arrived on May 7th, 2000.¹³ Ten days later, a significant attack by the RUF on their base at the airport was effectively repelled. That same day, the SLA captured the RUF's leader. Almost overnight, the RUF was thrown into disarray, and there appeared to be an opportunity to finally and decisively defeat the rebel group.¹³

The British Armed Forces quickly organised and resourced various pro-government armed groups to counterattack RUF positions. This "loose coalition" of armed actors—which included combatants from the SLA, AFRC, CDF, and even the West Side Boys—became known as the 'Unholy Alliance'.¹³ British forces then took command and control (C2) of the UN peacekeeping operation and "blended [it and the Unholy Alliance] into a single force" which they directed.^{13,67} As recollected by Operation Palliser's General David Richards:

Unholy they may have been, but, guided as they were at every level by British officers... , over the next few weeks they succeeded in securing much of the inland route between Freetown and [the airport].¹³

Within six weeks, Freetown had been secured, the RUF had been routed, and almost all hostilities in the country had ceased.¹³ Isolated violence continued to occur, but the 1991–2002 Sierra Leone Civil War quickly drew to a close. In early 2001, holdout RUF forces agreed to a ceasefire and to enter into a Disarmament, Demobilisation, and Reintegration (DDR) process which was largely completed by September, 2001 (Table 2, page 425).^{13,41,49,58} On January 18th, 2002, the 1991–2002 Sierra Leone Civil War was declared officially over.

In the subsequent Truth and Reconciliation Commission, all sides of the conflict were found to be characterised by "indiscriminate violence" specifically targeting civilians, and for "authorising or instigating human rights violations".⁹⁴⁴ The commission found that the conflict "broke long standing rules, defiled cherished traditions, sullied human respect, and tore apart the very fabric of [Sierra Leonean]

society”.⁹⁴⁴ Ultimately, 23 people from the RUF, CDF, and the AFRC were indicted by the Sierra Leone Special Court, 13 of whom were found guilty of crimes against humanity, war crimes, and violations of international humanitarian law (IHL) including the Geneva Conventions.^{41,944}

Date	Event
06 May 2000	RUF capture hundreds of UN peacekeepers
07 May 2000	Arrival of UK troops at Lungi airport
13 May 2000	Freetown secured
17 May 2000	RUF attack on the British Armed Forces at the airport repelled, and leader captured by the SLA
Late May 2000–June 2000	UK organises armed groups against RUF
June 2000–September 2000	RUF loses support and collapses militarily
10 September 2000	Operation Barras frees captured UK troops
10 November 2000	RUF hold-outs agree to ceasefire
May 2001	DDR begins in earnest
September 2001	DDR largely complete and most UK forces withdraw
18 January 2002	1991–2002 Sierra Leone Civil War is declared over

Table 2: Britain's intervention and the end of the 1991–2002 Sierra Leone Civil War

Post-war security system transformation, the professionalisation of RSLAF, and Britain's role therein

In 2007, Sierra Leone conducted its first general election as a multiparty democracy without peacekeeping assistance since 1977.¹³ The reformed national army, RSLAF, was credited with supporting this democratic milestone by maintaining safety, security, and order throughout the country over the course of the election.¹³ Only six years after the end of the civil war—characterised by disorganisation, indiscriminate and systematic violence against civilians, and numerous human rights abuses and war crimes committed by all parties to the conflict—this is notable praise.

This was made possible due to significant efforts by the international community—namely Britain—to reform Sierra Leone’s security sector during and especially after the civil war. In 1999, British Armed Forces personnel embedded in the GoSL MoD conducted a Strategic Defence Review as part of the Sierra Leone Security Sector Reform Programme (SILSEP). The review examined the state of Sierra Leone’s military, and it was evident that complete reform was wholly necessary.¹³ Even before the war, the SLA was poorly equipped, deeply politicised, and had little operational capability.^{13,n} The civil war substantively exacerbated this dire situation, as a significant number of soldiers deserted the SLA and were replaced by recruits with little-to-no training.¹³ Eventually, this “led to increased lawlessness” and

ⁿ The APC Government had “deliberately used appalling conditions of service to undermine the capability of the armed forces in recognition of it being a political threat”.¹³

eventually the “total collapse in discipline that finally destroyed any remnants of trust between the army and the civilian population”.^{13,º} In October, 1999, the Strategic Defence Review had been completed, with a recommendation to completely restructure and rebuild the national army.¹³

For all of these reasons (and also because of the military’s history of staging *coup d’états*),¹³ Britain took a central role in taking this recommendation forward. Before the war’s end, the UK-led Short Term [military] Training Team (STTT) was established to support Sierra Leonean troops fighting the RUF. This was later reformed into an organisation called the British Military Advisory Training Team (BMATT),¹³ which “integrat[ed]... hard security, public administration and civil service reform” in a way that “broke new ground in terms of cooperation” between the Department for International Development (DfID), Foreign & Commonwealth Office (FCO), and UK MoD.¹³ BMATT was, in essence, a cross-HMG effort to build entirely new state institutions.¹³ Note, BMATT later became the International Military Advisory Training Team (IMATT), and then later the International Security & Advisory Team (ISAT).^{13,p-¶}

ISAT’s remit was later extended after the security situation further deteriorated.[¶] By early 2001, ISAT consisted of 65 British Armed Forces personnel filling key positions in the GoSL MoD, as well as battlefield commands within the national army.¹³ As the 1991–2002 Sierra Leone Civil War drew to a close, a Military Reintegration Plan (MRP) was designed to reintegrate ex-combatants taking part in the DDR process. Soldiers from all factions—including rebel forces—were trained, professionalised, and consolidated into the new RSLAF.¹³ This included a complete overhaul of the military structurally; quite literally rebuilding the Ministry of Defence; and a significant increase in RSLAF’s size and available resources.¹³

This post-war HMG initiative was a “testing ground for new peacebuilding experiments that emphasised the role of development for maintaining peace”.²⁴ Taken together, the breadth of HMG’s various interventions is difficult to overstate—it

...reached deep into internal and external security institutions, altered command structures, provided top-to-bottom training, and established staffing policies, procedures, and behaviour. It created agencies to coordinate security information from the community level up to the President... [Britain’s interventions were therefore] not merely security

^º Things were so bad that then-President Kabbah even asked HMG to provide the country with someone from the British Armed Forces to take over the GoSL MoD Chief of Defence Staff (CDS). The request was declined, as it was deemed inappropriate to have a representative of HMG directly leading another country’s MoD.¹³

^p For the sake of consistency, in this thesis, this programme is referred to as ‘ISAT’.

[¶] While the work and role of ISAT was and would remain foundational to the reform of Sierra Leone’s army, the scale of the British Armed Forces’ presence and influence in the country would have been much smaller were it not for Operation Palliser (pages 245–245).¹³ An initial mission to secure the airport developed into a significant warfighting operation in support of GoSL, which became “medium-term [support to the] reorganisation and reform” of the national army.¹³ The security situation began deteriorating again in October, 2000, so the remit of ISAT was extended once more to “build... a long-term solution that would ensure stability for the future”.¹³ Therein, the British Armed Forces’ intervention was “very much shaped as responses to consecutive crises”.¹³

sector reform, but a complete transformation of the objectives of security provision, the mission, management, and coordination of security.^{13,r}

In short, the national military was essentially disbanded and completely rebuilt by the British, with purposeful efforts to reintegrate previously factional groups into a cohesive, trained, resourced, and professionalised army. This process was done in conjunction with restructuring and rebuilding military-adjacent institutions like the police (SLP) and the judiciary, and a further emphasis on rebuilding trust between the Sierra Leonean public and the armed forces.^r Ultimately, this “transformation” of Sierra Leone’s security system was considered so successful that the country “is frequently seen as *the* example” (emphasis in original) of SSR.^{13,s}

Effect on healthcare infrastructure and health system resilience

One final point on the 1991–2002 Sierra Leone Civil War and its effects bears mentioning: it wrecked the country’s already limited economic, educational,^t and health infrastructure.⁶⁹ Clinics and hospitals throughout the country were damaged or destroyed, and numerous healthcare workers (HCWs) fled the country or were killed.^{68,69} Furthermore, while RSLAF was funded and professionalised following the war as previously described, no such ‘transformation’ was made in the country’s health system. A 2009 survey of ten government hospitals put it bluntly:

There was a paucity of electricity, running water, oxygen, and fuel at the government hospitals in Sierra Leone. There were only 10 Sierra Leonean surgeons practicing in the surveyed government hospitals... There were few supplies at any of the hospitals, forcing patients to provide their own. The government hospitals were decimated during the civil war, but they form the backbone of... care for most of the country’s population... There are severe shortages in all aspects of infrastructure, personnel, and supplies.⁶⁴³

With only .02 physicians per 1,000 citizens, Sierra Leone has a severe dearth of trained doctors, even relative to other sub-Saharan African nations.^{946,u} While the country does have a robust network of community health workers (CHWs), they are trained in primary rather than tertiary care, and work in peripheral health units (PHUs) that often lack basic infrastructure.⁹⁴⁷ These PHUs are an average distance of 18 kilometres from the country’s villages, severely limiting access to care for those living in more rural

^r Britain’s military reform intervention included initiatives that “reached out to the people of Sierra Leone, who had experienced horrific violence at the hands of their own security forces during the war, and began the difficult task of reversing public suspicion of security forces and involving citizens in their own security”.¹³ According to subsequent population surveys in a number of Sierra Leone’s districts, following this reform process, there was a “significant positive change” in people’s perception of the army.¹³

^s Unbeknownst to the architects of this transformation at the time, this was to be hugely significant during the 2013–2016 West Africa Ebola Epidemic, as it directly contributed to the scale and quality of RSLAF’s contributions; their relationship with and perception amongst Ebola-affected communities; and the ease and depth of their collaboration with the British Armed Forces. This is further discussed in this chapter’s discussion chapter (see Chapter 9, pages 214–236).

^t It is estimated that 1,270 primary schools were destroyed during the war.⁹⁴⁵

^u Kenya and South Africa have, respectively, 10 and 40 times the number of physicians that Sierra Leone has when adjusted for population; the US—far from the leading nation by this metric—has 125 times the number.⁹⁴⁶

communities.^{947,v} Notably, in 2020, the country ranked 182nd of 189 countries in the Human Development Index.⁹⁴⁹

In 2013, GoSL and various partners conducted a demographic and health survey.⁹⁵⁰ Selected results are reproduced in the table below (Table 3) in order to provide a snapshot of key wellbeing statistics for the country ('SL') as well as for the three districts where data was collected for this thesis: Western Area Urban ('WAU'), Port Loko ('PL'), and Kambia ('KAM'). All statistics are reproduced from the results of this 2013 survey, unless otherwise indicated. Where a district performs better or worse than the national indicator, the cell is highlighted in green or red, respectively. National indicators, neutral indicators, and lacking data are all indicated in grey.

Given its dilapidated health infrastructure, inadequate human resources for health, and systematic poverty—and especially when coupled with a deep legacy of distrust in government—Sierra Leone was unprepared for the 2013–2016 West Africa Ebola Epidemic.⁵³

Measure	Indicator	SL	WAU	PL	KAM
Pop. density	Population per square kilometre ⁹⁵¹	68.5	9425.3	76.6	90.0
Education & access to information	% of women (15–49) who are literate ^w	35.5	65.4	27.9	19.7
	% of men (15–49) who are literate	53.9	84.4	52.6	43.2
	% of women (15–49) who have received no education	55.8	27.4	61.8	70.2
	% of men (15–49) who have received no education	40.3	11.3	43.6	51.8
	% of women (15–49) accessing no major media source per week	56.2	29.9	47.0	43.8
	% of men (15–49) accessing no major media source per week	42.7	26.5	33.0	50.1
Health	Under five mortality per 1,000 live births	156	152	175	131
	% of women (15–49) reporting at least one serious problem accessing healthcare	71.9	55.0	65.8	85.2
	Frontline health workers per 10,000 population ⁹⁵²	9.7	23.7	4.9	6.3

^v Sierra Leone's also has a significant number of traditional healers who employ folk, spiritual, and herbal remedies. They may also prescribe over-the-counter pharmaceuticals, and some have established referral protocols to nearby PHUs or hospitals.⁵¹⁴ While the average distance from a rural village to a PHU is significant as above, "there is no village... that doesn't have a traditional healer".⁹⁴⁸ These individuals are therefore a vital resource to many Sierra Leoneans, but the level and quality of care they can be very limited or even spurious.

^w Measured as those who have finished secondary school or higher, or those who can read a whole or part of a sentence.

	PHU density per 10,000 population ⁹⁵²	1.6	0.34	1.64	1.92
	Hospital density per 10,000 population ⁹⁵²	0.04	0.10	0.03	0.03
Employment, wealth, and inequality	% of women (15–49) employed in the 12 months preceding survey	68.1	52.3	73.5	66.1
	% of men (15–49) employed in the 12 months preceding survey	79.3	61.3	88.2	92.0
	% of individuals in the lowest wealth quintile	20.0	0.5	11.6	10.0
	% of individuals in the highest wealth quintile	20.0	88.0	4.8	2.7
	Gini coefficient	0.33	0.23	0.20	0.17
Participation in decision making ^x	% of women (15–49) reporting participation in decision making	45.4	42.7	61.5	55.4
Experience of violence	% of women (15–49) reporting ever experienced physical violence	55.5	57.9	68.5	54.0
	% of men (15–49) reporting ever experiencing physical violence	54.2	53.3	55.7	31.1
	% of women (15–49) reporting physical violence committed by police/soldier	0.0	ND	ND	ND
	% of men (15–49) reporting physical violence committed by police/soldier	4.0	ND	ND	ND

Table 3: Key wellbeing measures in Sierra Leone and three selected districts

The 2013–2016 West Africa Ebola Epidemic

This section first presents a brief history of Ebola, which is followed by an overview of the 2013–2016 West Africa Ebola Epidemic in Sierra Leone including its origin in December, 2013 and the outbreak’s subsequent escalation in early 2014. The section then describes Britain’s interventions—including militarily—in the autumn of 2014 in response to a lack of robust response measures by much of the international community up to this point. Specific consideration is then given to origin, design, and function of the militarised National and District Ebola Response Centres (NERC and DERCS, respectively) that the British Armed Forces and RSLAF helped to develop. Finally, an overview of the outbreak thereafter is provided up to its end in June, 2016, with special attention given to detailing its course in the Port Loko, Kambia, and Western Area Urban districts.

A brief history of the virus

Ebola—a viral haemorrhagic fever (VHF) and one of the world’s deadliest viruses, with a case fatality rate of up to 90%—is a zoonotic virus that was first discovered in 1976 by a team of scientists in the

^x The questions were decisions over 1) personal healthcare, 2) major household purchases, and 3) visits to family and relatives.

Democratic Republic of the Congo (DRC).^{70,y-z} The team (called the International Commission) was deployed to the rural and isolated village of Yambuku following reports of widespread and unexplained deaths in the area.⁷⁰ On their arrival, the International Commission found communities affected by large numbers of people suffering and dying from terrible complications that included unexplained bleeding (Figure 3).⁷⁰ The researchers named the new virus ‘Ebola’ after the nearby Ebola River, which translates to ‘Black River’ in the local Lingala language—the team thought this name was “suitably ominous”.⁷⁰ The International Commission was able to help halt the outbreak spreading further using basic containment strategies, including isolation of the sick; contact tracing and monitoring; and the introduction of infection, prevention, and control (IPC) and water, sanitation, and hygiene (WASH) measures.^{70,aa} The Yambuku outbreak was soon contained and declared over, with only a small number of cases and deaths officially reported.⁷⁰

Read each one aloud and mark an answer for every symptom occurred during this illness (not only right now):							
Fever	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Headache	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Vomiting/nausea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Difficulty breathing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Diarrhea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Difficulty swallowing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Conjunctivitis (red eyes)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Skin rash	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Intense fatigue/weakness	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Hiccups	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Anorexia/loss of appetite	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Unexplained bleeding	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk
Abdominal pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	If yes, please specify: _____			
Muscle pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	Other symptoms: <input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	
Joint pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unk	If yes, please specify: _____			

Figure 3: Ebola symptoms, as listed on a Sierra Leone case investigation form (adapted by author)⁹⁵⁵

Further sporadic outbreaks of Ebola occurred in the following decades, but like the outbreak in Yambuku, none escalated significantly. Unlike other illnesses such as acute diarrhoea, malaria, or tuberculosis that cause more than a million deaths in sub-Saharan Africa each year, the 23 known Ebola outbreaks prior to the 2013–2016 West Africa Ebola Epidemic resulted in a total of 1,580 fatalities.⁷⁰ Each of these outbreaks occurred on the African subcontinent (Figure 4, page 431), and did not present significant risk to the Global North. As is the case with many tropical diseases, international interest in and research on the virus were therefore very limited, including efforts to develop vaccines or therapeutics.⁴

^y Then named Zaire.

^z This team included the London School of Hygiene & Tropical Medicine’s (LSHTM’s) prior director, Peter Piot, who was then working at the Institute of Tropical Medicine in Antwerp.⁷⁰

^{aa} Contrary to popular belief, the Ebola virus is not particularly robust. It is only transmissible when patients are symptomatic, and it requires direct contact with bodily fluids (i.e., it is not airborne or spread through respiratory droplets). Further, the virus is effectively desiccated by chlorine, hand sanitiser, and soap. In fact, in response to growing public concern in the early days of the 2013–2016 West Africa Ebola Epidemic, Peter Piot said he “wouldn’t be worried to sit next to someone with Ebola virus on the Tube as long as they don’t vomit on you or something”.⁹⁵³ Containment of Ebola is therefore—in theory—relatively simple: identify the sick, isolate them so they do not infect others, and monitor any of their contacts for the duration of the virus’ incubation period. If the contacts become unwell, repeat the process, and continue doing this until the outbreak is contained. Meanwhile—as with just about any infectious disease—IPC and WASH interventions can help mitigate the likelihood of onward transmission from infectious persons, especially within hospital settings. At the time of the 2013–2016 West Africa Ebola Epidemic, treatment for Ebola—which is less relevant for overall containment—was limited to supportive care.⁹⁵⁴ While effective therapeutics and a highly effective vaccine do now exist, these only became widely available after the West Africa outbreak was already over.

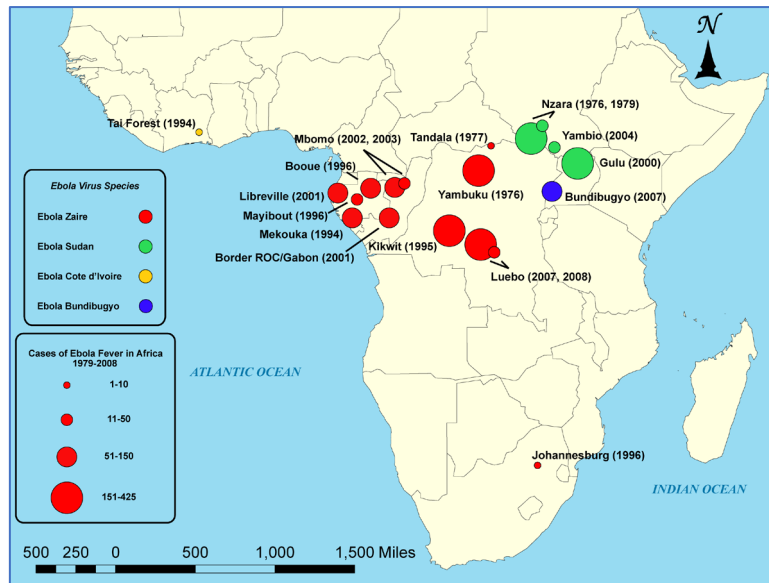


Figure 4: Ebola outbreaks prior to the 2013–2016 West Africa Ebola Epidemic⁹⁵⁶

How the 2013–2016 West Africa Ebola Epidemic began and unfolded

The 2013–2016 West Africa Ebola Epidemic is believed to have started in December, 2013 in a small Guinean village called Meliandou, possibly when a young boy named Emile came into contact with an Ebola-infected bat while playing outdoors.² The infection passed to the boy’s mother while she cared for her sick and dying child, as well as to the boy’s sister and grandmother.³ Their deaths and subsequent funerals—at which many family and community members ceremonially washed the infectious bodies—sparked the beginning of the deadliest outbreak of Ebola ever recorded.² Over its two and a half year course, cases of Ebola would spread to ten countries, including in the Global North. Therein, a virus that had been previously regarded as relatively inconsequential became the centre of international attention and concern. Ultimately, 11,325 people are known to have died from the virus during the outbreak, which is far more than the cumulative sum of all prior outbreaks combined (though even this probably underestimates the true number of fatalities by a significant margin).^{1,99}

Despite its origin in late 2013, the outbreak was not officially investigated and confirmed until March, 2014, at which point it had already reached much of Guinea and probably Sierra Leone and Liberia as well (Table 4 and Figure 5, page 432). These three first-affected countries were to become the outbreak’s epicentre.⁷² At first, though, the outbreak was “misclassified based on historical precedent of epidemics that were controlled through humanitarian medicine”.⁷¹ Accordingly, little was done by the international community at the time to contain the outbreak in Sierra Leone beyond the establishment of one field hospital in the country’s east by MSF.⁷³

Date	Event
March 2014	Ebola is confirmed in four Guinean districts and suspected cases are reported in both Liberia and Sierra Leone ¹

April 2014	Ebola is confirmed in Liberia ¹
May 2014	Ebola is confirmed in Conakry and in Sierra Leone, where it rapidly proliferates ¹
June 2014	Ebola is confirmed in Monrovia. There are now more confirmed cases of Ebola in Sierra Leone than in Liberia and Guinea combined ¹
July 2014	Ebola is confirmed in Freetown and President Koroma announces a national state of emergency ¹⁵
August 2014	The US Centers for Disease Control and Prevention (CDC) Emergency Operations Center (EOC) moves to Level 1 Activation, ¹ the World Health Organisation (WHO) declares a Public Health Emergency of International Concern (PHEIC), ⁷⁴ and (controversial) epidemiological modelling projects upwards of 1.4 million cases of Ebola by January, 2015 in the absence of further intervention ⁹
September 2014	Médecins Sans Frontières (MSF) calls for military intervention ¹¹

Table 4: Rapid escalation of Ebola in the first half of 2014

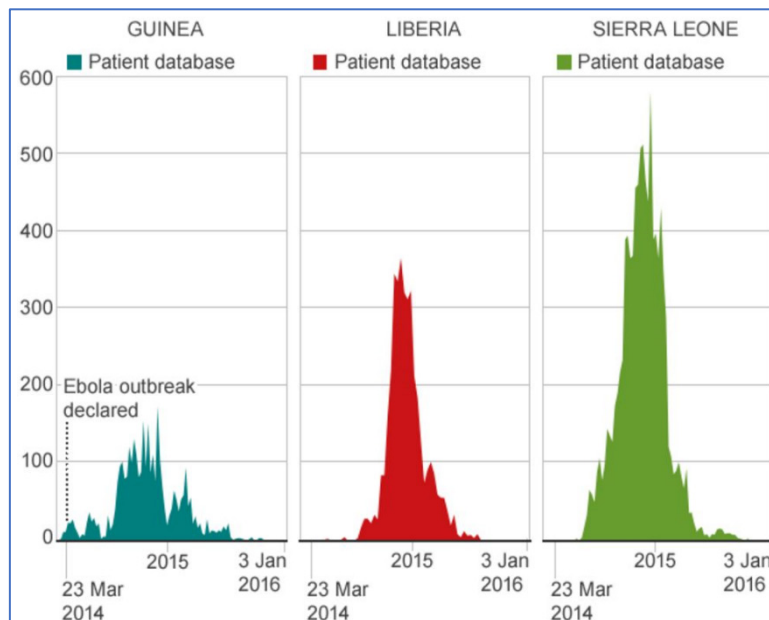


Figure 5: Weekly confirmed Ebola cases in the three most-affected countries from March, 2014 through January, 2016⁹⁵⁷

However, with a rapid escalation in transmission during the late spring and summer months of 2014, some experts were projecting that as many as 1.4 million people could contract the virus by the end of January, 2015 if no concerted international effort was made to stem the outbreak.^{9,bb} Indeed, even before the virus reached the densely populated city of Freetown in late July, 2014, the situation in Sierra Leone was grim. This was particularly the case in and around the Kenema and Kailahun districts in the country's

^{bb} A lot of the reasons that were publicly given for this escalation placed the blame on local people for not following public health directives around issues such as safe burial. Indeed,^{53,958–961} “as the epidemic took hold in Sierra Leone... reports were rife of instances of community resistance to medical intervention, communities’ mistrust and avoidance of healthcare centres, and stigmatisation of health workers and survivors”.⁵³ However, a number of critics have identified misjudgement in such arguments, or at the least, have argued for the ways that these instances of ‘resistance’ should be contextualised as part of a much longer history of structural inequity and marginalisation in the country.^{30,37,71,83–89,279,962}

east. Several recollections that were documented in interviews collected for this thesis convey the urgency of the situation there:

- “*The hospital isolation unit [in Kenema District] was totally full... There was just so much anxiety in Kenema [District] at that time, it was palpable... We locked patients in [the hospital]. I don't know, it seemed like the only way to physically contain people*” (NGO-C-N-14);
- “*Bodies weren't being collected for a week or 10 days, and people were beginning to get very frustrated. Bodies were actually kind of dissolving, you know, given that they were dying and they were left in the sun and they were dissolving in the heat. The disease was spreading and we just couldn't work out how to respond*” (HMG-C-D-6);
- “*There was no control... and there was no knowledge of the disease... Nobody wanted to go near anybody. Even health workers were afraid of patients! They didn't want to get close to patients... [because] there was no PPE [Personal Protective Equipment] [at that time]... Before the [response] system came, a lot of people died, and the disease spread far and wide*” (NGO-C-D-1);
- “*You can't imagine how many sick people we found in the communities*” (GoSL-C-N-24); and
- “*There's just a lot of stuff that happened in the early days... In Kenema [District] in August, there were bodies on the streets all the time. And the DHMT [District Health Management Team]... did not have the operational capacity to figure it out*” (NGO-C-N-14).

Initially, however, political considerations prevented some containment measures from being put in place, as the country's primarily affected eastern districts also happen to be the political opposition's stronghold. As recollected by a member of Sierra Leone's military and security services:

The President himself would summon his cabinet ministers. He would bring on board the Inspector General of the police, he would bring on board the [GoSL CDS], and they would sit and discuss. But there was no clear idea as to the nature of the disease. There were arguments about the need to quarantine... the whole district of... Kailahun... But, you know, the government is not... how do I put it? The government hasn't got very firm ground in Kailahun [District]. Kailahun [District] is dominated by the opposition, so they saw it that if these people were quarantined, they would misunderstand the intention and think that the government just wanted to kill them (GoSL-M-N-6).

The political and epidemiological calculus changed in late July, 2014 when the first case of Ebola was confirmed in Freetown. On July 30th, to try and prevent further spread of Ebola from the hinterland to the capital, President Ernest Bai Koroma invoked the Military Aid to Civil Authorities (MACA) policy.⁸⁴ 750 RSLAF troops were deployed to Kenema and Kailahun districts to place them in a military-enforced

quarantine, organised under a new military mission, Operation Octopus.^{37,76,cc-dd} In the face of a collapsing health system, the following day President Koroma declared a national public health emergency.¹⁵

This intervention and declaration were ‘too little too late’, and the crisis escalated further. On August 1st, the US CDC’s EOC moved to Level 1 Activation, and on August 8th, the WHO declared a PHEIC.¹ On August 31st, President Koroma upgraded the public health emergency to a national state of emergency, and shortly thereafter, the UN Security Council (UNSC) called the epidemic a global “threat to peace and security”.⁷¹ Taken together (Table 4, pages 431–432), this was a “significant ‘epistemic shift’, as it ushered in a new ‘imaginary’ of crisis” within the international community:⁷¹ the situation was recognised for the emergency it had been for several months.⁹⁶³

Box 1: Informal responses to the Ebola outbreak

This section—indeed, this study—primarily focuses on elucidating the Sierra Leone Ebola response’s formal processes, interventions, and activities, i.e., those which were sanctioned by and generally operated through GoSL and its constituent institutions like the Ministry of Health and Sanitation (MoHS) and DHMTs, and later the NERC and constituent DERCS.

However, informal responses to the emerging crisis were myriad and substantial, particularly at the household and village level. This was especially the case in the outbreak’s early days, when the formal response had not yet been robustly mounted. Some of these informal responses have been documented and described.^{30,37,43,71,83–90}

However, these local resources—and in turn, local actors—were not robustly or systematically incorporated into the formal response (though there was more effort to do so towards the end of the outbreak).²⁴ This is despite any capacities that local groups might have had (or been capable of developing and scaling), and despite cogent arguments that the exclusion of these local resources and local actors was therefore not only ethically questionable but also epidemiologically detrimental.

Arguments that a lack of local capacity justified this exclusion disregard—at least to an extent—these resources, and also disregard consideration of the historical reasons how and why this capacity was (perhaps) lacking. Ultimately, it is indicative of the structural denial of households’ and communities’ capacity, willingness, and desire to be actively participant in response to the crisis they faced.

Reasons for and some implications of this exclusion (including for the deployment of military to the response) are considered earlier in the thesis (i.e., chapters 6–9).

Britain’s early interventions

On September 2nd, 2014, then-International President of MSF, Dr. Joanne Liu, “admitted defeat and said that it would take military mobilisation by wealthy countries with biohazard expertise, not just

^{cc} Later on, district-wide quarantines were also placed on Port Loko, Moyamba, Bombali, and Tonkolili districts.⁷⁷ At one point, approximately 2 million people—about a third of Sierra Leone’s population—lived in such district-wide quarantines.⁷⁷

^{dd} MACA is a formal policy in Sierra Leone that was introduced as part of the post-civil war SSR supported by the UK (pages 245–245).¹³ The policy is functionally the same as Britain’s MACA policy, and allows for members of the armed forces to be deployed domestically under three criteria: 1) the military aid must be a ‘last resort’; 2) the civil authority is not able to fulfil the support needed, and it is not deemed worthwhile to develop that capacity in the civil authority; or 3) the civil authority does have the capability, but is not able to deploy it with sufficient speed or agility.⁷⁵ A peer-reviewed academic journal article that partially critiques the concept of last resort during public health emergencies has been included earlier in this thesis (Appendix A-6, pages 245–245). Even when MACA is invoked, members of the armed forces hold no legal power beyond that as citizens of the crisis-affected country (i.e., operations have to fall within and personnel must adhere to both military and civilian law).⁷⁵

international aid, to stop the disease”.¹¹ She publicly stated: “the military are the only body that can be deployed in the numbers needed now and that can organise things fast”.¹¹ Echoing this sentiment was LSHTM’s then-director Peter Piot who called for a “quasi military intervention”, and the European Civil Protection and Humanitarian Aid Operations (ECHO) which was “pushing for military medical intervention”.¹¹

Perhaps unbeknownst to these individuals and organisations at the time, the British Armed Forces was not only already supporting Sierra Leone’s Ebola response through their pre-existing in-country ISAT team (pages 423–427), but was already actively planning to deploy at least some new resources in response to the Ebola outbreak: on August 21st, an Advance Party from DfID and the UK MoD did a ‘recce’ to Sierra Leone, and on August 28th, DfID formally requested that the UK MoD take over the build of an Ebola Treatment Centre (ETC) that would later be known as the Kerry Town Treatment Unit (KTTU).¹²

Planning and actioning the British Armed Force’s deployment—to be organised under Operation Gritrock—occurred very quickly. In the first week of September, senior WHO and HMG officials met and determined that in addition to KTTU, the British Armed Forces was best-placed to help provide a robust C2 structure for coordinating the Ebola response.¹² Shortly thereafter, on September 17th, the UK announced that they would not only fund, build, and staff KTTU, but would also supply 700 additional Ebola treatment beds in six additional DfID-funded ETCs to be built across Sierra Leone by the British Armed Forces Corps of Royal Engineers.^{12,253} The same day, the UK also announced plans to establish a Joint Inter-Agency Task Force (JIATF), a DfID-led Freetown-based civil-military body for coordinating the various HMG agencies involved in the response (Chapter 6, figures 2 and 3, page 124).^{12,21}

Operation Gritrock pre-deployment briefings started the next day, on September 18th, and some staff (including the JIATF commander) arrived in Sierra Leone four days later.^{12,ee} The main body of Operation Gritrock arrived one week thereafter, on September 29th. On October 7th, the Royal Navy’s casualty receiving ship, the Royal Fleet Auxiliary (RFA) Argus, was notified of deployment to Sierra Leone.¹² The ship, which arrived in Freetown at the end of the month, was intended to provide assurances to expatriate Ebola Response Workers (ERWs) that high-quality non-Ebola care would be available to them as required if they deployed to the Ebola response.^{12,ff-gg}

On October 17th, medics from British Armed Forces arrived to staff KTTU, with the facility’s Public Health England (PHE)-run lab opening ten days later.^{12,253} Like RFA Argus, KTTU—which started accepting patients in early November—was intended to serve as a magnet for ERWs and Sierra Leonean

^{ee} While the epidemic was “in other words, securitised” therein,²⁴ these forms of military support were ‘de-linked’ from their wider military apparatus,^{26,71} which helped to “counter... [some] concerns with the implications of [this] militarisation”.⁷¹

^{ff} While care at KTTU was available to any HCW, this service was only available to expatriate ERWs.

^{gg} The ship also served as a platform for three Merlin helicopters which supported the outbreak response.

HCWs by helping assure them of the availability of tertiary Ebola care for any who became infected while responding to the outbreak.^{12,271,964,964} Further, on October 21st, the British Armed Forces' 5th Armoured Medical Regiment arrived to staff the new Ebola Training Academy.¹² The centre, which was opened by the British Armed Forces and RSLAF on October 29th, was established to train RSLAF and other Sierra Leonean nurses and medics to safely provide Ebola care in RSLAF-run ETCs.¹² Meanwhile—and once again to encourage the deployment of international ERWs to the response—the Royal Air Force (RAF) committed their Deployable Air Isolator Team (DAIT) for aeromedical evacuations of Ebola-positive expatriate ERWs to London's Royal Free Hospital.^{965,ff,hh} The RAF also began conducting supply runs of PPE, medicine, equipment, and other essential supplies to Sierra Leone.⁹⁶⁶

By the end of the October, HMG had deployed hundreds of civilian and military personnel to Sierra Leone from across DFID, the FCO, PHE, National Health Service (NHS), and the British Armed Forces.^{12,78,79} Taken together, these HMG personnel had already helped develop and staff: one ETC (and were in the process of building six more); Ebola laboratories; and Ebola medical training facilities for national staff.¹² Further, they had helped to reinforce essential supply chains. Further still, they had backstopped the availability of Ebola and non-Ebola care to (primarily expatriate) ERWs, including aeromedical evacuation. In support of these and other interventions over the course of the outbreak (Figure 6), HMG would spend approximately £500 million; deploy approximately 2,000 personnel (including more than 1,500 from the British Armed Forces); and support the build of approximately 1,500 Ebola treatment beds.^{78–80}

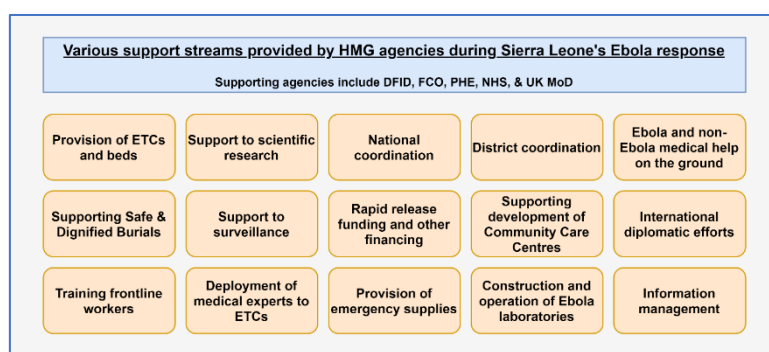


Figure 6: Various support streams provided by HMG agencies (Source: author)

The NERC and DERCs

Origin of the NERC and DERCs

Months earlier—shortly after the Ebola outbreak was first declared in March, 2014—a National Ebola Task Force was established in Sierra Leone.¹⁵ The group, led by the Minister of Health, was responsible for overseeing and coordinating Ebola response activities in the country. In early July, 2014, authority was transitioned to a new GoSL EOC, though the Minister of Health remained in charge.¹⁵ However,

^{hh} This was particularly important as many commercial flights had ceased operations to West Africa by this time.

President Koroma was dissatisfied with the GoSL EOC’s leadership and capabilities, and in late July, he established a separate Presidential Task Force on Ebola to help oversee it.¹⁵

It was widely perceived that coordination of the Ebola response—at least GoSL’s response under the stewardship of the MoHS—was failing.¹⁵ When the President visited the GoSL EOC on July 31st and August 9th, for example, he found it almost empty, despite the outbreak’s recent escalation and new cases in Freetown.¹⁵ He was “very upset”,¹⁵ and so in late August, President Koroma reconstituted the GoSL EOC and installed new leadership:²¹ the Minister of Health’s leadership was replaced with the joint leadership of the MoHS’ Chief Medical Officer (CMO), WHO, and GoSL EOC Operations Coordinator (a new role).¹⁵

However, despite these changes, the GoSL EOC was still perceived to be ineffective at coordinating the response to the growing crisis.¹⁵ This was made most obvious by the bodies of dead Ebola patients which were literally left to rot in the streets, a grim situation that was occurring throughout the country (NGO-C-N-14; NGO-C-D-1; GoSL-C-N-24; NGO-C-N-7; GoSL-C-N-17; HMG-M-N-5). In a report from Port Loko District in very early November, 2014, for example, a British journalist provided the following account:

An empty road, and empty houses. We’re driving into the new stronghold of the virus. There is a cluster of children on one side of the road. We soon discover why: on the other side, everyone is either dead, or dying... There [are] dead bodies all around here... But still, in this village, we have [living] Ebola victims... and they’re all believed to have the virus. And they’re just left here, presumably to die.^{629,ii}

In response, British Armed Forces personnel at ISAT went to President Koroma and offered to develop and help coordinate a new burial system, one that could—at the very least—collect and dispose of these infectious corpses within Freetown (NGO-C-N-7; GoSL-C-N-17; HMG-M-N-5). This offer was accepted by President Koroma, and within a week, a semi-reliable system for collecting and burying the dead was in place and the streets were cleared of bodies (NGO-C-N-7; GoSL-C-N-17; HMG-M-N-5). Following this successful intervention, key members of the British Armed Forces personnel believed they ought to intervene further, so they directly propositioned President Koroma with an offer to design and support a fully-fledged alternative to the GoSL EOC.¹⁵

Within 24 hours, the President “called and asked to hear the options”.¹⁵ Along with the support of other British civilians and RSLAF, a new coordination system was designed very rapidly, sketched out over a number of whiteboards (NGO-C-N-7; GoSL-C-N-17; HMG-M-N-5; HMG-C-N-12).²¹ The proposed design, “to a large degree, born out of the British assessment”,¹⁵ was then given to President Koroma.

ⁱⁱ As in Freetown, there very little support to be found in the districts. In his account, the journalist also interviews the Paramount Chief of Lokomasama (one of Port Loko District’s eleven ‘chiefdoms’), who exclaimed: “I have been calling, calling, calling for help, to the WHO, to the WFP [World Food Programme], to everyone, and nothing has come. Nothing at all... People are dying”.⁶²⁹

With diplomatic pressure from the FCO and DfID, President Koroma accepted the design of the new civil-military ‘NERC’.¹⁵ He appointed his then-Minister of Defence, Paolo Conteh, as the NERC’s Chief Executive Officer (CEO) with immediate effect (HMG-C-N-12):¹⁵ on October 17th, all personnel who had been working in the GoSL EOC under MoHS stewardship were told to report to the NERC instead (NGO-C-N-7). Before the end of the month, the first of a national network of constituent ‘DERCs’ had also been opened and reinforced with both British and Sierra Leonean military personnel, shifting responsibility for district-level Ebola response operations away from the DHMTs (GoSL-C-N-24).¹²ⁱⁱ As recollected by one member of the British Armed Forces, the MoHS “*threw their teddies out of the pram, because although [there was an attempt] to include them and [a desire] to include them, they felt their legs were chopped away, which they were. Because they failed?*” (HMG-M-N-5). Despite this consternation, the civil-military NERC and DERCs were brought online and would remain the principle coordinating bodies of Sierra Leone’s Ebola response until January, 2016 (when the outbreak was effectively over).

Date	Event
March 2014	The National Ebola Task Force, led by the Minister of Health, is established
11 July 2014	Authority is transferred from the National Ebola Task Force to the GoSL EOC, though it is still led by the Minister of Health
30 July 2014	To complement the GoSL EOC, President Koroma establishes the Presidential Task Force on Ebola
29 August 2014	The EOC is re-shuffled at the direction of the President. Leadership is put in the joint hands of the CMO, the WHO, and a new GoSL ‘EOC Operations Coordinator’
19 September 2014	The UN establishes the UN Mission for Emergency Ebola Response (UNMEER) for regional coordination
21 September 2014	HMG establishes JIATF, led by a DfID civilian, to coordinate HMG’s support to the Sierra Leone Ebola response
17 October 2014	Authority is transferred from the GoSL EOC to a new NERC, led by the country’s ex-Minister of Defence Paolo Conteh
01 January 2016	Authority is transferred from the NERC to a new GoSL Public Health EOC (PHEOC), led by the Office of National Security (ONS) and the MoHS

Table 5: A timeline of national coordination structures in Sierra Leone’s Ebola response

Design and function of the NERC and DERCs

The NERC and DERCs were inherently civil-military spaces, with civilian and military representation from both HMG and GoSL, in addition to International Non-Governmental Organisations ((I)NGOs), Intergovernmental Organisations (IGOs), and International Organisations (IOs).¹⁵ Indeed, the number of relevant agencies, governmental departments, and organisations participating in the NERC and DERC structures was substantial, as was the number of different Ebola response activities that they conducted

ⁱⁱ The first DERC was opened in Port Loko on October 31st, 2014.

(see chapters 6–8). The mandate of the NERC was to plan and provide strategic direction to the national response; the mandate of the DERCs was to comply with and operationalise these NERC policy directives through the coordination of Ebola response activities being conducted by all the involved actors. Through the DERCs’ daily inter-agency briefings and after-action reviews, these activities were (at least in theory) adaptive and capable of iteratively incorporating lessons learned, as strategies deemed effective could be scaled up while those deemed ineffective could be scaled down.

Overseeing the DERC and the daily activities coordinated within was a Command Team, which was comprised of several individuals:¹⁵

- The District Coordinator (DC): DCs were Ebola-specific appointments made by President Koroma, and were the district’s official NERC representative;
- The District Medical Officer (DMO): DMOs preceded the Ebola response and are the formal representative of the MoHS at the district level, and hold responsibility for all DHMT staff and operations;
- The ranking RLSAF officer: this individual was responsible for coordinating RSLAF’s Ebola-response activities in the district, and at times, for presenting evening briefings and coordinating day-to-day activities within the DERC; and
- The UK’s District Ebola Support Team (DEST) and Team Leader: the DEST—made up of HMG civilians and military personnel—was the district-level arm of JIATF and responsible for assisting in the overall coordination of the response, as well as for overseeing DfID-funded organisations and projects within the district.^{kk}

Underneath this Command Team sat eleven ‘pillars’ of operation, many broken into constituent sub-pillars. Each pillar had a specific function, was coordinated within the DERC, and was operationalised and implemented by a combination of its civilian and military actors (as examined in Chapter 8, pages 176–213). Pillar functions included disease surveillance (both case investigation and contact tracing); case management (CM); laboratory services; social mobilisation; logistics and transportation; security; quarantine management; dead body management; decontamination; and psychosocial support (see Chapter 8, Figure 3, page 194). These pillars were distinct spaces for the organisation and coordination of these activities, though inter-pillar coordination was also necessary for a number of different activities. Therein, the DERC’s internal structure and the coordination of Ebola response activities more generally was both vertical and horizontal in nature.

The theoretical response to a single alert and suspected case provides a good example of how these interpillar linkages worked (see Appendix A-1, Figure 2 and Figure 3, page 313 and 315, respectively). If there was a report of sickness or death in a community, a District Surveillance Officer (DSO) coordinated

^{kk} In Port Loko and Kambia districts, the Team Leader was a member of the Stabilisation Unit (SU).

by the surveillance pillar would investigate. If someone was alive but unwell with signs and symptoms of Ebola, the DSO would call the case management pillar to dispatch an ambulance to collect and convey the patient to an ETC to be tested (as coordinated by the laboratory services pillar). If someone had died, a Swabber coordinated by the laboratory services pillar would be dispatched alongside the DSO to collect a sample from the corpse, as would a burial team coordinated by the dead body management pillar to collect and inter it.¹¹ If the sample taken from the patient or corpse tested positive, a 21-day quarantine would be put in place. Therein, the security and quarantine management pillar would organise personnel from the SLP or RSLAF to place and maintain a quarantine cordon. Further, the latter pillar would also coordinate with WFP and the UN Children’s Fund (UNICEF) to deliver essential food and supplies to the household; coordinate with the surveillance pillar to dispatch a Contact Tracer to monitor quarantined contacts’ health for the 21-day duration of the virus’ incubation period; and coordinate with the psychosocial support pillar to dispatch staff mandated to provide psychosocial support to the affected family. Meanwhile, the social mobilisation pillar would coordinate social mobilisers, who conducted outreach and educational initiatives to raise awareness of the outbreak and the various mitigation measures that could take to prevent further infection within the household and wider community.

Taken together and as organised with the civil-military NERC and DERCS, these activities comprise ‘the Ebola response’ (i.e., the repeated application of this collection of activities and the processes interlinking them is, itself, the Ebola response).

Localisation and course of the outbreak thereafter

Epidemiologically, the Ebola outbreak in Western Area Urban, Port Loko, and Kambia districts had a number of unique qualities. The first confirmed case of Ebola in Port Loko District was in May, 2014, months before cases were confirmed in Freetown or the neighbouring Kambia District in July and September that year, respectively.^{967–969} Despite sharing a long border, in the month that Kambia District reported its first case, Port Loko District had become the outbreak’s epicentre.⁹⁶⁸ Similarly, Western Area Urban had a surge of cases between September and November, 2014.^{970,971} After the autumn’s precipitous increase in Ebola cases, Port Loko and Western Area Urban districts continued to experience high caseloads through until mid-January, 2015, when caseloads dropped almost as quickly as they had risen over the prior months.⁹⁶⁸

Kambia District, on the other hand, never experienced caseloads anywhere near as high as the Port Loko or Western Area Urban districts, even when adjusted for population. However, while cases in the latter districts fell in early 2015, transmission in Kambia District lingered stubbornly.⁹⁶⁷ A high number of Ebola-positive deaths with no epidemiological link were also recorded, indicating a lack of effective surveillance, and arguably a lack of trust between the district’s Ebola-affected communities and the

¹¹ Due to the fact that swab results took some time to be analysed, all corpses were treated as Ebola cases and buried accordingly (as the burial would usually need to occur before the result was made available).

response.^{967,mm–nn} Eventually, a case slipped through the cracks: a woman evaded quarantine and travelled from Kambia District to the densely populated Port Loko District town of Lungi, which—given its connections to Freetown—cascaded into further transmission in Western Area Urban District.^{974,975} British Armed Forces and RSLAF personnel that had been withdrawing from the DERCs were surged back into the Port Loko and Kambia DERCs to resume their support to coordination and the overall Ebola response effort.⁶⁵⁵ On June 16th, 2015, GoSL announced Operation Northern Push (ONP), a no-holds-barred effort to eradicate Ebola from the three districts.^{15,71} While ONP did not experience success within the operation’s initial target of 21 days—indeed, it was extended through the end of the Ebola outbreak in Sierra Leone several months later—the outbreak did subside: Kambia District’s transmission was finally brought under control, and new cases of Ebola dropped to almost nil.

By this time—as both lessons had been learned and resources redirected and concentrated into the Port Loko and Kambia districts—the challenges and mistakes of the response’s early days had been addressed in many ways.^{43,71} This included the development of “more sophisticated approaches for involving... communities” in not only the implementation of the response but also in its design.⁴³ The response “developed participatory approaches to encourage behavioural change”.²⁴ The outbreak ultimately

...rendered evident the benefits of engaging deeply with affected countries’ social, cultural and political context in order to understand communities’ response to the disease and to work with them to find ways to deal with the crisis.⁵³

This was not, *per se*, a response to the ethical imperative that doing so represented, but because over time, response decision makers realised that

...local leadership was essential to ensure the local legitimacy of interventions such as quarantines, movement restrictions, the reporting of illness and deaths and the introduction of safe burial practices.⁴³

Therein, the response “moved much closer” to bottom-up approaches and “community ownership”.^{71,oo} Simultaneously and perhaps counterintuitively,

...security approaches were also strengthened as community engagement seemed insufficient to bend the epidemiological curve.^{24,pp}

^{mm} Kambia District has a long, porous, and relatively unmonitored border with Guinea, which contributed to spread of the virus.⁶³² This also contributed to the area’s unique conceptualisation by response actors.^{43,53,55,972,973} It was seen to be “a place of resistance and cultural difference needing to be tamed”;⁴³ the district was identified as one where “mistrust, rumours, and widespread criticism of the government were rife” at the time of the outbreak.²⁵¹

ⁿⁿ Despite these different beginnings—one dramatic but relatively short-lived, the other mostly subdued but protracted—by June, 2015, the Port Loko and Kambia districts were the only areas of Sierra Leone that were still experiencing cases of Ebola, and were therefore the centre of Ebola eradication efforts in the country. In fact, by mid-spring 2015, cases had dropped so precipitously in the rest of the country that British Armed Forces were withdrawn, with the exception of these two districts and the capital.

^{oo} The introduction and integration of these strategies often followed much hand-wringing by anthropologists and local communities themselves.²⁸³

^{pp} One critic, for example, called response strategies at this time a collection of “heavy-handed intervention[s] bringing together ‘engagement’ and ‘security’ elements”.⁷¹

For example, by mid-2015, quarantine—only relevant for Kambia, Port Loko, and Western Area Urban districts at this time—included not only reliable food delivery but also baby formula; educational materials for children missing school; radios, cell phones, airtime, and solar chargers; and even at-home non-Ebola care for those who were pregnant or who had underlying health conditions.⁹⁷⁶ On occasion, RSLAF soldiers even tended the farms of those in quarantine.^{976,977} Meanwhile, in Kambia District, a response strategy was published re-affirming the roles of chiefs, faith leaders, and secret society heads in community engagement and the enforcement of public health measures.⁴³ This kind of holistic localisation and approach became more and more focused as part of a virtuous epidemiological cycle: as caseloads dropped, more time, attention, and resources were committed to ongoing clusters of transmission, which in turn, resulted in lower caseloads.

End of the 2013–2016 West Africa Ebola Epidemic

These efforts eventually paid off. On July 13th, 2015, Port Loko District experienced its last case of Ebola.⁸¹ While a new cluster of cases in Kambia District did arise in late August, 2015, it was quickly contained, and on September 7th, 2015, the district reached the same milestone.⁸² Following the containment of Kambia District's final cluster, the WHO declared the 2013–2016 West Africa Ebola Epidemic in Sierra Leone over on November 7th, 2015.⁹¹ Operation Gritrock was stood down, and the last British Armed Forces personnel departed the country three days later.⁹² Later, on January 1st, 2016, the NERC and DERCs were decommissioned, with responsibility for residual Ebola response operations handed to the newly created GoSL PHEOC and constituent GoSL District EOCs (DEOCs) under the management of the MoHS, and the remainder of the UK's civilian teams left the country.^{92,99}

On June 9th, 2016, the 2013–2016 West Africa Ebola Epidemic was declared over.^{1,92,98} In all, 28,652 people are known to have had Ebola across ten countries, of whom 11,325 people are known to have died.¹ Due to limited testing and surveillance, this number likely underrepresents the true number of cases and deaths by a significant margin.^{99,rr}

⁹⁹ On January 14th, 2016, a new case of Ebola was reported in Tonkolili District.⁹³ The case was a student in Port Loko District who had travelled through Kambia District on her way to Bombali District.⁹⁴ The source of her infection is not known, though it is possible the case was sexually transmitted, as is known to be possible for at least six months following an infection with the Ebola virus (it is possible that sexual transmission can occur many years following an infection with Ebola).^{94–96} One contact tested positive on January 20th and was successfully treated for the disease, being discharged from the ETC on February 4th.^{92,97} This was the last known case of Ebola in Sierra Leone's outbreak. On March 17th, 2016, the WHO once again declared Sierra Leone Ebola-free, this time for good, with only a small number of cases reported in Guinea and Liberia thereafter.¹

^{rr} Whether or not one considers the outbreak 'over' is not necessarily clear-cut: the Ebola outbreak declared in Guinea in early 2021 was possibly the result of sexual transmission from a survivor of the 2013–2016 epidemic. Some may therefore consider the current outbreak a continuation of the region's prior outbreak, rather than as an entirely new and distinct one.⁹⁷⁸ For the purposes of this study, the point is somewhat semantic, as this thesis concerns itself with the period of time between the outbreak starting in December, 2013 and the end of the outbreak as generally understood (i.e., mid-2016).

Summary and implications

A number of historical factors contextualise and influence the origin, nature, and effect of the British Armed Forces' and RSLAF's support to the 2013–2016 West Africa Ebola Epidemic.

Historically, there has been a very strong relationship between Britain and Sierra Leone, and relevant vestiges of the colonial state exist to this day. This includes, for example, the political power and identities—in many ways facilitated by the British colonial administration—of Krios in Freetown (pages 415–416) and Paramount Chiefs throughout the country (page 416), as heightened in the lead-up to decolonisation (pages 416–418). These factors may affect and perhaps bias not only the recollections of GoSL officials and Paramount Chiefs when critiquing and examining Britain's role in the Ebola response, but also the ability of these groups to speak as representatives of Ebola-affected populations given the historically contentious relationship between them (pages 416–418).

It is also important to note that Sierra Leone's Ebola-affected public is very heterogenous, in not only geography but also in tribe and political party affiliation (page 418). This, in turn, effects a person's and community's degree of political privilege. For example, as not only the seat of government but also the wealthiest and most developed part of Sierra Leone, Western Area Urban District (i.e., Freetown) is unusually privileged, especially because of the Krio population's unique history and closeness with Britain (pages 415–416).^{ss}

Further and considerably influencing perceptions of Britain as well as its and Sierra Leone's armed forces is the 1991–2002 Sierra Leone Civil War. Relevant factors—including in data collection sites specifically—include instances of horrific violence and abuse at the hands of both rebel forces and the then-national army (pages 420–423). The war also destroyed a significant amount of the country's health infrastructure (pages 427–429), exacerbating a chronic lack of health system resilience and disease outbreak preparedness (pages 431–434). However, the effect of 1991–2002 Sierra Leone Civil War on people's perceptions of armed actors is complex, as the British Armed Forces played a central and conspicuous role in stopping the violence and ending the war (pages 423–425), something which was most evident in Western Area Urban and Port Loko districts (pages 422–425).

The 1991–2002 Sierra Leone Civil War was also the impetus for the subsequent transformation of Sierra Leone's security sector, including the national army (pages 425–427). Through this security sector transformation and ongoing ISAT programme, the British Armed Forces helped to rebuild Sierra Leone's military in a model that was more-or-less identical to their own. As largely funded by HMG and directed

^{ss} In Sierra Leone's short history as an independent nation, the Port Loko and Kambia districts have also been unusually privileged areas (page 245). As above, this holds diffuse but arguably important relevance for district decision makers' and Ebola-affected communities' relationship with national decision makers, the intervening British Armed Forces and RSLAF personnel, and the Ebola response broadly. That is not to say these areas were not also subject to deeply problematic political histories (page 245; pages 245–245), but the Ebola response gave the area's affected populations a “momentary opportunity to become visible”.⁵⁵

by uniformed members of the British Armed Forces, this transformation not only served to influence and in some ways define RSLAF's Ebola response capabilities, but also to further bolster positive relationships between Britain and the Sierra Leonean public due to the former's sustained presence and support for GoSL.

This also created an unprecedented depth of trust in and political access for HMG, which thus had considerable influence on the origin, nature, and effect of military support to the Ebola outbreak (pages 434–436). Through ISAT, for example, there were already British Armed Forces personnel in Freetown prior to the Ebola outbreak and the deployment of British troops under Operation Gritrock (pages 436–438). Further, as individuals with trust and access at the highest levels of GoSL, these personnel played a central role in designing national Ebola response coordination structures (see Chapter 6, pages 111–144). Therefore, the subsequent deployment of British troops under Operation Gritrock was readily accepted by GoSL (pages 434–438). Operation Gritrock was also highly compatible with RSLAF's burgeoning Ebola-response roles under Operation Octopus, as their officer-class soldiers had been trained by the British Armed Forces and because the two militaries were identically structured (pages 425–427).

Through the development of the NERC and DERCs as well as their contributions to that process (pages 436–438) and leadership within the resulting structures (pages 438–440), the British Armed Forces and RSLAF—as part of a multi-agency civil-military team—were integral to the response to and containment of Ebola in Sierra Leone. Therein, while isolating the effect of the militaries' contribution defies scientific measurement (given the thoroughly civil-military nature of the response and its actors), it was nevertheless highly significant. This was particularly the case in the Western Area Urban, Port Loko, and Kambia districts (pages 440–442).

Also notable is the unique epidemiology of the Ebola outbreak in these areas: they were affected much later in the Ebola outbreak than other areas, when lessons had been learned, resources had been secured, military-enforced district-wide quarantines had been stood down, and the overall quality and dignity of the response had significantly improved (pages 440–442). Relationships between Ebola-affected communities and the Ebola response in these districts may therefore be quite different than those found elsewhere in the country (page 418), especially when compared with the more politically marginalised areas of Sierra Leone's east that were affected in the outbreak's earlier and more chaotic days (pages 431–434).^{tt}

In short, there are a number of unique historical factors in not only Sierra Leone but Western Area Urban, Port Loko, and Kambia districts specifically that are highly relevant to the examination of origin, nature, and effect of the British Armed Forces' and RSLAF's contributions during the 2013–2016 West

^{tt} Nevertheless, even in these districts,^{43,53,288,289} “the epidemic... laid bare, and sometimes exacerbated, mistrust in the healthcare system, elected officials and external health interventions”.⁵³

Africa Ebola Epidemic. While effort is made throughout this thesis to appraise and disentangle these diverse factors, comprehensively doing so without reproach is untenable. Nevertheless, their consideration in this extended chapter elucidates important opportunities for contextualising the thesis' findings and delineating the scope of their generalisability.

Reflexive considerations (extended version)

Introduction to the chapter

I—the PhD candidate—started at the London School of Hygiene & Tropical Medicine (LSHTM) in 2016, following the 2013–2016 West Africa Ebola Epidemic in which I worked as an Ebola Virus Disease (EVD) Response Worker (ERW). As a practitioner with a number of personal and professional experiences relevant to this study, it felt important to include a chapter in which I could detail and examine these experiences in greater detail than in Chapter 5 (pages 95–110). This is done with a particular focus on the influence they may have had on the development of this thesis at various stages. Indeed, the overall choice of research topic is a result of my personal and professional experiences working with and alongside members of the British and Sierra Leonean militaries throughout my time in Sierra Leone. This background also influenced my choice of research questions and informed subject selection (as colleagues and contacts from the Ebola response constituted a natural starting point for this project’s respondent selection).

Accordingly, the following chapter details my deployment(s) to the 2013–2016 West Africa Ebola Epidemic, with a focus on the specific personal and professional experiences which are of most relevance to this study. The chapter also discusses subsequent professional work with and adjacent to military and security forces (and at times non-state armed groups (NSAGs) such as during the 2018–2020 Kivu Ebola Epidemic), as well as another ongoing research project that I am involved with related to the role and perception of military and security forces in the response to public health emergencies.

Setting the emotional stage

My first trip to Sierra Leone was initially nothing to do with Ebola: I arrived in Freetown on July 23rd, 2014 on placement from my then-university to provide programmatic support to the King’s Sierra Leone Partnership (KSLP). KSLP was (and still is) focusing on supporting health system strengthening and long-term capacity building in Freetown’s Connaught Hospital. This seemed fitting to me. My previous work experiences had been in maternal and child health programming in South Sudan and health systems strengthening in Kenya, and I intended to provide support to KSLP in line with these general areas.

On the humid Wednesday evening that I arrived and settled into my accommodation, things felt normal. People went about their day, going to bars and beaches and markets. Conversations about Ebola—even amongst the health professionals that I was living with and working alongside at Connaught Hospital—generally coalesced around the notion that the outbreak was a relatively contained and rural concern. This was clearly not the case, as a small and rudimentary Ebola isolation and holding unit had been built at the hospital. Further—though largely unnoticed by the international community—Sierra Leone’s borders had already been closed with Liberia and Guinea, and the Kenema and Kailahun districts in the country’s east were being devastated by the virus. Some, notably Médecins Sans Frontières (MSF), were trying to raise

the alarm, stating just one month prior to my arrival that the Ebola “epidemic requires [a] massive deployment of resources”.⁶²⁵

Despite these rumblings, I was unaware of much foresight or planning in Freetown for what was soon to come: hand washing stations were not yet the norm, most people still shook hands and physically embraced to say hello, and there was no obvious public health messaging regarding the outbreak; the country had no system for centralising alerts, no database for systematically aggregating or analysing surveillance data, hardly any Ebola treatment centres (ETCs) or beds, and no special sites for burying the forthcoming dead. Anyways, there were no biohazard-secure hearses or trained burial teams to transport infectious bodies even if there had been somewhere to safely inter them.

My and others’ lack of awareness was to change very soon and very quickly: unbeknownst to myself or my colleagues at the time, the first laboratory-confirmed case of Ebola in Sierra Leone’s capital city arrived on the same day that I did.⁶²⁶ The case was publicly reported the following day.

I find it exceptionally difficult to describe what it is like to go to bed in a thriving, noisy, bustling city, and wake up in one suddenly aware of not just what had transpired, but also terrified of what was to come (Figure 1, page 448). I kept a blog at the time where I did my best to capture how I felt, and would like to reproduce a small portion of my writing from those inauspicious and foreboding days. This first post is from just four days after my arrival in Sierra Leone (Box 1).

Box 1: July 27th, 2014

Ebola has taken over everything here. You don’t even need to leave the house to hear announcements over loudspeakers shouting in Krio... that Ebola is here, Ebola is real, and Ebola will kill you. There’s even a catchy pop song... written by a guy in Monrovia about it that you can hear blaring from local bars at night: “Ebola! Ebola in town! Don’t touch your friend! Don’t touch him! It’s dangerous! Ebola in town! No kissing, no eating something dangerous! Ebola in town, don’t touch your friend, no touching!...”.

In one of the friendliest and warmest nations on earth, no one is shaking hands or high-fiving hello. Chlorine hand washing stations are outside every shop, mandatory for any entering customer. It has gotten bad, very recently, and very quickly. The... [first Freetown] patient... turned herself in after public announcements went out over the radio and loudspeakers proclaiming her a threat to all. She has since died, but not before infecting her parents and potentially anyone she has been in close contact with since her escape.^a

Since I arrived [four days ago], things have gone downhill, to say the least... Guards are posted at every entrance [of Connaught Hospital] with gloves and masks. The isolation ward at the hospital is now behind barbed wire and a thick, padlocked door from fear it will be attacked by those who believe Ebola is some kind of ploy, and possibly to prevent those inside from leaving. The hospital feels eerily quiet because doctors, nurses, and patients aren’t showing up out of fear. Meanwhile, the highly loved and respected doctor leading the Ebola response in Sierra Leone has contracted the infection,^b the doctor leading the response in Liberia has died from it, and just yesterday, the first western patient—an American doctor—came down with the infection in Monrovia. Evidently, even the strictest precautions and best hazmat suits aren’t a guarantee [of safety]. Furthermore, there has now been a confirmed case in Nigeria... When I arrived, there were no patients in the Connaught Hospital isolation ward. As of Friday there are now three awaiting test results... [and] there is a real fear that in a week or two the hospital will be swamped with cases.

^a I was not yet *au fait* with appropriate public health terminology.

^b Dr. Sheik Umar Khan sadly died from his infection with Ebola several days later.⁹⁷⁹

You've got to remember: the best way to prevent the spread of the infection is to avoid physical contact with patients and to wash your hands. But this huge hospital—one of the largest and best equipped in the entire country—has four working sinks and not enough gloves to go around... This is why nurses at the main treatment centre in Kenema District are striking—a lack of proper safety equipment has resulted in the deaths of four of them. To top it off, the strike means that infected patients are leaving, going back to their homes, and bringing their infection with them.

My next entry was on August 1st. It simply listed several headlines from major international news outlets from the prior days: “Battling fear and deadly virus”, Cable News Network (CNN);⁹⁸⁰ “Money could have come earlier”, CTV News Channel;⁹⁸¹ “Ebola patients ‘refusing isolation’”, British Broadcasting Corporation (BBC) News;⁹⁸² “Top Ebola doctor dies from virus”, Channel 4.⁹⁷⁹



Figure 1: A deserted Freetown street, August 04, 2014 (Source: author)

As the outbreak escalated and the situation deteriorated, I was asked by KSLP to contribute my time to the Ebola response (specifically, to start working out how an alerts call centre might work). I would never get the chance: later that same day, I was told by my university that I was being evacuated from the country.⁶²⁷ It would take a few days, because flights were fully booked as many with the means fled the country.^{983–988} Accordingly, just before my plane departed Sierra Leone,^c I had time to write a final entry (Box 2).

Box 2: August 5th, 2014

Why is Ebola so deadly? Why is it so dangerous? Why is it “spreading too fast”?⁹⁸⁹ Why is the University of Chicago evacuating me, why have the Peace Corps and Samaritan’s Purse left, and why has the United States (US) Centers for Disease Control and Prevention (CDC) advised against all but essential travel to Sierra Leone, Guinea and Liberia? Why will it take \$100 million from the World Health Organisation (WHO), an additional \$100 million from the World Bank, 50 US CDC infection prevention and control (IPC) specialists, the forced closure of government agencies and schools, the quarantining of entire regions of the country enforced by the military, and the rapid deployment of MSF and International Red Cross (IFRC) teams to combat this disease?

^c I was on the last British Airways flight out of Freetown—the airline cancelled all future flights to Sierra Leone while I was in the air between Freetown and London. The flights were never resumed.

This sounds arrogant, but... it's not that complicated. And it has very little to do with Ebola.

Let me back up. Of course, there are a multitude of complicating factors that collectively have a huge impact on containment that I do not mean to trivialise. First and foremost, the responsibility of the respective West African governments to provide effective assistance to their people, the significance of disease virulence, cultural beliefs surrounding medicine and burial, lack of trust in authority post-civil war, violence against health workers, and so on... all of which you may have heard referenced in some news article elucidating why containing this outbreak is such a challenge. But what I'm trying to get at is that there is a deep, underlying issue at hand, an elephant in the room, one which constitutes and represents just how little the outside world really genuinely values a Sierra Leonean or Guinean or Liberian life.

I'll answer this with another question. Why are Britain, the US, the international aviation authorities, and the WHO so unconcerned about this virus—with its 21-day incubation period, and one that has successfully travelled via an international flight—arriving and spreading through a major Western city?

Because Britain and the US have functional, well-funded hospitals and health systems. In any part of the Western world, this virus would not survive beyond a handful of patients. It would be contained immediately. And not because of some rapid rollout of \$200 million in funds, the immediate quarantining of entire neighbourhoods and regions, or because of the work of hundreds of infectious disease specialists. That would never be necessary. It would be contained because hospitals in the US have running water. Hospitals in the US have an ample supply of rubber gloves. Hospitals in the US have well trained nurses and functional, routine IPC. Kent Brantly—the US doctor from Liberia who contracted the infection—has been placed in a state-of-the-art isolation ward at Emory Hospital. But even the health officials there say that isn't necessary as the virus is not airborne. He would do just fine and put no one at significantly greater risk if he were in a regular old private hospital room.⁹⁹⁰ Dr. Thomas Frieden, the director of the US CDC, made this statement just a couple days ago in an interview with ABC: “We do know how to stop Ebola. It's old-fashioned plain and simple public health: find the patients, make sure they get treated, find their contacts, track them, educate people, [and] do IPC in hospitals”.⁹⁹¹ The little health infrastructure that did exist in Sierra Leone was destroyed through years of civil war in the 1990s and early 2000s, and has been essentially unrepaired, unsupported, and undeveloped for years before, during, and after the conflict. \$200 million from the WHO and World Bank is a godsend for the people of Sierra Leone right now, and—Insha'Allah—will contain the outbreak and quickly bring it to an end. But if that money had been invested over the past few years—or even 6 weeks ago when MSF and aid agencies here pleaded to the world that the people of Sierra Leone, Guinea, and Liberia were in trouble, that human lives hung in the balance, that the region was on the brink of disaster and money was needed urgently—if that money had gone into durable sinks, nurse training, health education, reliable power, chlorine, and some rubber gloves—then there would be no Ebola crisis unfurling around me today. You have to remember that... it's hospitals on this continent that must contend with other statistics like 1.8 million lives lost every year to treatable diarrhoea, one million to treatable malaria, and 1.5 million from treatable tuberculosis. Imagine the entire population of Los Angeles dying from treatable disease year after year after year, and you have an idea of the sheer magnitude of avoidable human tragedy that unfolds throughout much of our world day-by-fucking-day.

More than 900 people have died of this terrible disease, and millions more from others, not because of unprecedented virulence or because these infections are not treatable—they are—but because the world with money has abandoned the world without. When Western governments, accountable to their people, will not care about a crisis until two American lives are threatened, and when the US gives only .19% of GDP to helping those most in need instead of the already paltry 0.7% they committed to give 44 years ago, then we have failed not only those we aim to help but also ourselves. We should be ashamed.

I boarded my flight, the plane taxied to the runway, and I left my new colleagues behind. Firmly believing they might die working to protect and save the lives of others, I felt that I had abandoned not only them, but an entire nation of people in a time of profound need. Even if 'we' were not ashamed, I certainly was.

My (second) deployment to Sierra Leone and my experiences with the military while there

In the days leading up to my evacuation from Sierra Leone in early August 2014, it was clear to me that had I contracted Ebola (which, while unlikely, felt like a very real possibility at the time), or had any other kind of medical emergency, the likelihood that I would receive efficient and half-decent tertiary medical

care was questionable. Even a relatively routine international medical evacuation appeared increasingly unreliable as airlines began cancelling their flights to West Africa.^d

From the moment that I was made to leave, I knew that I wanted to return to Sierra Leone, but my knowledge of these risks was a genuinely limiting factor. With new no-touch policies, a nation prepared with hand washing stations, and better personal knowledge of the virus, I was somewhat confident that I could avoid Ebola—but, what was going to happen if I experienced some other kind of medical emergency, such as injuries sustained in a road traffic accident?⁶²⁸

In the process of deciding when and how to return to Sierra Leone, my assessment of both risks—however real—was significantly mitigated by the British Armed Forces, marking the first time that I was conscious of any positionality regarding the militaries' Ebola-related roles in Sierra Leone. On November 4th, 2014, British Armed Forces' Corps of Royal Engineers and Sierra Leonean construction workers completed the Kerry Town Treatment Unit (KTTU), the first of six British Armed Forces Corps of Royal Engineers-built ETCs in Sierra Leone. In addition to 80 Ebola beds managed by Save the Children, 12 were to be managed by British Armed Forces medics and were set aside specifically for healthcare workers (HCW) and other ERWs with suspected Ebola.⁹⁶⁴ Six days prior, the Royal Fleet Auxiliary (RFA)'s one-hundred bed casualty receiving ship, the RFA Argus, docked in the waters off Freetown to respond to any non-Ebola medical emergency that might occur amongst expatriate ERWs deployed to the outbreak.¹⁷ In the meantime, the Royal Air Force (RAF) had committed their Deployable Air Isolator Team (DAIT)—a joint Department of Health and United Kingdom (UK) Ministry of Defence (MoD) asset—to the response, for the evacuation of expatriate Ebola patients to the UK for tertiary medical care at London's Royal Free Hospital.^{965,e}

It is undeniable that these military assets made me—and, importantly, my family—feel wholly less alarmed about my interest in and prospect of returning to the country, particularly as the outbreak had escalated significantly since I had been evacuated. In some ways, my sense of relief and comfort was actually more general than the availability of these specific assets: to me, they represented a clear indication that a well-resourced Western government (of a country that I was a citizen of) was committed to ensuring my wellbeing. My risk and fear of being abandoned if something went wrong—something Sierra Leonean people had come to understand all too well over the early days of the outbreak—was gone. With these developments, I felt an expression of solidarity from and between the British government (HMG) and its constituent departments, including the British Armed Forces.^f

^d In most extreme cases, medical evacuations are done on civilian aircraft.

^e Whereas Sierra Leone's Ebola case fatality rate was edging 90 percent at this time, in the Global North, the same proportion of Ebola patients survived.

^f During data collection for this thesis, I would later ask expatriate ERW respondents about whether and how they felt the same.

I did what I could to find a full-time position in the Ebola response and I eventually succeeded, returning to Sierra Leone on January 3rd, 2015 to work for the International Non-Governmental Organisation ((I)NGO) GOAL Global (GOAL). GOAL had been tasked by the Ebola Response Consortium (ERC) to support the operationalisation of surveillance activities in Port Loko District, the contemporaneous epicentre of the outbreak. I was asked to lead this initiative.

Driving in the dark from the airport to my first duty station in Port Loko District, the car's headlights illuminated at least half a dozen bodies by the roadside in what I later learned was community-managed isolation for the dying and deceased.⁶²⁹ This drive also included my first direct interaction with the military in Sierra Leone's Ebola response, when I was required to get out of the vehicle by Republic of Sierra Leone Armed Forces (RSLAF) personnel to wash my hands and get my temperature taken at several checkpoints. I cannot say that I thought much of this, as I was used to military roadblocks and checkpoints from past work in South Sudan. By comparison, this seemed like a friendly interaction.^g

When I arrived in Port Loko District, I was onboarded and brought up to speed by my organisation. I learned that GOAL's ETC—which had started receiving patients just two weeks prior—had been one of those built by the British Armed Forces Corps of Royal Engineers. Amongst my colleagues, there was chat of frustration and delays in the process of building the facility, but broadly speaking, I felt people were grateful for the support. Who else was could have got it done so quickly, even with the delays?

My work—situated directly within the Port Loko District Ebola Response Centre (DERC)—started the following morning. It is when I first arrived at the DERC that I began to grasp the extent of the British Armed Forces' and RSLAF's role in the response. I was somewhat taken aback: the role went far beyond providing medical care and evacuation services to (mostly expatriate) staff; the building of some ETCs; or the staffing and operation of the occasional health screening checkpoint or roadblock. These are all military functions which, to me, fell more-or-less within the purview of 'normal'.

In the civil-military DERC, however, I saw that military roles could not have been more central: two RSLAF Captains were coordinating civilian District Surveillance Officers (DSOs), another the civilian burial teams, and another civilian ambulance teams; a British Armed Forces Battle Captain chaired coordination meetings and helped strategise response measures (except this time, the fight was against Ebola using inter-agency civilian staff rather than against a belligerent armed group using military force);^h a British Armed Forces Major and medical doctor provided a public health advisory role alongside two Department for International Development (DfID) Humanitarian Advisors; and a Sierra Leonean colonel oversaw it all alongside an ex-Metropolitan Police Stabilisation Unit (SU) officer. To me, it more or less

^g This is, frankly, not saying very much.

^h Battle Captains—as called in the DERC—usually work in a tactical operations centre (TOC). A TOC is a command centre in which military operations from the battalion-level down are coordinated, tracked, assessed, and planned.⁹⁹²

seemed that military and security services ‘ran the show’, coordinating the Sierra Leonean civilians doing a lot of the actual implementing work. I was aware this all occurred under the advisement of the WHO and US CDC, but another major civilian coordinator (at least on paper), the United Nations (UN) Mission for Ebola Emergency Response (UNMEER), was seemingly absent.



Figure 2: A member of the British Armed Forces helps a UN actor prepare for a presentation on Social Mobilisation (Source: author)



Figure 3: Employees of SU, the British Armed Forces, and GOAL have a conversation (Source: author)

I spent the following 9 months supporting surveillance and coordination in Port Loko District and later Kambia District, where I felt strongly that the DERC structure and the activities coordinated within were incredibly important contributions to the response. I felt that this interagency and interprofessional milieu allowed for multiple skillsets, perspectives, workstreams, and iterative learning to be built into response activities.^{i,j} In Port Loko District, I even became part of the core group of personnel that comprised the DERC Command Team. I am certainly not suggesting that everything in the militarised DERCs was this positive or simple. Nor, even, am I suggesting that my generally positive perception is necessarily reflective of how the DERCs actually operated. Indeed, these spaces were highly complex, and roles and responsibilities were neither wholly delineated nor fully stable (and were also not consistent between different DERCs). That my perception and memory is of military personnel more-or-less leading day-to-day activities in the DERCs is nevertheless an important and telling observation. So too is the fact that that the DERC’s joint-civilian leadership was very ambiguous to me at the time.^k This, in turn, reflects

ⁱ Along with colleague and friend Gillian McKay, I documented this perspective for the Africa at LSE (London School of Economics and Political Science) blog. The blog is summarised in Appendix B-3 (pages 245–245).⁴⁹⁹

^j I feel exceedingly grateful for what I was able to experience and proud for what I was able to accomplish in Sierra Leone. It was certainly not easy: four of my colleagues, including one under my direct supervision, caught Ebola and died; my work was not infrequently hampered by politics, or worse, corruption (which at times very directly circumscribed life-saving action); friends and family refused to see me during brief trips home due to fear of the virus; and at one point, I was even detained in an American ETC with suspected Ebola. What I found most difficult was my inability to pay DSOs for their unwavering commitment to the Ebola response. They worked seven days a week and—especially after one of their colleagues caught Ebola and died—their risks were tangible. However, they went unpaid for literally months on end. Of all my accomplishments in Sierra Leone, I am singularly most proud of finding a workaround for this, and for getting compensation to the 80-odd DSOs that I worked with. Many are still working in public health and remain genuine friends.

^k The DERC did formally have civilian leadership, through the politically appointed District Coordinator (DC) who worked alongside the District Health Management Team (DHMT) District Medical Officer (DMO). However, in Port Loko District, neither actor seemed particularly present. In Kambia District, the DC was more active, but I also felt they were ineffective and at times found their presence and contributions counterproductive.

how little distinction I understood there to be between military and civilian actors leading and coordinating the Ebola response.

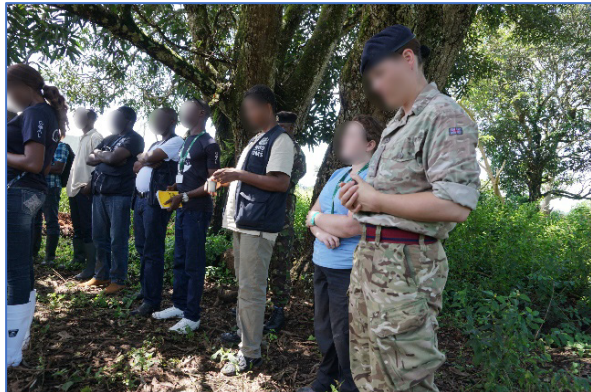


Figure 4: A member of the British Armed Forces stands alongside DHMT, GOAL, and WHO colleagues (Source: author)



Figure 5: UN Children's Fund (UNICEF), RSLAF, and the British Armed Forces pose for a photograph (Source: author)

Therein, my interaction with members of the British Armed Forces and RSLAF was daily and substantial, in both specific and diffuse ways. Examples of my specific interactions included:

- Daily management of surveillance activities with RSLAF captains;
- Integrating dead body management and alerts with surveillance functions with RSLAF captains;
- Strategising response operations with the British Armed Forces Battle Captain and health advisor;
- Getting lifts from the British Armed Forces when I did not have an available vehicle;
- Attending meetings chaired by the British Armed Forces and RSLAF;
- Asking for the use of military assets when required (such as navy boats to access riverine areas); and
- Housing members of the British Armed Forces in GOAL residences when DFID closed their Forward Operating Bases (FOBs)—and thereafter living alongside them, which included socialising, sharing meals, and drinking much-needed sundowners at the end of most days.¹

In fact, the two militaries were so engrained in my daily activities and life that I found this section difficult to write: extracting my experiences working alongside armed forces from the wider milieu of district-level coordination feels almost disingenuous (and at the least incongruous) with my experiences in Port Loko and Kambia districts. In other words, military contributions to DERC operations were so constant, substantial, and intertwined within the overall system of coordination that delineating where military contributions stopped and civilian contributions began feels not only irresponsible (as it de-emphasises the depth of civil-military integration), but unworkable: while non-security activities coordinated out of the DERC were infrequently conducted by a military actor, the overall coordination of these activities

¹ These interactions with military personnel extended to various friendships, despite my initial hesitation of the safety, capability, and professionalism that military actors were capable of (which I primarily attribute to my past and routinely negative experiences with armed actors in South Sudan).

within the DERC was very much a shared civil-military space. Therefore, to some extent, all Ebola response interventions were civil-military in nature.

Ultimately, my sense and memory of the British and Sierra Leonean militaries is one of comradeship, though perhaps not one specific to these institutions. Rather, it is a notion that this jumble of actors—military and civilian, national and international, governmental and non-governmental—were ‘all in this together’, with one shared focus and goal.^m

I left the country on September 21st, 2015 with an Ebola Medal for Service in West Africa.^{n-o} I resumed my undergraduate studies the following week.^{440,p} There were only a small handful of Ebola cases following my departure, and the outbreak in Sierra Leone was finally declared over on March 17th, 2016.



Figure 6: Saying goodbye to DERC guards (Source: author)



Figure 7: Saying goodbye to members of the DERC Command Team (Source: author)



Figure 8: A plaque given to me by the DSOs in Port Loko District, now hanging on my wall in London (Source: author)

^m It is important to note that this could result in attribution biases, as I may unconsciously attribute positive events and outcomes—namely, the success of containment and ending the outbreak—to this whole group, which includes RSLAF and the British Armed Forces.

ⁿ That I remained in-country through the end of the outbreak could result in unconscious telescoping biases, as events, challenges, and frustrations from earlier in the outbreak may be emotively interpreted through a lens of ultimate success.

^o The Ebola Medal for Service in West Africa is actually relevant to this research topic as the first and only medal extended by HMG to not only members of the military but also civilians involved in the response. As an extension of something otherwise uniquely limited to the armed services, the medal was considered somewhat controversial amongst some members of the military and some civilians.

^p My personal experiences in Sierra Leone were documented at length in a three-hour interview for the US CDC Ebola Response Oral History Project run out of the David J. Sencer CDC Museum. The recording and an associated transcript can be found on the project’s website and is briefly summarised in Appendix B-3 (pages 245–245).⁹²³

Preliminary thoughts on military contributions to Sierra Leone's Ebola response

After departing Sierra Leone, I returned to the University of Chicago to complete the fourth and final year of my undergraduate degree in Public Policy. I decided to write my undergraduate thesis about the Ebola response in Sierra Leone. However, at this time, my interest in the origin, nature, and effect of British and Sierra Leonean military support to the response was relatively nascent. Rather, I focused primarily on documenting, analysing, and discussing the challenges (and solutions) that I and others had faced operationalising disease surveillance activities.[¶]

Despite attempting to provide a comprehensive overview of the Port Loko and Kambia districts' Ebola response in my undergraduate thesis, reference to either the British or Sierra Leonean militaries was relatively thin. However, a few references were made in support of RSLAF. For example, in a footnote, I wrote that the organisation “performed admirably” in their provision of security to field staff and the management of the ambulance system.⁴⁷² I later called them “a more effective C2 (command and control) body” than the DHMT and WHO, but I did not provide any further discussion or detail.⁴⁷²

The most direct and relevant reference to military support came in one of the undergraduate thesis' recommendations, in which an implicit perspective on the efficacy of the militaries' contribution is evident:

[HMG] should dramatically increase funding for the SU, and the [US] government [USG] should dramatically increase funding for the equivalent Office of the Coordinator for Reconstruction and Stabilization (S/CRS). As a civil-military collaborative body, SU was extraordinarily effective at coordinating the [Ebola] crisis response, far more so than coordination from the WHO. Additionally, response leaders should have a strong history of C2 and preferably civil-military collaboration, as well as relevant technical or medical training and preparation.⁴⁷²

As part of this undergraduate thesis, I also conducted original qualitative research in the form of a fairly straightforward survey of 27 DSOs in Port Loko District and 16 DSOs in Kambia District.[†] While the survey was quite broad, several questions directly asked DSOs about the degree of perceived involvement, care, receptivity, and support they had received from the British and Sierra Leonean militaries. Second only to GOAL,[§] RSLAF was identified by DSOs as a more caring, involved, receptive, and supportive group than any other organisation.[‡] Incongruously, when DSOs were asked which

[¶] As discussed elsewhere, this was written up and published in a peer-reviewed academic journal which is included in this thesis' appendix (Appendix A-1, pages 245–245).

[†] Ethical approval was sought and granted for this research project by the Social & Behavioral Sciences Internal Review Board (IRB) Office at the University of Chicago.

[§] As I had worked for GOAL and was also (proudly) responsible for finally getting the Port Loko and Kambia districts' DSOs paid,^j this is very possibly the result of courtesy bias.

[‡] Survey options also included the DHMT, the WHO, the British Armed Forces, the US CDC, the DERC, and the NERC.

organisation was the single most important to them successfully completing their work in the Ebola outbreak, the overwhelming majority listed GOAL,^j but none listed RSLAF.^u

There were also two questions where DSOs were asked to freely write their answers:

- What is something the (British forces / RSLAF) did very well?
- What is something the (British forces / RSLAF) could have done better?

In retrospect, it is a shame that I did not choose to properly analyse the freehand answers that were given (focusing instead on the quantitative survey data), as a quick glance at them now is telling: RSLAF was commended by a majority of DSOs for providing security to staff, securing quarantined homes, and running checkpoints (with a smaller number of respondents also expressing thanks for RSLAF's technical support and coordination in the response);⁶³⁰ the British Armed Forces was commended by a majority of DSOs for listening and communicating openly with them, for providing technical and logistical support, and also for providing equipment and funding.⁶³⁰ Various criticisms were also expressed: RSLAF was criticised by approximately half of DSOs for getting involved in the response too late and ending their support too soon and for not recruiting, training, or building capacity amongst civilian personnel;⁶³⁰ the British Armed Forces was criticised by somewhat more than half of DSOs for not providing sufficiently comprehensive, sustained, or direct support to the response,^v for not providing DSOs security in the field, and for not offering scholarships, adequate training, or capacity building to DSOs.⁶³⁰

That I asked these questions suggests I understood the central role that the British and Sierra Leonean militaries had in Sierra Leone's Ebola response, and that I was curious to understand the degree to which ERWs considered those roles important and helpful or deleterious to their daily activities. That I considered the militaries' roles as sufficiently important to include them amongst only eight relevant groups for the DSOs to choose from is also telling (though, even in retrospect, this is more or less fair). Also notable is that I chose to commit one of only thirteen recommendations in my undergraduate thesis to call for response leaders to have "a strong history of C2"—a militarised term I first heard in Sierra Leone—and that "preferably" these leaders should have a civil-military background in addition to other expertise.⁴⁷²

At the time, I do not believe that it occurred to me quite how unusual the civil-military dynamic was in Sierra Leone's Ebola response, nor was I fully conscious of quite how much it interested me. I just felt that it was important, and whether or not that was problematic (or even particularly noteworthy) was not yet something to which I had committed focused attention.

^u The next highest number of respondents listed the British Armed Forces and the WHO (equally), then the DHMT and National Ebola Response Centre (NERC) (equally). No respondents listed the DERC, US CDC, or RSLAF.

^v Several of these statements were quite direct, such as: *they should have taken a leading role; they should have occupied all the districts and chiefdoms in the country; they should provide more support to all the pillars; and they could stay longer to see that the fight is over* (various DSOs).⁶³¹

Starting at LSHTM and formulating this research topic

When I started at LSHTM in the autumn of 2016, I was committed to researching some facet of the 2013–2016 West Africa Ebola Epidemic, but I did not immediately consider investigating the role and perception of the British and Sierra Leonean military contributions therein. In fact, in my application to LSHTM, I said I wanted to examine the effect of the outbreak on access to maternal health services (in line with my prior work in South Sudan). As referenced above, first peer-reviewed academic journal article while registered at the school was on overcoming operational challenges to case investigation in Port Loko and Kambia districts during the outbreak, which included only one brief reference to how DSOs relied on RSLAF’s navy boats to conduct disease surveillance in Kambia District’s numerous riverine areas.⁶³²

While this article’s discussion of the militaries’ roles was thin, it does focus on “district level coordination and operational structures, successes, and failures”, and makes a strong argument that deference to technical epidemiology over logistical and operational needs had a strong and negative impact on the efficacy and efficiency of Sierra Leone’s Ebola response.⁶³² Accordingly, the article calls for the need to deploy operational expertise in addition to technical and medical expertise to public health emergencies.⁶³² Developing this article reinforced my own thinking on the need for and value of effective leadership and coordination in the response, which had not seemed to come from the WHO or the Ministry of Health and Sanitation (MoHS). The WHO Special Representative to the Secretary General (SRSG) in the Ebola response, Dr. Bruce Aylward, admitted as much, saying: “[the WHO is] an organisation that was not designed to be an operational field-based organisation... play[ing] such a role”.⁷⁹

I continued thinking about where coordination in the response had come from, and it occurred to me—as it evidently had, however obliquely, during my time in Sierra Leone—that I felt the British and Sierra Leonean militaries were effective coordinators and operational partners at a time when that skillset was desperately needed and when no other group seemed fully capable or willing to ‘take the reins’. This struck me as a fundamental and crucial insight, despite the fact that a cursory review of the literature found only one paper directly speaking to this phenomenon.²⁰ I found this lack of evidence on an issue I deemed centrally important to be quite intriguing, and I quickly decided to focus my efforts and study towards understanding this civil-military issue.

Work with Chatham House

These ideas matured substantially when an opportunity arose through LSHTM Professor David Heymann to contribute to (and in some ways define) an upcoming Royal Institute for International Affairs (Chatham House) roundtable event held in March, 2017. The roundtable already had funding, but there was no specific agenda or plan for it. I had a reasonable amount of discretion to define who I wanted to invite, and was given leeway to set the meeting’s agenda. Therefore, I decided to use the

roundtable as a platform for pulling together a number of key civilian and military stakeholders from the 2013–2016 West Africa Ebola Epidemic in Sierra Leone with a view to start addressing this research gap.

The meeting's primary objectives were to:

- “Identify those aspects of the Ebola response which, if addressed, would have enabled more effective civilian-military cooperation and response;
- Consider the spectrum of a future UK response to an infectious disease outbreak in sub-Saharan Africa; and
- Explore the acceptability, potential and ability of a UK contribution to a civilian-military response, in line with the recommendation of the International Health Regulations (IHR) review committee that military medical teams be available for deployment to a significant outbreak”.²⁷¹

As the event was held at the Royal Society, it was heavily UK-centric: the Foreign & Commonwealth Office (FCO), UK MoD, DfID, Permanent Joint Headquarters (PJHQ), Public Health England (PHE), and the SU were all represented. In addition, there was also representation from three intergovernmental organisations (IGOs), four (I)NGOs, five academic institutions, one private company, one additional think tank, the US Armed Forces, and Sierra Leone's NERC. In total, more than fifty individuals representing 20 organisations convened for the roundtable.

As there was so little literature on the role and perception of military contributions to the outbreak, this roundtable served as not only a mechanism for defining a set of key research questions and identifying research gaps to be considered for this thesis, but also for building a preliminary list of prospective interviewees. I documented this discussion in the Chatham House meeting report *The Next Ebola: Considering the Role of the Military in Future Epidemic Response*, which, as a core and foundational component of the background research conducted for this thesis, is discussed in the literature scoping (Chapter 3, pages 39–64) and is also included in the thesis' annex (Appendix A-7, pages 373–384).

Other relevant experiences that inform my perspective

In addition to my personal and professional experiences in Sierra Leone; the development of my thinking during the production of my undergraduate thesis; and the refinement of the topic at the Chatham House event, I have had several other relevant experiences informing my perspective on the research topic that bear mentioning.

Deployment to the 2018–2020 Kivu Ebola Epidemic

On August 1st, 2018, an Ebola outbreak was reported in North Kivu, Democratic Republic of the Congo (DRC). Seven members of the same family had suddenly died with symptoms of haemorrhagic fever

shortly after attending a burial in the town of Mangina. Shortly thereafter, the virus was reported in a further five health zones, including the sprawling cities of Beni and Butembo.

Unlike the 2018 Équateur outbreak that had ended just days earlier, it was clear to me that the Kivu Ebola Epidemic had the potential to reach the scale, severity, and complexity of the 2013–2016 West Africa Ebola Epidemic. I knew this as much from reading news articles and tracking the unfolding epidemiology as I did from the ‘rock in my stomach’ feeling that I had last felt four Augusts prior whilst in Freetown.

While the dread felt familiar, this time, something was different: I not only had prior experience responding to Ebola, but thinking about the virus and researching effective responses to it had occupied my time and dominated my thoughts since. There are exceptionally few people that focus on Ebola full-time, and so I felt compelled to raise my hand and contribute my expertise. I found an opportunity through the Global Outbreak and Response Network (GOARN) to support the WHO’s work as an epidemiologist, took an intensive French course to buff up my rusty language skills, filed for an Interruption of Studies (IOS) from LSHTM, and got on a plane (to a plane to a plane to a plane to a plane to a plane).^w I arrived in Beni, my first duty station, on Christmas day.

I was promptly given a radio, a bulletproof jacket, and a blue helmet—and I promptly needed all three: on Boxing Day, the national government decided to cancel the upcoming presidential elections in North Kivu, claiming that the Ebola outbreak made it too unsafe for people to vote. This was very convenient for the government in power: North Kivu and Ituri were (and remain) the opposition stronghold. The provinces are deeply traumatised by and untrusting of then-President Joseph Kabila, his party, and his political allies.^x Fighting broke out almost immediately in and around Beni, including in the streets surrounding my UN Peace Enforcement (MONUSCO)-protected hotel.

I sheltered on the floor of a colleague’s bedroom. He slid over a bottle of whiskey me and explained how to identify whether any particular burst of gunfire was the national army (the FARDC) or one of the myriad NSAGs based on the heaviness of the sound. By evening, the situation had calmed sufficiently for me to scamper across the street to my bedroom in the hotel’s annex. I figured that I could charge my phone, pack a go-bag, and get some sleep. Attempting the latter proved a futile exercise: through the night, sounds of gunfire continued to reverberate throughout the hotel, and there was nothing to do except lie on the floor and listen to my radio for any updates or instruction to evacuate. The order never came. The next morning, everyone got back to work, as if nothing much had happened at all.

^w Seriously.

^x Joseph Kabila took power in 2001, 10 days after the assassination of his father, Laurent-Désiré Kabila. The latter spearheaded the First Congo War, which spurred the Second Congo War. These wars devastated Eastern DRC, including North Kivu and Ituri. They also set in motion the Ituri Conflict and fomented various violent armed terrorist groups including the Lord’s Resistance Army, Nationalist and Integrationist Front, Union of Congolese Patriots, and the Allied Democratic Forces (ADF).



Figure 9: White versus black UN (source: author)

I had been in DRC for all of two days, and—to put it in the mildest possible terms—my doctoral research had already been brought sharply into focus. Here—especially evident following the decision to cancel the presidential elections—the military was an arm of a corrupt and deeply undemocratic and authoritarian government. Meanwhile, despite the FARDC’s long and credible record of human rights abuses and violence against vulnerable and generally peaceful communities, MONUSCO—visually inextricable from civilian UN actors and infrastructure (Figure 9)—had a mandate to support them. MONUSCO may have been fighting the ADF (a terrorist group that had long antagonised and committed hideous atrocities against local people), but they were doing so in support (and with the permission) of the national government. Nevertheless, the WHO (and therefore I) relied on MONUSCO and the FARDC to serve as armed escorts, to fortify hotels and offices, and to deliver supplies through their airstrips and logistics hubs scattered across eastern Congo.

I did my best to understand this complexity, but the number of armed and civilian groups, their allegiance or belligerence to Ebola-affected communities, and the fluidity of their imbricating relationships was dizzying (Figure 10, page 461).

After a few weeks, I transitioned from my role as an epidemiologist to become the WHO Incident Manager’s deputy and assistant, a role that I held through early May 2019. This gave me fascinating and sometimes alarming insights into how these various groups were supportive of or antagonistic towards the WHO and the Ebola response. Transitively, it also gave me insights into how some of these groups were supported or antagonised by the WHO and the Ebola response, in both direct and indirect ways.

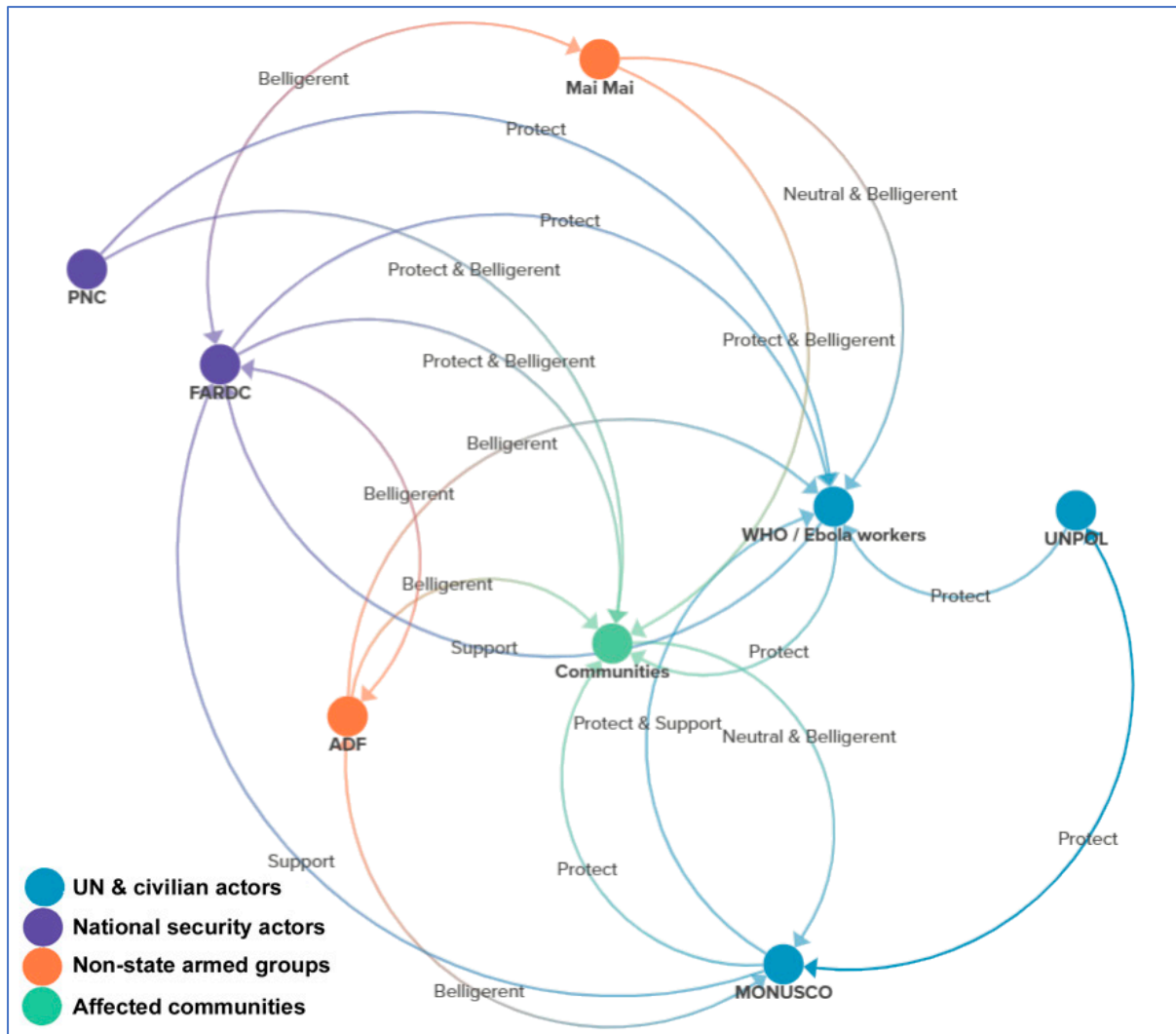


Figure 10: DRC actors and their relationships (source: author)

This was never more true than when the shaky ambivalence of NSAGs towards the WHO and the Ebola response became anything but on February 24th, 2019. I was in Goma, decompressing after another long day, when my phone began a vibrating whirl: photograph after video after photograph after video of the MSF ETC in Katwa—already pushing bed capacity—was on fire. Messages then came through that it was under attack by a large, armed, and organised group of individuals. Patients were hastily (and unsafely) evacuated to the nearby MSF Butembo ETC and the Alima holding centre.^y The brother of one patient died of presumed smoke inhalation and asphyxiation. His corpse was hardly recognisable when a photo of it was inevitably shared on the group WhatsApp. I, the WHO Incident Manager, and several others boarded a helicopter to Butembo at first light to try and manage the crisis, to better understand what had occurred, and crucially, to figure out where new Ebola cases could be treated now that the MSF Butembo and Alima facilities were even more overstretched.

^y Several members of staff had very high-risk exposures to Ebola patients as they carried them from their wards.

After three long days, the teamwork of MSF, the WHO, the Ministry of Health, and Alima had sorted a workaround solution: the Alima holding centre was quickly adapted to take confirmed cases in addition to suspected ones; extra surge capacity was established at MSF Butembo; and MSF Katwa would be rehabilitated as quickly as possible. A core and capable team was left in Butembo to carry the plan forward.

Exhausted, I returned to Goma with the WHO Incident Manager on February 27th for a small and private meeting with MSF's then-International President Dr. Joanne Liu (who happened to be in-country). The conversation was really a plea by the WHO to MSF: a plea not to evacuate, despite the ambiguity over who had attacked them days prior and the reasons for it. There was, gratefully, consensus: despite the risks, the humanitarian imperative was simply too significant. MSF would stay. The meeting was moments from adjourning when everyone's phones started ringing more or less simultaneously. MSF *Butembo* was now under attack and was on fire. Dr. Liu excused herself, and her agency: while the reasons may have been ambiguous, the targeting of MSF was anything but. The organisation was to evacuate.

Having landed from Butembo only hours earlier, I and the WHO Incident Manager got back in our armoured car and returned to the Goma airport en route to Butembo, though not before I rang MONUSCO and the FARDC to deploy armed peacekeepers outside MSF's hotel in the city (at their request) for the night. Alima, rightfully, decided to evacuate their holding centre as well. In the epicentre of the second-largest outbreak of Ebola to have ever occurred, we went from three treatment facilities to nil in 72 hours. MSF evacuated their international staff on the same helicopter that I and the WHO Incident Manager arrived on (they were actually waiting on the landing strip, as if the outgoing white-vested guard of MSF was being replaced by the WHO's navy blue). MSF—the 'run towards the bullets' organisation—had found their threshold of (un)acceptable organisational risk.

Herein lay the painful but unavoidable reality: MSF was not willing to place armed guards outside their ETCs, but they were not willing to remain *in situ* without armed protection. There was no alternative but to leave, and, with MSF gone, no other major (I)NGO was willing to sustain operations in the Butembo area. The WHO could sustain the risk only because MONUSCO had trained peacekeepers and tanks and armoured vehicles and helicopter gunships.



Figure 11: MSF Katwa's triage unit (source: author)



Figure 12: MSF Katwa's logistics and storage facilities (source: author)



Figure 13: MSF Butembo (source: author)



Figure 14: MSF Butembo (source: author)



Figure 15: MSF Butembo (source: author)



Figure 16: Destroyed patient and clinical trial records, MSF Butembo (source: author)



Figure 17: Ambulatory patients escaped over the perimeter fence, MSF Butembo (source: author)



Figure 18: A memorial for Dr. Richard Mzuku in Butembo (source: author)

What followed is difficult to recall. Ebola-positive patients were moved into any nook or cranny that had not been burned to the ground. Now ex-MSF national staff were pleaded with to return to work, this time under armed protection. Sandbags had to be arranged to be flown in from Uganda. The WHO's two major hotels were fortified (i.e., had hastily constructed watch towers and co-located MONUSCO encampments put in place, had trees felled to build helicopter landing and evacuation sites, *et cetera*). The WHO started providing per diems and vehicles to the FARDC for the provision of armed escorts, and negotiating with Mai Mai and select other NSAGs for safe passage... *et cetera*. We eventually rehoused the patients that were too unwell to have run away during the attacks (yet too strong to have died in the period of time without proper care that followed), and things eventually settled into a new and very militarised normal.

And then, 10 weeks later, on April 15th, 2019, the WHO epidemiologist Dr. Richard Mzouku was assassinated. I was a ten-minute drive away at the time, listening to everything unfold in the radio. And there was absolutely nothing that I or seemingly anyone else could do.

I would love to summarise these experiences and those that followed into something approaching cogency, academically lensed and framed by the topic of my thesis.^z Ultimately, even writing this chapter now—more than 18 months later—I am too upset to think or write in that way.

What I do remember, and what does feel relevant, is that I felt safer for MONUSCO and the FARDC's protection. I felt safer being in a DfID-provided armoured car day in and day out. I felt angry at what I perceived to be the hypocrisy of (I)NGOs running treatment centres that refused armed protection until they really needed it, then pleaded with me to arrange for troops and armoured personnel carriers to come to the rescue them when 'push came to (violent) shove'. I felt thoroughly aware of how the presence and actions of these armed actors drove the distrust and violence that we were facing, and could think of absolutely nothing that might break this most vicious and violent of cycles. The Ebola response could not survive without weapons to defend it from the anger those same weapons produced. But, what were you supposed to do when the lives of staff and the lives of patients very much hung in the balance? There was a fatalistic sense that the response would not abandon a city of almost 2 million people facing Ebola's lethal grip, even if its stubborn presence could be at nothing short of literal gunpoint.

^z Many of these experiences and lessons learned were presented and recorded in a seminar at LSHTM (alongside my dear friend and LSHTM DrPH candidate Gillian McKay) in June, 2019 titled *Ebola in conflict: Field perspectives on response strategy and implementation in DRC*.⁶³³ Further, I documented some of my lessons learned in a Guardian opinion piece alongside Gillian and PhD supervisor Susannah Mayhew,⁵⁰⁰ a version of which was submitted to and accepted by a parliamentary review for how the UK government could improve their COVID-19 response.⁶³⁴ My experiences were also documented in the Netflix documentary 'Pandemic: How to Prevent an Outbreak' (in my role assisting the WHO Incident Manager, I facilitated the documentary team's visit to DRC, and was featured in several episodes).⁶³⁵⁻⁶³⁷ I also had the privilege of privately briefing the Archbishop of Canterbury with DfID and LSHTM colleagues on the Kivu Ebola Epidemic and the prospective role that the Anglican Church might play in helping drive locally led responses to Ebola and Ebola-related community needs.

The US CDC's then-Director Robert Redfield (now much maligned for his fumbled response to the early days of the COVID-19 pandemic) put it mildly, but succinctly:

North-eastern DRC has suffered from decades of conflict, with the proliferation of [NSAGs] and community-based militia, and a worsening humanitarian crisis. The use of security forces for protection of Ebola response workers, allegations of improper use of funds, and community mistrust of [UN] peacekeepers, the national government, and nonlocal Congolese impeded response activities.⁹⁹³

The outbreak finally ended on June 25th, 2020.

Brown University and the *Civil-Military Interactions in Conflicts: Best Practices and Perceptions* research project

In 2018, I attended the Civilian-Military Humanitarian Response Workshop and associated Research Symposium on Civilian-Military Humanitarian Coordination in Providence, Rhode Island. The annual workshop and research symposium is jointly organised by Brown University, the US Naval War College (NWC), and the Harvard Humanitarian Initiative (HHI).^{aa-bb} There, I met a number of practitioners and researchers interested in civil-military dynamics during humanitarian and public health emergency response. A small group of us decided to apply for a US State Department's Bureau of Population, Refugees, and Migration (PRM) call to conduct relevant research.

The research project—titled *Civil-Military Interactions in Conflicts: Best Practices and Perceptions* and run out of Brown University's Watson Institute for International and Public Affairs—was awarded PRM funding in 2018 and is expected to conclude in late 2022. The study examines three humanitarian/public health emergency civil-military case studies, and is therefore highly relevant to this thesis. The case studies are natural disaster response in the Philippines; the Syrian refugee crisis on Jordan's militarised border; and the contributions to and effect of armed actors including NSAGs during the 2018–2020 Kivu Ebola Epidemic in DRC. The underlying objective is to examine the civil-military interaction (CMI), relations (CMR), coordination (CMCoord), and cooperation at and between each research site, with a view to identifying civil-military lessons learned, challenges, and best practice. As someone with experience working in the 2018–2020 Kivu Ebola Epidemic, I was primarily responsible for managing the DRC site, where—as reasonably aligned with this thesis—the project involved speaking with military responders, civilian responders, and Ebola-affected community members.

Therein, the project has not only further developed of my thoughts on the thesis' research topic, but may also improve the generalisability of the thesis' findings through the examination of three additional case

^{aa} I also attended the 2020 workshop and symposium and presented findings from various workstreams; the 2021 workshop and symposium (where I also chaired the civil-military 'Outbreaks Working Group'); and plan to attend the forthcoming 2022 workshop to present the findings from the research project discussed here.

^{bb} At the conference I met a number of members of the affiliated Civil-Military Pandemic Response Network (CM-PRN), a group of predominantly US-based civilian and military outbreak response practitioners. I have since become an active member of the CM-PRN group.

studies. Further, it also serves to partially address a key limitation of the thesis (see Chapter 9, pages 214–236), as the project has systematically documented and examined the perspectives of crisis-affected community members. Findings are currently being drafted, and will include two significant research and policy reports (see Appendix B-3, pages 407–413) as well as a series of peer-reviewed academic journal articles (see Appendix B-2, pages 403–406).^{cc}

Date	Event
July 2014–August 2014	First deployment to Sierra Leone’s Ebola response
January 2015–September 2015	Second deployment to Sierra Leone’s Ebola response
June 2016	Completion of undergraduate degree and relevant thesis at the University of Chicago
October 2016	Registration at LSHTM and commencement of PhD study
November 2016–February 2017	Conceptualisation of research design
March 2017	Chatham House roundtable event
April 2017–August 2017	Upgrading and ethics approval
September 2017–September 2018	Data collection
August 2018	First attendance at the annual Civilian-Military Humanitarian Response Workshop and associated Research Symposium on Civilian-Military Humanitarian Coordination
October 2018–November 2018	Transcription of all interviews
December 2018–May 2019	IOS: deployment to the 2018–2020 Kivu Ebola Epidemic
September 2019	Start of the <i>Civil-Military Interactions in Conflicts: Best Practices and Perceptions</i> project
October 2019–March 2020	Interview coding and data analysis
March 2020–January 2021	IOS: deployment to the ongoing COVID-19 pandemic
January 2021–May 2022	Further analysis and writing up
March 2022–April 2022	Presentation of preliminary findings from the <i>Civil-Military Interactions in Conflicts: Best Practices and Perceptions</i> project
June 2022	Submission of PhD thesis
August 2022	Anticipated conclusion of the <i>Civil-Military Interactions in Conflicts: Best Practices and Perceptions</i> project

Table 1: Research timeline and timeline relevant personal and professional experiences

^{cc} Relatedly, I was also jointly awarded a small seed grant to develop a working paper titled *Civil-Military Engagement During Public Health Emergencies: A Comparative Analysis of Domestic Responses to COVID-19* that is currently being prepared for submission to a peer-reviewed academic journal. This paper is included in the thesis’ appendices (Appendix B-1, pages 245–245).

Summary and conclusion: how my background and experiences influence this study

The anecdotes that I included from my first arrival in Sierra Leone in late July and early August 2014 are, to me, necessary contextualisation of my positionality as it relates to this study. My sense of hopelessness, anger, and fear at this time was very real. Well into that autumn, these feelings became increasingly desperate, as friends of mine deployed to the response and described first-hand how unambiguously apocalyptic they perceived the situation to be. Only by clearly stating the depth of these emotions do I believe that I am able to fully convey the sense of relief—a first but invaluable glimmer of hope—that I felt when the British and American governments announced the deployment of their respective militaries to West Africa. To me—and to my friends in Sierra Leone watching dystopia unfold around them—the announcement was very significant.

Once I returned to Sierra Leone in January, 2015, this feeling was reinforced in many ways: things felt decidedly organised and coordinated compared with a few months prior, and I mostly perceived RSLAF and British Armed Forces personnel as professional, effective, and efficient. In several cases, these military colleagues became friends with whom I routinely shared meals and social drinks. Therefore, I felt a kind of defensiveness when some critics later reflected negatively on what they called the unfortunate or even dangerous ‘militarisation’ of the Ebola response (see Chapter 3, pages 39–64). I realise and freely admit that my interest in this research topic stemmed, to some extent, from the incongruity of my personal perspective with this external criticism. This thesis, therefore, was not only an opportunity to provide actual data to underlie a debate that felt was quite abstracted and dissonant with my personal and professional experiences, but also an opportunity to challenge and nuance my own perspective on the issue.

In addition to my time working in Sierra Leone’s Ebola response, various personal and professional experiences are relevant to the development of this perspective: my undergraduate thesis was important to developing initial thoughts on this issue, especially consideration of the gap in operational expertise I saw in many civilian actors; my early work at LSHTM—in particular, the affiliated work that I did with Chatham House, through which I developed the thesis’ research aim, research objectives, research questions, and an initial list of respondents—was also formative; so was my deployment to the 2018–2020 Kivu Ebola Epidemic, which was a wholly sobering experience during which I felt armed actors were detrimental to the Ebola response and both threatened and secured my personal safety (therein, the limits of generalising my thesis’ findings could not have been made more clear); and the *Civil-Military Interactions in Conflicts: Best Practices and Perceptions* research project nuanced these considerations still further through robust consideration of three entirely new case studies as well as the consideration of previously undocumented perspectives.

In short, I believe that my relevant experiences and background are, in many ways, inextricable from the design, analysis, and findings of this study. Therefore—as is attempted in this chapter—it is right and

necessary to contextualise this study and its findings within the milieu of my personal and professional experiences. Accordingly, all reasonable efforts have been made to maintain awareness of the relevance and effect this background may have on the thesis at all stages of its development (see Chapter 5, pages 95–110).

When all is said and done, however, this collection of personal and professional experiences is something of which I am proud—as a commitment to my research topic, but also my professional field. For experiences like those in DRC, I also see my relevant background as diverse, complicating, and thought-provoking in relation to the thesis’ themes and questions, rather than as reductive or self-limiting of my perspective. Ultimately and therein, while I strive to be conscious of not only my implicit biases (including as discussed in Chapter 5, pages 95–110), I also strive to be conscious of and grateful for the privileged perspective that my experiential grounding offers.