

Ungoverned Spaces in Civil Conflict:
A geospatial analysis of the Lord's Resistance Army

Julia Yingling
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Supervisor: Rex Brynen
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Introduction

An insurgency is a power struggle between the established government of a country (the counterinsurgent) and the insurgent, who aims to seize control from the central government or succeed and form a new government.¹ Insurgencies are a form of civil conflict, violence taking place domestically between groups nominally considering themselves fellow citizens. Since the end of the Cold War, the frequency of civil conflict has risen, with intrastate conflict surpassing interstate conflict as the most common form of conflict today.² Civil conflicts see a society at war with itself; as a result, they are more complex to sustainably resolve and tend to see extreme levels of indiscriminate violence unlike those in interstate conflicts.

Actors in civil conflicts, particularly on the insurgent side, also often use tactics and strategies that are not seen in interstate conflicts. These include the use sanctuary, which has long been recognised as an integral strategy of insurgent and rebel groups, providing protection from counterinsurgency operations and acting as a force multiplier. These sanctuaries can take many forms, including within the state due to population support or inaccessible terrain, and externally, in a host state, the diaspora, or refugee populations. Ambiguous, weakly controlled, porous, and inaccessible border areas can create ungoverned spaces that insurgent groups can turn into sanctuaries during civil conflict.

There is an emerging body of literature looking at the geographic mobility of conflicts. Recent research has shown that conflict zones are not fixed, but can change considerably over time, spreading, contracting, and shifting geographically.³ However, there have been few studies of the effects of different policy responses to insurgencies on the changing geographic scope of conflicts.

This paper examines the impacts of counterinsurgency operations on insurgent groups' use of ungoverned spaces, by tracking the geographic movement of insurgent group operations in response to various counterinsurgency operations. This is done through the use of geospatial information science (GIS) combined with qualitative analysis to examine the case study of the Lord's Resistance Army, an insurgent group that has operated in a number of central African countries for around three decades.

When insurgents are faced with the loss of critical sanctuary areas, they must find new ones in order to survive. This thesis will argue that that weakly and ungoverned transborder areas represent one such alternative. This can be seen in the case of the Lord's Resistance Army: increasingly effective counter-insurgency operations forced the LRA to

¹ David Galula, *Counterinsurgency Warfare: Theory and Practice* (Westport, CT: Praeger Security International, 1964), 1-2.

² Kendra Dupuy et al., *Trends in Armed Conflict, 1946-2016* (Oslo: PRIO Policy Brief no. 2, 2017), 1-4.

³ Kyle Beardsley, Kristian Skrede Gleditsch and Nigel Lo, "Roving Bandits? The Geographical Evolution of African Armed Conflicts," *International Studies Quarterly* 59, no. 3 (2015); Halvard Buhaug and Scott Gates, "The Geography of Civil War," *Journal of Peace Research* 39, no. 4 (2002).

migrate farther and farther from its initial area of operations, as the group sought to take advantage of opportunities present by ungoverned spaces in east and central Africa.

Studying insurgency and its relation to ungoverned spaces is important because of the prevalence of civil conflict and inequalities created by the globalizing post-Cold War world. The Weberian-Wesphalian state is a fully functioning and sovereign state with the capacity to enforce political decisions through organizational hierarchy throughout its territory.⁴ This is the cornerstone of the modern state system, and it is assumed that the majority of states function in this way. However, this is an unachievable goal for many states, including large swaths of the developing world. In these states, whether by accident or design, territorial control is markedly uneven, creating important ungoverned areas and even leading to the label of 'failed states.'⁵

There is an emerging consensus that both state failure and civil conflict are contagious across borders, leading to regions with clusters of insecurity.⁶ Geographic and spatial relationships are strong indicators to predicting the outbreak of conflict, and transnational linkages – growing as the world modernizes – work to create neighborhood effects for armed conflict.⁷ The combination of these factors means that without proper understanding of the use of ungoverned spaces and insurgent mobility, counterinsurgent operations throughout the developing world face a risk of pushing conflict into neighboring states and ungoverned areas, perpetuating dangerous cycles of regional instability.

Literature Review

A sanctuary is an area used by an opposition group that is secure and out of the reach of government forces. Sanctuaries have long been recognized as key to insurgent and guerilla strategy. Mao Zedong describes the establishment of 'base areas' as a fundamental step for guerilla operations, without which an insurgency cannot sustain itself, and points to geographically inaccessible, peripheral areas as base area locations.⁸ Similarly, Che Guevara's theory of *foco* warfare advises insurgents to operate in peripheral areas with weak state penetration, in areas rendered inaccessible due to difficult terrain.⁹

⁴ Kristian Berg Harpviken, ed., *Troubled Regions and Failing States: The Clustering and Contagion of Armed Conflicts*, in *Comparative Social Research* (Bingley, UK: Emerald Books, 2010), 4.

⁵ Catherine Boone, "Territorial politics and the reach of the state: unevenness by design," *Revista de Ciencia Política* 32, no. 3 (2012).

⁶ Harpviken, *Troubled Regions and Failing States*, 8-10.

⁷ Halvard Buhaug and Kristian Skrede Gleditsch, "Contagion or Confusion? Why Conflicts Cluster in Space," *International Studies Quarterly* 52, no. 2 (2008); Nils B. Weidmann and Michael D. Ward, "Predicting Conflict in Space and Time," *The Journal of Conflict Resolution* 54, no. 6 (2010).

⁸ Mao Tse-tung, "The Three Stages of the Protracted War," in *The Guerrilla Reader: A Historical Anthology*, ed. William Laquer (Philadelphia: Temple University Press, 1977), 189-196.

⁹ Che Guevara, "Guerrilla Warfare – A Method," in *The Guerrilla Reader*, ed. Laquer, 203-210.

These classical strategists are not alone in their thinking. More recent literature on civil conflict and insurgencies underlines the importance of sanctuary created by constraints on the ability of the state to exercise force. Sanctuaries, created by physical, social, or legal obstacles to state penetration, create windows of opportunity for rebel groups to operate unbothered and compete with the authority of the central government.¹⁰ In insurgent conflicts, an asymmetric conflict where the two sides have unequal strength, the weaker insurgent requires some form of sanctuary to operate.¹¹ Without some weakness in the counterinsurgent or sanctuary to protect from the government, insurgencies have an extremely difficult time beginning operations due to their inherently weak starting position.¹²

Sanctuaries offer a number of advantages to insurgent groups. A sanctuary hampers state surveillance, law enforcement, and military operations. This allows insurgent groups freedom of movement, training facilities, bases for leadership and decision-making, a place to strategize and centralise logistics, access to financial and supply networks, and time to build up resources and strength until the insurgent group can pose a direct challenge to the state.¹³ Access to sanctuary is particularly important for insurgent groups that wish to expand beyond small, mobile bands of fighters and stage more complex operations.¹⁴ Sanctuaries are therefore a cornerstone of insurgent and guerilla strategy, and have been widely used by insurgent groups throughout history.

Sanctuaries can take many forms, with the common characteristic of factors that in some way constrain a state's ability to act against the insurgency. The key to this is some form of inaccessibility. This is empirically supported by Andreas Tollefson and Halvard Buhaug, whose study found that civil conflict events tend to be concentrated in remote peripheries and areas with rugged terrain.¹⁵ All types of sanctuary share this characteristic of

¹⁰ Idean Salehyan, "No Shelter Here: Rebel Sanctuaries and International Conflict," *The Journal of Politics* 70, no. 1 (2008): 55; Andreas Forø Tollefson and Halvard Buhaug, "Insurgency and Inaccessibility," *International Studies Review* 17, no. 1 (2015): 11.

¹¹ Lawrence Freeman, *The Transformation of Strategic Affairs*, Adelphi Paper no. 379 (London: The International Institute for Strategic Studies, 2006), 29; David Wise, *The Role of Sanctuary in an Insurgency* (Degree monograph, School of Advanced Military Studies, Fort Leavenworth, KS: United States Army Command and General Staff College, 2008), 4-5.

¹² Galula, *Counterinsurgency Warfare*, 4.

¹³ Rem Kortweg, "Black Holes: On Terrorist Sanctuaries and Governmental Weakness," *Civil Wars* 10, no. 1 (2008): 66-68; Tollefson and Buhaug, "Insurgency and Inaccessibility," 7; Rex Brynen, *Sanctuary and Survival: the PLO in Lebanon* (Boulder, CO: Westview Press, 1990), 3.

¹⁴ Mackubin Thomas Owens, "Sanctuary: the geopolitics of terrorism and insurgency," in *Armed Groups: studies in national security, counterterrorism, and counterinsurgency*, ed. Jeffrey H. Norwitz (Newport, RI: U.S. Naval War College, 2008), 141.

¹⁵ Tollefson and Buhaug, "Insurgency and Inaccessibility."

inaccessibility, whether it be physical, social, or otherwise fashioned. Inaccessibility acts as a form of force protection, which is key to successful insurgency.¹⁶

Sanctuaries can be internal to a state, created by protective geography or terrain, sympathetic or cowed populations (often with similar socio-cultural identities), or the manipulation of legal statutes that limit the government's use of force.¹⁷ Internal sanctuaries are often 'social' or conceptual sanctuaries, connected to 'hearts and minds' strategies.¹⁸ Territorial and geographic internal sanctuaries often have a long history of use as in-state sanctuaries. For example, Mao's Red Army in China is a quintessential case of the use of internal sanctuaries, both among sympathetic populations and rough terrain provided by mountainous regions.¹⁹ The Qin mountains in Shaanxi province saw the beginning of Mao's Long March and have historically been considered inaccessible areas sheltering competing groups in Chinese history.²⁰

External sanctuaries are also frequently used. 55% of rebel groups have operated in geographically proximate areas that lie outside the target state at some point during civil conflict.²¹ There are a number of reasons insurgent groups may use external sanctuaries instead of or in addition to internal sanctuaries. First and foremost, an internal sanctuary may not be available due to an unsupportive target population or, paradoxically, terrain that is too inhospitable for even the insurgent group to make effective use of.²² The use of an external sanctuary may alternatively be unrelated to the domestic conditions. If neighboring states are actively supporting the insurgency, for instance, a group may not need an internal sanctuary for their operations.²³

On the whole, the success of an insurgency increases significantly if it can gain sanctuary in a neighbouring state.²⁴ This is due to the particular challenges external sanctuaries pose for central government counterinsurgency operations. David Galula's classic work on the theory and practice of counterinsurgency operations discusses the 'border doctrine,' noting that "by moving from one side of the border to the other, the insurgent is often able to

¹⁶ Steven Metz and Raymond A. Millen, *Insurgency and counterinsurgency in the 21st century: reconceptualising threat and response* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2004); Galula, *Counterinsurgency Warfare*, 34.

¹⁷ Brynen, *Sanctuary and Survival*, 3; Robert M Monarch, *Denying Sanctuary: rejecting safe havens in counterinsurgency operations*, (Master of Strategic Studies degree monograph. Carlisle, PA: US Army War College, 2009), 3; Wise, *The Role of Sanctuary in an Insurgency*, 14, 27.

¹⁸ Owens, "Sanctuary," 136.

¹⁹ Brynen, *Sanctuary and Survival*, 3-4.

²⁰ Owens, "Sanctuary," 140-141.

²¹ Idean Salehyan, "Transnational Rebels: Neighboring States as Sanctuary for Rebel Groups," *World Politics* 59, no. 2 (2007): 218.

²² Brynen, *Sanctuary and Survival*, 3-5.

²³ Ibid.

²⁴ Owens, "Sanctuary," 140.

escape pressure or, at least, to complicate operations for his opponent.”²⁵ The ‘complication of operations’ and the effectiveness of external sanctuaries on the whole is due to strong norms of territorial sovereignty in the modern state system. Domestically, central governments exert a monopoly on the use of force. International boundaries, however, clearly define the limit of governments’ individual monopolies.²⁶ One government is distinctly confined to their own security jurisdiction, and if insurgents can move beyond this territorial boundary, they can dramatically raise the cost of intervention. Cross-border incursions by one state in pursuing an insurgent either require the cooperation of the sanctuary state or risk starting an international confrontation and drawing international condemnation for the infringement of another state’s sovereignty.²⁷ Operations in neighbouring territory are also more costly, as the state lacks familiarity with the terrain and population and may have to take on some governance functions after clearing territory – consider, for instance, Israel’s occupation of Lebanese territory in pursuing the Palestine Liberation Organisation.²⁸

There are two primary types of external sanctuaries, both of which have been extensively studied. They can be broadly categorised as either active or passive host states. Active host states are those with governments that are aware of insurgents in their borders and tolerate or even support their activities.²⁹ Often, this is part of a ‘tit-for-tat’ pattern of opposing states sponsoring insurgent forces as proxy actors in each others states, often as a tool of coercive bargaining.³⁰ Bapat notes that statistically, even if strong states can control terrorist or insurgent groups in their territory, they will most likely refuse to expend resources reining in actors that pose their own central government no active threat.³¹

Passive host states, on the other hand, become external sanctuaries against the government’s wishes. This is most often due to the central government’s weakness and limited control over their border flows and territory adjacent to the conflict state. Weak governments find it difficult to maintain authority and evict insurgent groups, and do not have the capacity to divert their resources towards counterinsurgency operations in the periphery.³² Insurgent groups from one state will necessarily find a weak neighbouring state without the ability to suppress their activities an attractive opportunity for external

²⁵ Galula, *Counterinsurgency Warfare*, 23.

²⁶ Salehyan, “Transnational Rebels,” 219.

²⁷ Salehyan, “No Shelter Here,” 55-56.

²⁸ Salehyan, “Transnational Rebels,” 223; see Brynen, *Sanctuary and Survival*.

²⁹ Kortweg, “Black Holes,” 60.

³⁰ Axel Borchgrevink, “State Strength on the Ethiopian Border: cross-border conflicts in the Horn of Africa,” in *Troubled Regions and Failing States*, ed. Harpviken, 27:199.

³¹ Navin A. Bapat, “The Internationalization of Terrorist Campaigns,” *Conflict Management and Peace Science* 24 (2007): 271.

³² Beardsley, Gleditsch and Lo, “Roving Bandits,” 506; Salehyan, “No Shelter Here,” 57-58; Borchgrevink, “State Strength on the Ethiopian Border,” 199.

sanctuary. Even if the neighbouring state is too weak to protest cross-border counterinsurgency operations, the international community's condemnation of violations of state sovereignty raise the cost of international counterinsurgency for the counterinsurgent.³³ Passive host states are not only failed states with no real central government, such as Somalia. Kenneth E. Boudling's loss of strength gradient states that the amount of power a state can project depends not only on the state's capacity, but the distance across which power is projected and the cost of this projection.³⁴ When applied domestically, power projection depends both on the central government's capacity, but also the size of the country and cost of projection across difficult terrain or areas with low infrastructure. This illustrates therefore how insurgent groups can operate in the periphery of even a relatively strong country without the central government's approval, as it is harder for the government to project power in distant borderlands.

The concept of 'ungoverned spaces' becomes useful at this point, as these spaces are able to bridge the dichotomy of internal and external sanctuaries in the literature. Ungoverned spaces are physical areas without a clear governing authority, often due to weak central governments that cannot control their full territory, or due to ambiguity about what government is responsible for the space. Ungoverned spaces include weak and failed states, but provides more nuance than these terms, as it recognises that state control is not uniform across space. Porous borders with minimal governmental supervision of cross-border movement are also ungoverned spaces, as are contested and poorly-defined borders. For example, the border between Egypt and Sudan contains a variety of areas that are either claimed by both countries or neither.³⁵ Inaccessible territory also creates ungoverned spaces, which can become internal or external sanctuaries. On the whole, the idea of an ungoverned space is a relatively conceptually inclusive term that captures the ambiguities of space and control, and groups together areas that are most likely to act as sanctuaries for insurgent groups.

It is clear that the literature on sanctuaries is extensive, particularly given the rise of civil conflict in the post-Cold War period. However, there is very little literature done on insurgents' movement between sanctuaries. How does the loss of sanctuary prompt the relocation of insurgent groups, and how do groups pick new sanctuaries? On the whole, scholars continue to treat conflict zones as fixed attributes, when in reality, the extent and location of a conflict zone can and often does change considerably over time.³⁶ Beardsley, Gleiditsch and Lo discuss the mobility of conflict zones in Africa, finding that conflict zones

³³ Salehyan, "No Shelter Here," 57-58.

³⁴ Tollefson and Buhaug, "Insurgency and Inaccessibility," 8.

³⁵ Idean Salehyan, *Rebels Without Borders: transnational insurgencies in world politics* (Ithaca, NY: Cornell University Press, 2009), 40.

³⁶ Beardsley, Gleiditsch and Lo, "Roving Bandits," 504.

move more when the government is strong, rebels must resort to mobility as a survival strategy, and the rebel groups have relatively weak ties to local populations.³⁷

Although an important contribution, one paper on conflict zone mobility cannot cover the entire topic. This paper therefore seeks to add to the literature on conflict zone mobility by looking at how insurgents mobility between sanctuaries contributes to changing conflict zones.

Research Methodology

To study the impacts of counterinsurgency operations on insurgencies' use of ungoverned spaces as sanctuary, this paper uses a combination of GIS and qualitative analysis. This analysis was performed on the case study of the Lord's Resistance Army (LRA) operations in central Africa between 1989 and 2016.

This case study was selected for a number of reasons. The LRA is idiosyncratic in many ways, including its religious ideology, brutality, sometimes unconventional tactics, and poorly-defined goals. However, the LRA is an excellent example of cross-border operations and use of sanctuary in ungoverned areas and is similar in these tactics to other insurgent groups. The insurgency has been active for 31 years, providing a substantial number of data points for analysis, and attack data has been relatively well-recorded compared to other insurgencies. Additionally, the LRA does not pose issues that are seen in conflict data from other insurgent groups, including lone wolf and misattribution of attacks that could reduce the accuracy of the analysis.

The first step of the analysis was dividing the three-decade span of LRA operations into major periods of counterinsurgency efforts. This was done through independent research of the conflict but also took into account other authors' temporal divisions of the conflict. The final periods were decided based on the primary type of counterinsurgency pursued. This is because this paper's analysis focuses on the result of evolving counterinsurgency methods on the LRA's spatial distribution and use of sanctuary, as opposed to changes in, for instance, the LRA's tactics or strength, which would be better suited to periods defined by LRA activities. Although there is forcibly temporal lag between the beginning of a new counterinsurgency period and its effect on LRA operations, this paper averages the period to the year as the conflict event dataset did not provide enough data points to be able to define a temporal lag with confidence. The definition and description of these periods can be found in table 1 in the case study. Multi-year or multi-month events were categorised under the year of the majority of the event; for example, Operation Lightning Thunder is categorised as 2009, even though it began in December 2008.

³⁷ Ibid.

In addition to qualitative analysis, this paper used quantitative spatial analysis. GIS analysis provided a number of advantages for social science research, many of which have yet to be fully explored beyond voting behaviour or hotspot analysis. In particular, GIS is rarely used in studies of international relations and conflict outside of a relatively limited group of researchers associated with the Peace Research Institute Oslo.

The primary advantage of GIS in conflict research relates to geography's classic challenges of scale and the modifiable areal unit problem (MAUP). MAUP affects statistical results when spatial data is aggregated, as the resulting analysis can be strongly influenced by both the shape and scale of the unit of aggregation.³⁸ Consider MAUP in the context of conflict data. Most literature on state capacity, conflicts, and related factors such as ethnic identity and economic development are measured at the state level. This is a natural result of the fact that states are the major provider of such information, through census data and government agencies, and data at lower levels of administration quickly becomes highly varied in quality and format.³⁹ However, country-wide markers reinforce assumptions of the evenness of state capacity and penetration, and ignore substantial the geographic variation in even the most basic markers such as population distribution and economic development.⁴⁰

For studies of sanctuary and state control, MAUP and the aggregation of data becomes a major obstacle to accurate analysis. Country-wide markers and the 'flattening' of data results in an artificially strengthened perception of central governments and international borders. These factors serve to mask sanctuaries and ungoverned spaces, which proliferate along the periphery of states, take advantage of undefined international boundaries, and are defined by subnational variation in the state's ability to control its territory. GIS methods, therefore, can help disaggregate data, study conflict beyond the national level, and look at subnational and transnational trends simultaneously.

ESRI's ArcMap 10.5.1, industry-standard GIS software, was used to spatially manipulate and analyse conflict event data. Event data came from the Uppsala Conflict Data Program's Georeferenced Event Dataset, version 17.1 (UCDP-GED). This dataset tracks events, defined as an "individual incident (phenomenon) of lethal violence occurring at a given time and place," and is one of the most disaggregated sources of violent conflict data.⁴¹ The dataset is in the unprojected World Geodetic System 1984, EPSG:4326 (WGS 1984), and is a shapefile

³⁸ Stan Openshaw, *The Modifiable Aerial Unit Problem* (Norwich, UK: GeoBooks, 1984), 3.

³⁹ Halvaard Buhaug and Jan Ketil Rød, "Local Determinants of African Civil Wars, 1970-2001," *Political Geography* 25, no. 3 (2006): 317-318.

⁴⁰ Tollefson and Buhaug, "Insurgency and Inaccessibility," 8; Halvard Buhaug and Päivi Lujala, "Accounting for scale: Measuring geography in quantitative studies of civil war," *Political Geography* 24, no. 4 (2005): 399-418.

⁴¹ Mihai Croicu and Ralph Sundberg, "UCDP GED Codebook version 17.1," (Uppsala: Department of Peace and Conflict Research, Uppsala University), 2.

with point geometry. Events are georeferenced down to the town or village level, which allows for extremely precise mapping.

Although the UCDP-GED only covers events starting in 1989, the missing event data does not dramatically skew spatial analysis as the LRA is known to have operated only in Uganda in 1987 and 1988. The dataset generally has much sparser data for the LRA conflict pre-2000; however, the existing data points are sufficient for the kind of combined quantitative and qualitative analysis this paper is undertaking.

Because of these coverage issues, the UCDP-GED was intended to be supplemented by data from Invisible Children + Resolve's LRA Crisis Tracker, which tracks a similar definition of event data as the UCDP-GED and is georeferenced, but includes abductions, property destruction, and other incidents that did not result in any casualties and therefore would not be included in the UCDP-GED. However, the organisation never responded to requests for a data export, and therefore there was no way to include the entire dataset. Future studies should consider expanding the data used to cover non-lethal LRA incidents and increase the data points for years before 2000.

After importing the UCDP-GED, relevant LRA event data was extracted by selecting the desired events in the attribute table and creating a new shapefile from selection. This was performed with an SQL query for selecting by attribute, creating a new shapefile from any events with either the side_a or side_b coded as a relevant actor (LRA, Arrow Boys, Bangadi Milita); this request also therefore included all events with civilians as one side. A second SQL query was required to create a shapefile for the Government of Uganda, because this actor is included in other unrelated conflicts. This used the coded dyad (Government of Uganda – LRA) instead of actors. These two shapefiles were then merged to create one complete shapefile of all LRA-related event data.

To create shapefiles for each period's event data, SQL selection by attribute for each range of years was performed on the new LRA-only attribute table.

A variety of basemaps were also imported to provide visual reference to the event data. These mapped international borders, national parks and protected areas, and ecoregions. International borders used the public domain Natural Earth Data, 4th edition, large-scale (1:10m) vector polygon shapefile Admin-0 in WGS 1984; no re-projection or modification was necessary. The shapefile used maps international administrative boundaries based on a combination of United Nations definitions and commonly recognised semi-independent and contested areas. A polygon representing the Kafia Kingi disputed area was hand-drawn from this shapefile. Natural Earth Data's road file was used to extract the polyline for the Juba-Torit road. Protected areas were mapped with the World Database on Protected Areas v. 1.4, a vector polygon shapefile mapping all protected areas in the world through 2014, also in WGS 1984. Because of the massive size of the file, it had to be clipped to the central Africa region to make it useable. Ecoregions came from The Nature Conservancy 2012 terrestrial ecoregion shapefile, which provides vector polygons in WGS 1984 mapping the World Wildlife Fund's ecoregion definitions.

The GIS analysis resulted in seven unique maps for each of the previously-defined conflict periods. These can be seen in figures 1-6 below in the case study, and together in appendix A. A map of protected parks and nature reserves and disputed areas is included in appendix B. These maps were then used for qualitative analysis of the use of sanctuary by the LRA, by examining the location of event data and comparing it to the data in basemaps and counterinsurgency in the defined periods. To perform these comparisons, a number of tools were used in ArcMap, including: buffers and overlays, joins of attribute and spatial data, planar and geodesic measurements, and spatial statistics, including basic cluster analyses. Some of these tools required projecting the data frame in order to obtain measurements and units in kilometers instead of decimal degrees.

A glossary of acronyms is included in appendix C.

Case Study: the Lord's Resistance Army

Overview of the Conflict

The Lord's Resistance Army emerged in the late 1980s in Uganda from a combination of millenarian religious ideology, divisions between the north and south, and civil war.

Uganda was mired in guerilla civil war from 1981-1986, known as the Bush War. It was started by the National Resistance Army (NRA) under the leadership of southerner Yoweri Museveni, claiming that the 1980 elections that led to former president Milton Obote regaining power were rigged.⁴² The Ugandan National Liberation Army (UNLA) under Obote led a brutal counter-insurgency against the NRA and perpetrated many human rights violations against civilians, particularly in the central Luwero region.⁴³ In 1986, the NRA triumphed over new president Tito Okello, marking the end of the Bush War and beginning of another three decades of violence.⁴⁴

During the colonial period, the British artificially divided the north and south of Uganda, creating a southern civilian elite with better education and socio-economic access and militarising northern communities through extensive recruitment into the army and police.⁴⁵ These divides were manipulated by post-independence governments and became intertwined with overlapping ethnic, tribal, and linguistic identities. Museveni and the NRA

⁴² International Crisis Group, "Northern Uganda: Understanding and Solving the Conflict," (ICG Africa Report no. 77, Nairobi/Brussels, April 2004), 2.

⁴³ Ronald R. Atkinson, "From Uganda to the Congo and Beyond: Pursuing the Lord's Resistance Army," (New York: International Peace Institute Publications, 2009), 5.

⁴⁴ ICG, "Northern Uganda," 2-4.

⁴⁵ Andre Le Sage, "Countering the Lord's Resistance Army in Central Africa," *National Defense University Strategic Forum* no. 270 (2011), 4.

promoted a common Bantu linguistic identity for Uganda, which reduced tribal and ethnic tensions in west-central Uganda, but marginalised Nilotic groups in the north, including the Acholi people.⁴⁶ The NRA also failed to integrate ex-UNLA soldiers into the new national Uganda People's Defence Forces (UPDF).⁴⁷ The combination of large numbers of unintegrated soldiers, historical grievances overlapping with identity divides, and fears of reprisals for UNLA's actions during the civil war spurred primarily Acholi ex-UNLA officers to create the Uganda People's Defence Army (UPDA) and lead an insurgency against the central government.

The UPDA was joined in its struggle by a number of other northern liberation movements, the most prominent of which was the Holy Spirit Mobile Forces (HSMF). Alice Auma 'Lakwena' formed and led the HSMF as a spiritual medium for the Holy Spirit fighting for the Acholi people against the central Museveni government.⁴⁸ The HSMF also absorbed many ex-UNLA soldiers and briefly posed a major threat to the NRA, coming within 100 kilometers of the capital Kampala before their defeat.⁴⁹

It was at this point in 1987 that Joseph Kony emerged, claiming to be the cousin of Alice Lakwena, and founded the Lord's Resistance Army out of the remnants of the UPDA and HSMF. The LRA was the last option for any remaining ex-UNLA officers to resist the NRA, and many joined Kony's ranks. As a result, the LRA from very early on exhibited a fusion of the UPDA's highly effective guerilla strategy and the HSMF's Acholi spiritualism-millennarian Christian ideology. Kony added his distinct tactics of terror, which have together defined the LRA's three-decade insurgency against the central government.

The LRA initially operated with a dual agenda: putting violent pressure on Museveni's government in Kampala to promote northern Ugandan rights, and promoting the HSMF's purification of Acholi society. The second goal is tied into traditional narratives that relate purification, healing, and killing, particularly the Acholi spiritual belief that struggles and afflictions are punishment for wrongdoing.⁵⁰ These two goals of the LRA meant that the group actually maintained substantial support – or tacit acceptance – from the local population in northern Uganda for a long time.⁵¹ This support has diminished due to the LRA's increasingly brutal tactics; this coincided in the late 1990s with Kony's belief that the

⁴⁶ Atkinson, "From Uganda to the Congo and Beyond," 5.

⁴⁷ ICG, "Northern Uganda," 2-3.

⁴⁸ Le Sage, "Countering the LRA," 3-4.

⁴⁹ ICG, "Northern Uganda," 3-4.

⁵⁰ Zachary Lomo and Lucy Hovil, "Behind the Violence: Causes, consequences and the search for solutions to the war in Northern Uganda," (Refugee Law Project Working Paper no. 11, Makerere University Centre for Justice and Forced Migrants, February 2004), 14.

⁵¹ Kevin C. Dunn, "The Lord's Resistance Army and African International Relations," *African Security* 3, no. 1 (2010): 55.

Acholi people had betrayed the LRA, resulting in a shift from targeting the government to civilians and an increase in displacements and human rights violations.⁵²

The LRA is led by the Control Altar, made up of Kony and other senior officers. Key generals control the main 'brigades,' but outside of this general structure, the LRA's organisation is extremely flexible and primarily consists of small roving bands, sometimes with fewer than a dozen fighters.⁵³ Over the course of the conflict, centralised control and communication between Kony and other leaders has been dramatically reduced.⁵⁴ The group ensures loyalty through its spiritual beliefs – particularly the centrality of Kony as a prophet – and indoctrination of child abductees.⁵⁵ Christopher Day's recent study of the LRA's persistence and resilience attributes the group's endurance to this flexible organisation structure as well as its ingenuity in resource acquisition through low-level predation of local populations, involvement in illicit trade, and external sponsorship.⁵⁶ Pamela Faber similarly points to tactical adaptability and flexibility as key to the LRA's resilience, highlighting the relatively low effort required to intimidate locals and cause mass displacements.⁵⁷ Indeed, the LRA is infamous particularly for its violence and impact on civilians. Mutilations, summary executions, sexual violence, child abductions for slaves and soldiers, and the general use of atrocities in their operations have terrorised local populations with little government protection. It is difficult to identify precise statistics, particularly for the whole conflict, but as of 2012 the LRA was estimated to be responsible for more than 100,000 deaths, tens of thousands of abductions, and up to two million internally displaced persons.⁵⁸

Day and Faber, as well as numerous other authors, highlight the importance of regional conflicts in the LRA. Throughout its existence, the LRA has been actively supported by international players, benefited from general regional insecurity, and exploited both international and civil conflicts. Sudan has periodically supported the LRA, particularly during the 1990s and early 2000s when tensions between Uganda and Khartoum were high, as Uganda was supporting south Sudanese rebel groups; in return, Khartoum provided military and logistical support to the LRA and its operations in both Uganda and southern Sudan.⁵⁹ This pattern of tit-for-tat sponsoring of armed opposition groups is quite

⁵² Ibid., 51.

⁵³ Christopher R. Day, "Survival Mode: Rebel Resilience and the Lord's Resistance Army," *Terrorism and Political Violence* (2017): 5; Le Sage, "Countering the LRA," 6.

⁵⁴ Day, "Survival Mode," 11-13.

⁵⁵ Le Sage, "Countering the LRA," 2-3; 6-7.

⁵⁶ Day, "Survival Mode," 4-6.

⁵⁷ Pamela Faber, "Sources of Resilience in the Lord's Resistance Army," (CNA Occasional Paper Series, April 2017), 19.

⁵⁸ "Key Statistics," The Resolve: LRA Crisis Initiative, accessed March 20, 2018.
<http://www.theresolve.org/the-lra-crisis/key-statistics/>.

⁵⁹ Le Sage, "Countering the LRA," 2-4.

common in the eastern and Horn of Africa regions.⁶⁰ However, aid ended in 2005 with the end of the Sudanese civil war and an agreement by Uganda and Sudan to end support for proxy groups, including the LRA.⁶¹ However, since 2013 civil conflict has emerged in both the CAR and South Sudan, which provided openings for the LRA and continues to threaten counterinsurgency efforts.⁶² Meanwhile, continued geopolitical tensions between Uganda, the DRC, and Sudan in particular complicate regional coordination and transnational efforts against the LRA.⁶³

Today, the LRA is no longer seen as a formidable conventional military threat, as is illustrated by the US ending its military involvement in anti-LRA operations and the UPDF's withdrawal from pursuit operations in the CAR.⁶⁴ The group is estimated to have only around 150 fighters remaining, and although Kony remains at large, the other four individuals the International Criminal Court issued warrants for are either captured or deceased, and a number of other high-ranking commanders have been killed since 2010.⁶⁵ Nonetheless, the group still poses a threat to civilians in multiple countries, and has been considered all but defeated before.

Definition of Counterinsurgency Periods

This paper divides the years from 1989 to 2016 for which the UCDP GED has event data for LRA activities into six periods, based on the characteristics of counterinsurgency efforts. These periods are summarised in table 1. This section will provide a description of each period and the LRA's movements.

Period 1 spans from 1989, the beginning of the event data, through 1993. The Ugandan central government's counterinsurgency operations focusing on the LRA developed out of operations the NRA had begun at the end of the Ugandan Civil War to eliminate a wide variety of opposing rebel groups. Ultimately, the LRA was the only remaining viable insurgency and the UPDF's focus turned to northern Uganda. The government attempted a number of ceasefires, which failed due to actions on both sides, as well as classic counterinsurgency operations.⁶⁶ 1991 marked the UPDF's first major military offensive, Operation North, which was far from success. The UPDF failed to defeat the LRA, and their

⁶⁰ Borchgrevink, "State Strength on the Ethiopian Border," 199.

⁶¹ Atkinson, "From Uganda to the Congo and Beyond," 7.

⁶² Alexis Arieff and Lauren Ploch, *The Lord's Resistance Army: The US Response* (CRS Report no. R42094. Washington, DC: Congressional Research Service, 2015), 4; Paul Ronan, "The State of the LRA in 2016," (The Resolve: LRA Crisis Initiative, Invisible Children, and the LRA Crisis Tracker, March 2016), 18.

⁶³ Ronan, "The State of the LRA," 16.

⁶⁴ Faber, "Sources of Resilience in the LRA," 1-2.

⁶⁵ Ibid.

⁶⁶ Arieff and Ploch, *The Lord's Resistance Army*, 6.

Table 1: Dates, Characterisation, and Key Events for each Counterinsurgency Period		
<i>Period and Dates</i>	<i>Characterisation</i>	<i>Key Events</i>
1: 1989-1993	Unilateral domestic COIN	Emerges out of UPDF operations against remaining rebels after 1988 ceasefire UPDF's Operation North in northern Uganda Arrow Boys and other militias
2: 1994-1999	Unilateral transnational COIN Domestic peace efforts	Bigome Peace Talks Khartoum begins supporting LRA Panda gari security sweeps and use of 'protected villages'
3: 2000-2005	Unilateral transnational COIN International support	Nairobi Peace Agreement UPDF's Operation Iron Fist in southern Sudan Reformation of militias and LDUs Museveni refers LRA to the ICC CPA ends Sudanese Civil War
4: 2006-2008	Multilateral peace efforts Unilateral domestic COIN	Juba Peace Talks and Cessation of Hostilities Agreement
5: 2009-2012	Cooperative regional COIN International support	UPDF's collaborative Operation Lightning Thunder in northern DRC Beginning of US support for the UPDF
6: 2013-2016	Multilateral COIN International support	African Union launches Operation Monsoon and the RTF with continued US involvement Waning interest from regional governments

heavy-handed operations displaced large numbers of civilians and triggered a spike in retaliatory violence against Acholi populations by the LRA.⁶⁷ The UPDF also created local self-defence militias in northern Uganda, including the Arrow Boys and Rhino, or Amuka Groups.⁶⁸ However, the central government and Museveni in particular was worried that the militias would eventually turn on the UPDF, so they refused to arm the militias with anything more than traditional weaponry, such as bows and arrows.⁶⁹ As a result, the militias were unable to effectively operate against the LRA, and the LRA had even more incentive for revenge attacks against civilians. Together, these factors alienated the northern populations from both the LRA and the central government. In particular, the central government's equation of the Acholi Kony with the Acholi population as a whole

⁶⁷ Lomo and Horvil, "Behind the Violence," 43; Le Sage, "Countering the LRA," 5-6.

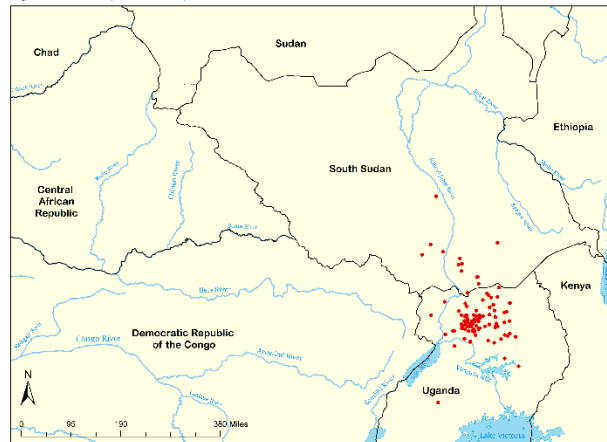
⁶⁸ Le Sage, "Countering the LRA," 5-6.

⁶⁹ Christopher R. Day and William S. Reno, "In Harm's Way: African Counter-Insurgency and Patronage Politics," *Civil Wars* 16, no. 2 (2014): 114-116.

Figure 1: Period 1 (1989 to 1993)



Figure 2: Period 2 (1994 to 1999)



allowed the government to distance the conflict from other aspects of domestic politics and reinforced the northerner's perceptions of abandonment.⁷⁰ On the whole, Period 1 saw relatively ineffective, unilateral counterinsurgency operations led by the Ugandan central government in northern Uganda, without real support from the local populations or meaningful successes against the LRA.

LRA event data during period 1 (figure 1) is only in northern Uganda, primarily around Gulu and Kitgum, and no further south than Soroti. This is a relatively small area, compared to the LRA's future range, but from the start the group has taken advantage of areas with low population density and scattered villages with little contact with the central government. This is characteristic of northern Uganda, the least populated but largest region of Uganda. Gulu is the largest city in the area, followed by Kitgum; neither are among the largest cities in Uganda. The climate is a forest-savanna mosaic, with corridors of forest area interspersed with drier wooded savanna and scattered rivers and marshes.⁷¹

Period 2 begins in 1994 and ends in 1999. 1994 saw the first actual attempts at peace talks, led by an Acholi government minister, Betty Bigome. These negotiations had the potential to be successful, but the lack of full buy-in from either the central government or the LRA meant they ultimately broke down.⁷² With the failure of these peace talks, the UPDF began to proactively separate the LRA from the local Acholi population, who were viewed with suspicion as potential LRA supporters. Much of the population of northern Uganda were forced into 'protected villages' and targeted by arbitrary security sweeps, known as *panda gari*.⁷³ The protected villages, essentially IDP camps, were intended to guard and separate

⁷⁰ Lomo and Horvil, "Behind the Violence," 23-24.

⁷¹ "Terrestrial Ecoregions," World Wildlife Fund, <https://www.worldwildlife.org/biome-categories/terrestrial-ecoregions>.

⁷² Lomo and Horvil, "Behind the Violence," 42-43; Day and Reno, "In Harm's Way," 115.

⁷³ Day and Reno, "In Harm's Way," 115-116; ICG, "Northern Uganda," 14; "Panda Gari' security operations criticized," *IRIN*, December 7, 1998. <http://www.irinnews.org/report/4005/uganda-%E2%80%9Cpanda-gari%E2%80%9D-security-operations-criticised>.

civilians from the LRA; however, living conditions in the camps were horrific, and the LRA continued to carry out successful attacks on civilians living in ‘protected villages.’⁷⁴

Regionally, the mid-1990s marked the beginning of Khartoum’s support of the LRA. This sponsorship would characterise the conflict through 1999. The Equatoria Defence Force (EDF), an SPLA splinter faction, facilitated the LRA’s contacts with Khartoum, and the LRA began operations in southern Sudan against the SPLA in addition to continuing operations in northern Uganda.⁷⁵ In return, the Ugandan central government sponsored the SPLA.⁷⁶ The UPDF continued counterinsurgency efforts against the LRA in northern Uganda but expanded operations to targeting LRA positions in southern Sudan, participating in raids and hot pursuit across Uganda’s northern border.⁷⁷ During this period, the LRA was at times stronger and more capable than the UPDF,⁷⁸ and the combination of transnational – but still unilateral – counterinsurgency efforts by the UPDF and domestic efforts at peace talks were unsuccessful in countering the LRA and served to further alienate northern Ugandans.

In the event data (figure 2), period 2 shows the first expansion of the LRA north into southern Sudan with the start of interactions with Khartoum and the SPLA. The events are generally no more than a day’s walk from the Ugandan border, and there are only 12 out of 256 events falling north of the Juba-Torit road, and none venture into the White Nile seasonal swamplands north-east of Juba. Most events in southern Sudan are in Central and Eastern Equatoria, the two states directly bordering Uganda. A number of events are around protected areas that cross the southern Sudan-Ugandan border: Imatong Reserve (Sudan) and Agoro Reserve (Uganda), and Nimule National Park (Sudan) and Otzi Reserve (Uganda) further west. During these operations in southern Sudan, the LRA learned “how to survive in borderlands for years.”⁷⁹ Operations in northern Uganda during period 2 are still clustered in Gulu and Kitgum districts, with very few further south than Soroti and none towards the Kenyan border.

Period 3, from 2000 to 2005, saw a thawing in relations between Kampala and Khartoum and ultimately the withdrawal of Khartoum’s support from the LRA. This began with the signing of the Nairobi Agreement in December 1999, with Kampala and Khartoum each agreeing to respect the others’ territorial integrity, disarm rebel groups in their own territory, and stop funding proxy groups – including the LRA.⁸⁰ Further pressure was put on Khartoum when the US designated the LRA a terrorist organisation; later, in 2005, the

⁷⁴ Le Sage, “Countering the LRA,” 5.

⁷⁵ ICG, “Northern Uganda,” 24.

⁷⁶ Day, “Survival Mode,” 6-8.

⁷⁷ Arieff and Ploch, *The Lord’s Resistance Army*, 6.

⁷⁸ Day, “Survival Mode,” 10-11.

⁷⁹ Ibid., 9.

⁸⁰ Dunn, “The LRA and African International Relations,” 48-50.

Figure 3: Period 3 (2000 to 2005)

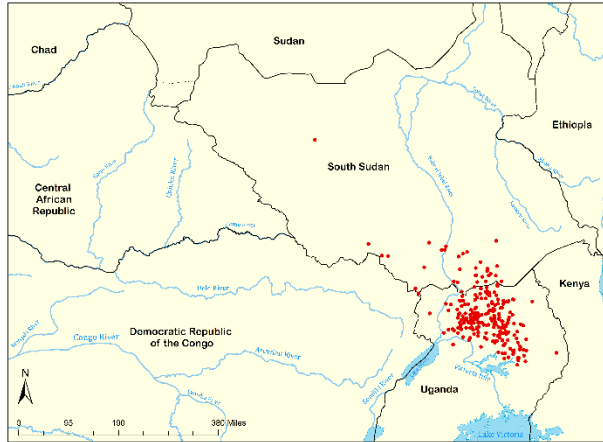
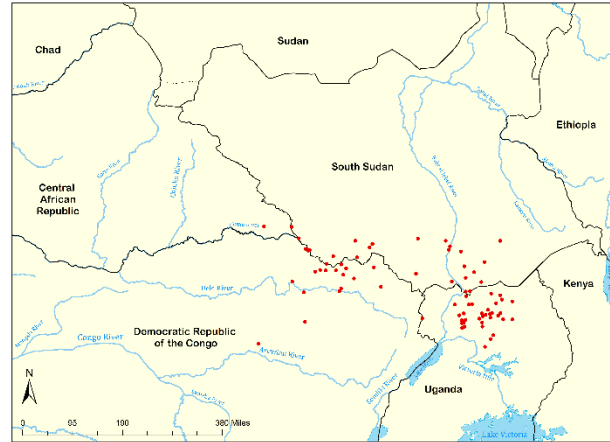


Figure 4: Period 4 (2006 to 2008)



Comprehensive Peace Agreement ended the Second Sudanese Civil War and eliminated any reason for Khartoum to continue even covert support of the LRA.⁸¹ Although these counterinsurgency operations were still unilateral in nature, the UPDF was now carrying out operations at the same time as Sudan. Operation Iron Fist, a massive UPDF offensive in southern Sudan, was made possible by Khartoum giving the UPDF permission to operate up to the Juba-Torit road red line.⁸² At the same time, Museveni looked to put further international pressure on the LRA by referring the situation to the International Criminal Court, which issued warrants in 2005.⁸³ Domestically, the UPDF re-launched Local Defence Units, both in Acholi areas and other parts of northern Uganda. The Arrow and Amuka militias were much more successful this time, as the UPDF actually armed the groups with modern weaponry, and focused them on protecting civilians while the UPDF conducted forward operations.⁸⁴ Still, LDUs were less successful in Acholi areas due to continued mistrust of the central government, underlining the vital importance of good relations with local populations in counterinsurgency operations.⁸⁵ This was nearly impossible, as civilians were still being forced into IDP camps, which were no longer even euphemistically called 'protected villages' and had squalid and depressing living conditions.⁸⁶ Period 3's unilateral counterinsurgency efforts, both domestic and transnational, were more successful than previous periods because of Uganda's shift towards international cooperation with the thawing of regional geopolitics.

The event data for period 3 also shows continued activity in northern Uganda, with an increase in events both further west and east of Gulu. On the border with southern Sudan, there is an increase in events near the transborder Imatong-Agoro and Nimule-Otzi

⁸¹ Le Sage, "Countering the LRA," 4; Atkinson, "From Uganda to the Congo and Beyond," 9-11.

⁸² Day, "Survival Mode," 10-11.

⁸³ Dunn, "The LRA and African International Relations," 50.

⁸⁴ Lomo and Horvil, "Behind the Violence," 36-38; ICG, "Northern Uganda," 13-15.

⁸⁵ ICG, "Northern Uganda," 13.

⁸⁶ Atkinson, "From Uganda to the Congo," 8.

reserves. The total increase in events from previous periods is likely partially because of improved reporting and awareness, but can also be attributed to the re-entry of LRA fighters from southern Sudan after Operation Iron Fist. The expansion to the east in particular happened after Operation Iron Fist; pre-2003, most event data is primarily more to the northwest.⁸⁷

In southern Sudan, Operation Iron Fist had important impacts on the LRA's infrastructure, but primarily pushed the LRA further into Sudan.⁸⁸ This can be seen in period 3 with the increase in events above the Juba-Torit road, a no-cross line for the UPDF.⁸⁹ Figure 3 also shows the LRA's expansion west in southern Sudan along the border with the DRC and into Western Equatoria, and the first LRA activity around Lantoto National Park, the Sudanese side of Garamba. As for terrain, all LRA operations are still in forest-savanna mosaic, similar to the conditions in northern Uganda.⁹⁰

Period 4 begins in 2006 and ends in 2008, covering primarily the Juba peace process and associated ceasefire, although, as can be seen in figure 4, this ceasefire was routinely violated. Nonetheless, during these three years there was an immense regional effort to find a negotiated settlement and a relative lull in violence. The first round of internationally-sanctioned talks between the government of Uganda and the LRA began in 2006. These talks were viewed with great optimism: they were the first genuine attempts at negotiations since the Bigome talks in 1994, and were mediated by South Sudan, a third party with vested interest in ending the conflict and ridding its territory of thousands of LRA and UPDF forces.⁹¹ The ICC's 2005 arrest warrants provided a major stumbling block at times but are also thought to have incentivised LRA leaders to negotiate.⁹² Two rounds of talks observed by representatives from a number of African states and civil society organisations led to a final agreement in spring of 2008.⁹³ Ultimately, though, Kony never showed up to sign the deal and the Juba peace process fell apart. This period saw a truly multilateral peace process with important international participation, accompanied by light domestic counterinsurgency operations by the Ugandan and South Sudanese governments.

The first high-profile contact between international peacekeepers and the LRA also occurred in 2006, with a dramatically botched operation in Garamba National Park in the DRC by forces part of MONUSCO that resulted in the death of eight Guatemalan special

⁸⁷ Lomo and Hovil, "Behind the Violence," 34.

⁸⁸ ICG, "Northern Uganda," 15; Atkinson, "From Uganda to Congo," 8; Le Sage, "Countering the LRA," 5.

⁸⁹ Day, "Survival Mode," 9-11.

⁹⁰ WWF, "Terrestrial Ecoregions."

⁹¹ Dylan Hendrickson and Kennedy Tumutegereize, "Dealing with complexity in peace negotiations: reflections on the Lord's Resistance Army and the Juba talks," Conciliation Resources Report, January 2012.

⁹² Dunn, "The LRA and African International Relations," 50.

⁹³ Hendrickson and Tumutegereize, "Dealing with complexity," 13-17.

forces.⁹⁴ This does not change the classification of period 4 as only having unilateral counterinsurgency operations, because it is the sole example of multilateral forces operating in this time period. Additionally, the actual purpose of the operation is contested: the official reason was reconnaissance, while others claim it was to raid LRA positions or even capture Vincent Otti, Kony's second-in-command.⁹⁵ Nonetheless, the UN operation in Garamba is indicative of the international community's increasing awareness of the LRA.

The event data in period 4 (figure 4) spreads dramatically to the west. The first events in the DRC are in 2006, followed by the CAR in 2008. At the same time, there is a major reduction in event data in northern Uganda, with the last event in Uganda recorded in October 2007. This shift is directly connected to the end of the Second Sudanese Civil War, as the SPLA and EDF were freed up to coordinate with the UPDF in the coming years, pushing the LRA out of its previous camps while the UPDF blocked most re-entry into Uganda.⁹⁶ Correspondingly, there is very little event data along the DRC-Ugandan border: as the LRA spreads west and expands into the DRC, they clearly move through South Sudan due to the firming of the northern Ugandan border.

During the Juba peace process, Kony and much of the LRA was known to be in Garamba National Park, taking advantage of the relative ceasefire to gather supplies and strength with minimal intervention from FARDC or MONUSCO forces.⁹⁷ The data shows this, with a proliferation of events along the South Sudan-DRC border, particularly around Garamba and Lantoto, another cross-border reserve area. Events in the DRC are exclusively in the north-east, in Haut-Uele province; similarly, the first events in the CAR are in far eastern Haut-Mbomou, the prefecture bordering South Sudan and the DRC. The LRA is also still only operating in familiar mixed savanna-forest terrain.

Period 5, beginning in 2009 and lasting until 2012, is defined by the beginning of cooperative regional operations and American involvement. Some easing of geopolitical dynamics in central and east Africa meant that UPDF counterinsurgency operations had authorisation from Juba, Kinshasa, and Bangui to operate in their territory. Theoretically, the UPDF would focus on pursuit of the LRA, with support from other militaries, but that the other militaries would be more focused on protecting civilians.⁹⁸ In practice, though, just as the international community increasingly focused on the LRA, the governments in the region began to feel reductions in pressure to deploy major resources towards their

⁹⁴ David Lewis, "Guatemalan blue helmet deaths stir Congo debate," *Reuters*, January 31, 2006, <https://reliefweb.int/report/democratic-republic-congo/guatemalan-blue-helmet-deaths-stir-congo-debate>; Arieff and Ploch, *The Lord's Resistance Army*, 6.

⁹⁵ Ibid.

⁹⁶ Day, "Survival Mode," 9-11.

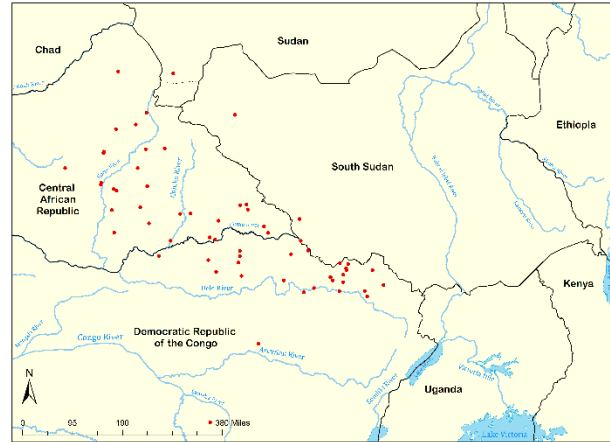
⁹⁷ Le Sage, "Countering the LRA," 5-6.

⁹⁸ Philip Lancaster, Guillaume Lacaille, and Ledio Cakaj, *Diagnostic Study of the Lord's Resistance Army* (International Working Group on the LRA, Washington, DC: IBRD/World Bank, 2011), 13.

Figure 5: Period 5 (2009 to 2012)



Figure 6: Period 6 (2013 to 2016)



peripheries and away from more pressing security threats.⁹⁹ The African Union began symbolic and investigative steps in 2010 towards multilateral intervention against the LRA, but initially took on no political role in organising counterinsurgency operations.¹⁰⁰

However, the UPDF had direct American aid starting in late 2008 and 2009 with Operation Lightning Thunder, launched just after the activation of AFRICOM. Operation Lightning Thunder began in December 2008 after the failure of the Juba peace talks as a major UPDF raid on Garamba in the DRC with the permission of Kinshasa and some involvement from the SPLA and FARDC.¹⁰¹ Although the operation managed to weaken the LRA, it was still relatively unsuccessful, as the LRA evacuated their camps just prior to its start, the UPDF sustained major casualties, and the LRA responded with revenge massacres of civilians.¹⁰² The US provided important logistical and intelligence support to the operation and, in 2011, deployed around 100 military advisors to train and work with the UPDF, as well as some parts of the SPLA and FARDC.¹⁰³ The combination of regional cooperation and US backing meant that counterinsurgency operations during period 5 were, comparatively speaking, relatively successful, although none of the regional militaries substantially improved their treatment of local populations.

Period 5 (figure 5) is the first period without event data in northern Uganda, or even along the South Sudan-Uganda border. In South Sudan, most event data is in Western Equatoria near the border of the DRC, with scattered events further north and into Sudan. The increasingly successful counterinsurgency operations have fully pushed the LRA out of their long-standing home operating region in northern Uganda and south-east Sudan.

⁹⁹ International Crisis Group, "The Lord's Resistance Army: End Game?" (ICG Africa Report no. 182, Nairobi/Brussels, November 2011), 4-5.

¹⁰⁰ Ibid., 2.

¹⁰¹ Ronald R. Atkinson, Phil Lancaster, Ledio Cakaj and Guillaume Lacaille, "Do No Harm: assessing a military approach to the Lord's Resistance Army," *Journal of Eastern Africa Studies* 6, no. 2 (2012): 371-372.

¹⁰² Atkinson, "From Uganda to the Congo," 14-6.

¹⁰³ Arieff and Ploch, *The Lord's Resistance Army*, 8-9.

Event data is still primarily above the Uele River in the DRC, and there is extensive event data around Garamba and the border with South Sudan. However, UPDF operations, including Operation Lightning Thunder, push the LRA progressively further into the CAR and DRC. There is important clustering of event data around the DRC-CAR border, the Bomu River, and the Bili-Uele protected area, all of which are west of Garamba. In the CAR, there are events as far north as near the CAR-Sudan border and Kafia Kingi disputed area. Period 5 is also the first period the LRA begins substantial operations in jungle areas, instead of forest-savanna mosaic. This is the Congolian lowland forest ecoregion, characterised by rainforests with extremely tall canopy heights and much greater topographic variation.¹⁰⁴ Nonetheless, the majority of LRA operations are still in forest-savanna mosaic.

It was only in 2013, the beginning of period 6, that the AU took on the role of coordinator and political leader of multilateral counterinsurgency efforts. By 2013 the vast majority of anti-LRA operations were under the umbrella of the AU Regional Task Force's Operation Monsoon, an organisational structure broadly recommended by experts to coordinate the various national armies.¹⁰⁵ The US increased funding and included military aircraft and additional deployments starting in late 2012 and worked with the UPDF through the RTF.¹⁰⁶ The RTF has been successful in removing key commanders from the conflict and increasing defections, better equipped to coordinate with UN peacekeepers in the region, and a true framework for multilateral operations was encouraging.¹⁰⁷

The start of actual multilateral operations, however, was marred by operational challenges and quickly threatened by participating governments' declining interest and a rise in regional tensions. Relations between the national armies were consistently strained, and each military's poor treatment of local populations opened the door for a civilian abuse blame game.¹⁰⁸ Humanitarian crises and civil conflict broke out in South Sudan and the Central African Republic, while political considerations have reduced quality troop contributions and aggressive operations from Kampala and Kinshasa.¹⁰⁹ With the reduction of total LRA attacks, the group is no longer a priority as it poses no direct threat to any of the affected countries' central governments or their primary constituents. As a result, the end of the UCDP GED data in 2016 coincides with waning interest in the LRA as a whole.

Event data for period 6 (figure 6) is much more scattered and moves deeper into the CAR in particular. This is to be expected, as the FACA are by far the smallest and weakest military in the region and have little capacity to counter the LRA, particularly since the start of the

¹⁰⁴ WWF, "Terrestrial Ecoregions."

¹⁰⁵ Atkinson et al., "Do No Harm," 379; ICG, "End Game," 16-18; Lancaster et al., *Diagnostic Study*, 17.

¹⁰⁶ Arieff and Ploch, *The Lord's Resistance Army*, 12-13.

¹⁰⁷ Day, "Survival Mode," 11-13.

¹⁰⁸ Lancaster et al., *Diagnostic Study*, 12-13, 42-43.

¹⁰⁹ Arieff and Ploch, *The Lord's Resistance Army*, 2; Ronan, "State of the LRA," 16-20.

civil war in 2013.¹¹⁰ Events are located throughout the Bangassou Forest Reserve and Chinko preservation area. There is less clustering on the border with the DRC. Events in the DRC continue to cluster around Garamba and within Bili-Uele. The event data also shows a slight convergence of points around the Kafia Kingi disputed area, the suspected location of Kony as of 2016, with events in Sudan and the CAR within 30km of the border.

Use of Sanctuary by the LRA

Central Africa, particularly the border areas between Uganda, South Sudan, the Democratic Republic of the Congo and the Central African Republic, is a region with particularly weak states, multiple security issues, inaccessible terrain, and poorly-defined international borders. These factors combine to create a proliferation of ungoverned spaces that the LRA has taken advantage of for decades. However, in order to take advantage of these ungoverned spaces around transborder areas, the LRA has been forced to migrate further afield from its initial area of operations in northern Uganda due to increasingly effective counterinsurgency operations.

A few major trends emerge from the event data. Importantly, it is clear that the LRA does not rely on an internal social sanctuary with the Acholi population; the group is far too mobile and has continued operations for a decade after being driven from northern Uganda. Conflict zones tend to move the most when they involve insurgencies, such as the LRA, with weak ties to local populations facing a relatively stronger central government.¹¹¹ International boundaries are key to the LRA's operations, particularly the triborder region where the CAR, DRC, and South Sudan come together. The LRA operates frequently near or within preservation areas, and particularly those adjacent to or traversing an international boundary. Generally, trends in the event data are consistent with the existing literature on the LRA, which widely notes the LRA's use of contested territory and border zones and operations primarily in the sparsely populated periphery of states with little institutional penetration.¹¹²

The LRA takes advantage of ungoverned areas along international boundaries that are primarily created by weak governments. The CAR has the lowest Human Development Index ranking in the world at 188; South Sudan, the DRC, and Uganda are all below 160, among the least developed of developing nations.¹¹³ All of the states affected by the LRA have experienced other forms of civil conflict, regime change, and even invasion since 1989. With the exception of Juba in South Sudan, all of the capital cities are comfortably far away from the tripoint affected by the LRA. And all of the affected states have major issues

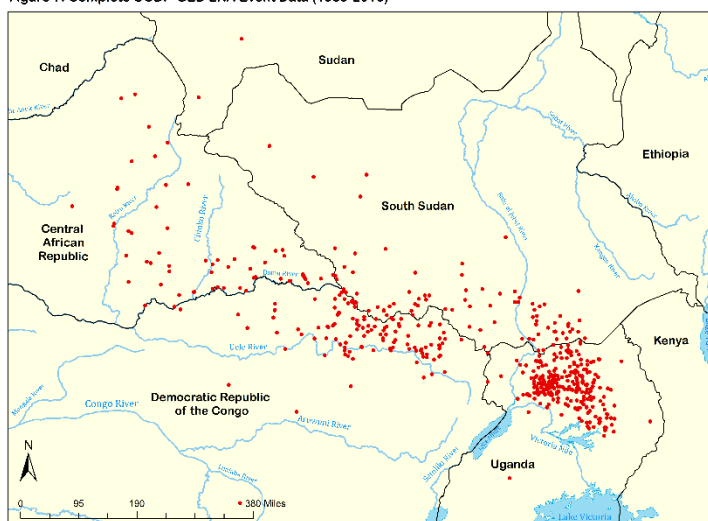
¹¹⁰ Lancaster et al., *Diagnostic Study*, 13, 43; Ronan, "State of the LRA," 16.

¹¹¹ Beardsley et al., "Roving Bandits," 503.

¹¹² Faber, "Sources of Resilience," 15; Day, "Survival Mode," 2; Arieff and Ploch, *The LRA*, 3-6.

¹¹³ "International Human Development Indicators," UNDP, <http://hdr.undp.org/en/countries>.

Figure 7: Complete UCDP-GED LRA Event Data (1989-2016)



with corruption, human rights abuses, public service provision, and economic development.¹¹⁴ The conflict zone of the LRA is situated in the intersection of five profoundly weak and insecure states, each with very little control over their international borders, which creates ungoverned spaces due to a lack of the central government's capacity and interest to govern.

The LRA is experienced in taking advantage of these ungoverned

spaces: indeed, 17.9% of all the event data is found within a 25km buffer of international boundaries, or about a brisk 4-hour walk. This seems low, but note that around a third of the event data is in the Gulu and Kitgum areas of northern Uganda, the LRA's original and longest area of operation.

The LRA's area of operations is also quite large: the conflict zone for the whole dataset is larger than Turkey (figure 7). This is in part due to the group's movements further and further afield from its initial area of operations in northern Uganda due to increasingly effective counterinsurgency operations. The LRA's use of slow-tiring child abductees as both porters and soldiers and the group's organisation in small bands means that they are able to quickly travel thousands of kilometers and are highly mobile.¹¹⁵ The LRA's mobility has increased dramatically since 1989: the total area of period 6's conflict zone is around 17 times larger than period 1.

The mobility of the LRA and its large conflict zone provide further challenges to counterinsurgency operations. Border security is problematic in most countries, due to the often vast distances required to patrol and secure, and is more difficult when neighboring states are weak and borders run through remote peripheries.¹¹⁶ As the LRA becomes more mobile through the periods, the length of border needing to be secured increases. In period 1, the affected border area was about 220km; by period 6, over 1000km of international borders potentially need monitoring.

A number of ungoverned areas that the LRA has taken advantage of as sanctuary are created by disputed borders. From period 1 through 3, essentially all of southern Sudan was an active conflict zone with secessionist violence; the entire area was a network of

¹¹⁴ HRW, *World Report: 2018* (Human Rights Watch, 2017), <https://www.hrw.org/world-report/2018>.

¹¹⁵ Lomo and Horvil, "Behind the Violence," 21; Arieff and Ploch, *The Lord's Resistance Army*, 3.

¹¹⁶ Monarch, *Denying Sanctuary*, 15; Galula, *Counterinsurgency Warfare*, 23.

contested borders between Khartoum and the SPLA. Another form of a contested border was the Juba-Torit red line, particularly during period 2 through 4. Below the road, the UPDF could operate against the LRA, but could not traverse it; above the road, however, the SPLA was still ill-equipped to project power or conduct counterinsurgency operations against the LRA.¹¹⁷ This creates an ungoverned space above the Juba-Torit road, disputed by the UPDF and SPLA, which the LRA was able to move into during period 3 and 4 to avoid UPDF pursuit. Most recently, the disputed Kafia Kingi enclave between Sudan and South Sudan has given the LRA access to important supply networks and is suspected to act as the current sanctuary and hiding place of Kony.¹¹⁸

The inaccessibility of the terrain in the LRA's area of operations allows the group to take further advantage of weak borders as it increases the amount of ungoverned space. The pole of inaccessibility for Africa is located in Haut-Mbomou in the CAR, a mere 160km from the tripoint of the CAR, DRC, and South Sudan.¹¹⁹ Although poles of inaccessibility are an arbitrary construct, the point is illustrative: due to challenging terrain, distance from major population centers, and poor infrastructure, the LRA's area of operation is located in one of the most inaccessible areas of the world. And as the conflict has progressed, the mean center of the event points for each period has moved progressively closer to the pole of inaccessibility: in periods 1 through 3, the mean center hovered between Gulu and Kitgum, but jumps west of the pole on the CAR-DRC border by period 6.

The terrain the LRA operates in has limited and poor quality roads networks, many rivers and tributaries that flood during the rainy season, heavily forested areas impeding overhead surveillance, and savanna with random forest mosaic.¹²⁰ The area has virtually no cellphone coverage, and the LRA has been forced to switch to couriers to communicate between groups.¹²¹ In northern Uganda, the LRA held a strategic advantage over the UPDF due to their intimate knowledge of the geography. As the LRA has ventured into new territory, the group has recognised the importance of maintaining this upper hand. Abductions of locals helps the LRA with cultural and language challenges, but interviews with previous abductees have also revealed the LRA's additional interest in learning quite literally the lay of the land – in period 4, one of the earliest reports of the LRA in Garamba was their abduction of a park ranger for a period of weeks to obtain detailed geographic information on their new environs.¹²² Ironically, detailed knowledge of the local terrain in

¹¹⁷ Day, "Survival Mode," 10.

¹¹⁸ Ronan, "State of the LRA," 20; Faber, "Sources of Resilience," 15; Arieff and Ploch, *Lord's Resistance Army*, 6.

¹¹⁹ Daniel Garcia-Castellanos and Lombardo Umberto, "Poles of Inaccessibility: a calculation algorithm for the remotest places on Earth," *Scottish Geographical Journal* 123, no. 3 (2007): 227; 231.

¹²⁰ Atkinson et al., "Do No Harm," 377;

¹²¹ Lancaster et al., *Diagnostic Study*, 39-40;

¹²² Ibid.

northern Uganda was what made the LDUs particularly effective in counterinsurgency operations during period 3 and ultimately helped drive the LRA out of Uganda.¹²³

One particularly key aspect that emerged from the event data was the LRA's operations in and around national parks and other nature preservation areas (figure 8, appendix B), particularly those adjacent to or traversing international boundaries. These areas combine the weakness of the central government, porous border areas, and difficult terrain to create a perfect sanctuary. The parks along the South Sudan-Ugandan border that see important activity from period 2 to 4 are all almost entirely within the 25km buffer of an international border, while Garamba and Bili-Uele in the DRC are both around 40% within the buffer. Most protected areas in the tripoint region are essentially unmapped and have little to no active law enforcement presence.¹²⁴ In addition, the border parks in the region were already known to be dangerous before the LRA's arrival due to poachers and smugglers.¹²⁵ This allows both the LRA and national armies (particularly the FARD) to blame incidents on criminal activity, reducing the pressure for armed operations. Kafia Kingi is a prime combination of disputed territory overlapping with the Yata Ngaya, Boro, and Radom national parks, respectively in the CAR, South Sudan, and Sudan. It would be unsurprising for there to be increases in LRA activity in this area in the future, due to increasing tensions between Khartoum and Juba, the end of RTF operations in the CAR, and the already-recorded shifts north in the event data between period 5 and 6.

Conclusion

Sanctuary is critical to the success of insurgent groups, and ungoverned spaces proliferate in today's world that can provide such sanctuary. Using a combined GIS and qualitative case study analysis, this paper finds that the many weakly and ungoverned transborder areas in east and central Africa create ungoverned spaces that the LRA has effectively been able to exploit.

Increasingly effective counter-insurgency operations forced the LRA to migrate farther and farther from its initial area of operations in northern Uganda, as the group sought to take advantage of opportunities present by ungoverned spaces in east and central Africa in order to survive. National parks and protected areas created particularly attractive ungoverned areas for sanctuary, but event data shows the LRA also operating in disputed areas and along peripheral and inaccessible borders. As the periods progress, the event data visually tracks the LRA's into new ungoverned areas and abandonment of old sanctuaries.

¹²³ Lomo and Hovil, "Behind the Violence," 38.

¹²⁴ WWF, "Terrestrial Ecoregions."

¹²⁵ Faber, "Sources of Resilience," 15.

GIS was particularly conducive to this type of study, because it helps avoid the MAUP problem that aggregates data, artificially flattening individual states and strengthening international borders. The techniques used in this paper provide new methods that can be applied to a broad range of topics in conflict and peace research, a field that has made only limited use of GIS in the past.

This kind of analysis can also be used to better analyze state and non-state actors in tandem in other areas of study, including research into terrorism and criminal networks. Existing theories and analysis generally assume separate levels of analysis for state and non-state actors, and often run into difficulties with the regionalization of 'domestic' actors such as the LRA.

Bibliography

- Arieff, Alexis and Lauren Ploch. *The Lord's Resistance Army: The US Response*. CRS Report no. R42094. Washington, DC: Congressional Research Service, 2015. <https://fas.org/sgp/crs/row/R42094.pdf>.
- Atkinson, Ronald R. "From Uganda to the Congo and Beyond: Pursuing the Lord's Resistance Army." New York: International Peace Institute Publications, 2009. https://www.ipinst.org/wp-content/uploads/publications/e_pub_uganda_to_congo.pdf.
- Atkinson, Ronald R., Phil Lancaster, Ledio Cakaj and Guillaume Lacaille. "Do no harm: assessing a military approach to the Lord's Resistance Army." *Journal of Eastern Africa Studies* 6, no. 2 (2012): 371-382. <https://doi.org/10.1080/17531055.2012.669591>.
- Bapat, Navin A. "The Internationalization of Terrorist Campaigns." *Conflict Management and Peace Science* 24 (2007): 265-280. <https://doi.org/10.1080/07388940701643607>.
- Beardsley, Kyle, Kristian Skrede Gleditsch and Nigel Lo. "Roving Bandits? The Geographical Evolution of African Armed Conflicts." *International Studies Quarterly* 59, no. 3 (2015): 503-516. <https://doi.org/10.1111/isqu.12196>.
- Boone, Catherine. "Territorial politics and the reach of the state: unevenness by design." *Revista de Ciencia Política* 32, no. 3 (2012): 623-641. <http://dx.doi.org/10.4067/S0718-090X2012000300007>.
- Brynen, Rex. *Sanctuary and Survival: the PLO in Lebanon*. Boulder, CO: Westview Press, 1990.
- Buhaug, Halvaard and Jan Ketil Rød. "Local Determinants of African Civil Wars, 1970-2001." *Political Geography* 25, no. 3 (2006): 315-335. <https://doi.org/10.1016/j.polgeo.2006.02.005>.
- Buhaug, Halvard and Kristian Skrede Gleditsch. "Contagion or Confusion? Why Conflicts Cluster in Space." *International Studies Quarterly* 52, no. 2 (2008): 215-233. <https://doi.org/10.1111/j.1468-2478.2008.00499.x>.
- Buhaug, Halvard and Päivi Lujala. "Accounting for scale: Measuring geography in quantitative studies of civil war." *Political Geography* 24, no. 4 (2005): 399-418. <https://doi.org/10.1016/j.polgeo.2005.01.006>.
- Buhaug, Halvard and Scott Gates. "The Geography of Civil War." *Journal of Peace Research* 39, no. 4 (2002): 417-433. <https://doi.org/10.1177/0022343302039004003>.
- Clunan, Anne L. and Harold A. Trinkunas, eds. *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty*. Stanford, CA: Stanford University Press, 2010.
- Croicu, Mihai and Ralph Sundberg. "UCDP GED Codebook version 17.1." Uppsala: Department of Peace and Conflict Research, Uppsala University, 2017.
- Day, Christopher R. "Survival Mode: Rebel Resilience and the Lord's Resistance Army." *Terrorism and Political Violence* (2017): 1-21. <https://doi.org/10.1080/09546553.2017.1300580>.
- Day, Christopher R. and William S. Reno. "In Harm's Way: African Counter-Insurgency and Patronage Politics." *Civil Wars* 16, no. 2 (2014): 105-126. <http://dx.doi.org/10.1080/13698249.2014.927699>.
- Dolan, Christopher. "What do you remember? A rough guide to the war in Northern Uganda 1986 – 2000." COPE Working Paper no. 33, London, UK: Acord, 2000. <https://doi.org/10.13140/RG.2.2.25849.47205>.
- Dunn, Kevin C. "The Lord's Resistance Army and African International Relations." *African Security* 3, no. 1 (2010): 46-63. <https://doi.org/10.1080/19362201003608797>.

- Dupuy, Kendra, Scott Gates, Håvard Mokleiv Nygård, Ida Rudolfson, Siri Aas Rustad, Håvard Strand and Henrik Urdal. *Trends in Armed Conflict, 1946-2016*. Oslo: PRIO Policy Brief no. 2, 2017. <https://www.prio.org/utility/DownloadFile.ashx?id=1373&type=publicationfile>.
- Faber, Pamela. "Sources of Resilience in the Lord's Resistance Army." CNA Occasional Paper Series, April 2017. https://www.cna.org/cna_files/pdf/DOP-2017-U-015265-Final.pdf.
- Freeman, Lawrence. *The Transformation of Strategic Affairs*. Adelphi Paper no. 379. London: The International Institute for Strategic Studies, 2006.
- Galula, David. *Counterinsurgency Warfare: Theory and Practice*. Westport, CT: Praeger Security International, 1964.
- Harpviken, Kristian Berg, ed. *Troubled Regions and Failing States: The Clustering and Contagion of Armed Conflicts*. Vol. 27 of *Comparative Social Research*, edited by Fredrik Engelstad. Bingley, UK: Emerald Books, 2010.
- Hendrickson, Dylan and Kennedy Tumutegyeize. "Dealing with complexity in peace negotiations: reflections on the Lord's Resistance Army and the Juba talks." Conciliation Resources, January 2012. http://www.operationspaix.net/DATA/DOCUMENT/6894~v~Dealing_with_Complexity_in_Peace_Negotiations_Reflections_on_the_Lord_s_Resistance_Army_and_the_Juba_Talks.pdf.
- International Crisis Group. "Northern Uganda: Understanding and Solving the Conflict." ICG Africa Report no. 77, Nairobi/Brussels, April 2004.
- International Crisis Group. "The Lord's Resistance Army: End Game?" ICG Africa Report no. 182, Nairobi/Brussels, November 2011.
- IRIN News. "'Panda Gari' security operations criticized." *IRIN*, December 7, 1998. <http://www.irinnews.org/report/4005/uganda-%E2%80%9Cpanda-gari%E2%80%9D-security-operations-criticised>.
- Korteweg, Rem. "Black Holes: On Terrorist Sanctuaries and Governmental Weakness." *Civil Wars* 10, no. 1 (2008): 60-71. <https://doi.org/10.1080/13698240701835482>.
- Lancaster, Philip, Guillaume Lacaille, and Ledio Cakaj. *Diagnostic Study of the Lord's Resistance Army*. International Working Group on the LRA. Washington, DC: IBRD/World Bank, 2011. http://www.tdrp.net/PDFs/LRA_DiagnosticStudy_1.pdf.
- Laquer, William, ed. *The Guerrilla Reader: A Historical Anthology*. Philadelphia: Temple University Press, 1977.
- Le Sage, Andre. "Countering the Lord's Resistance Army in Central Africa." *National Defense University Strategic Forum* no. 270 (2011). <http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-270.pdf>.
- Lewis, David. "Guatemalan blue helmet deaths stir Congo debate." *Reuters*, January 31, 2006. <https://reliefweb.int/report/democratic-republic-congo/guatemalan-blue-helmet-deaths-stir-congo-debate>.
- Lomo, Zachary and Lucy Hovil. "Behind the Violence: Causes, consequences and the search for solutions to the war in Northern Uganda." Refugee Law Project Working Paper no. 11, Makerere University Centre for Justice and Forced Migrants, February 2004. https://refugeelawproject.org/files/working_papers/RLP.WP11.pdf.
- Mackinlay, John. *Globalisation and Insurgency*. Adelphi Paper no. 352. London: The International Institute for Strategic Studies, 2002.

- Metz, Steven and Raymond A. Millen. *Insurgency and counterinsurgency in the 21st century: reconceptualising threat and response*. Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2004.
- Monarch, Robert M. *Denying Sanctuary: rejecting safe havens in counterinsurgency operations*. Master of Strategic Studies degree monograph. Carlisle, PA: US Army War College, 2009. <http://www.dtic.mil/dtic/tr/fulltext/u2/a494801.pdf>.
- Natural Earth Data, Fourth Edition (Large-scale data, 1:10m, Cultural; accessed March 1, 2018). <http://www.naturalearthdata.com>.
- Openshaw, Stan. *The Modifiable Aerial Unit Problem*. Norwich, UK: GeoBooks, 1984.
- Owens, Mackubin Thomas. "Sanctuary: the geopolitics of terrorism and insurgency." In *Armed Groups: studies in national security, counterterrorism, and counterinsurgency*. Edited by Jeffrey H. Norwitz, 135-148. Newport, RI: U.S. Naval War College, 2008.
- Ronan, Paul. "The State of the LRA in 2016." The Resolve: LRA Crisis Initiative, Invisible Children, and the LRA Crisis Tracker, March 2016. <http://www.theresolve.org/wp-content/uploads/2016/03/The-State-of-the-LRA-2016-Final.pdf>.
- Salehyan, Idean. "No Shelter Here: Rebel Sanctuaries and International Conflict." *The Journal of Politics* 70, no. 1 (2008): 54-66. <https://doi.org/10.1017/s0022381607080048>.
- Salehyan, Idean. "Transnational Rebels: Neighboring States as Sanctuary for Rebel Groups." *World Politics* 59, no. 2 (2007): 217-242. <https://doi.org/10.1353/wp.2007.0024>.
- Salehyan, Idean. *Rebels Without Borders: transnational insurgencies in world politics*. Ithaca, NY: Cornell University Press, 2009.
- Sundberg, Ralph and Erik Melander. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research* 20, no. 4 (2013): 523-532.
- Tapscott, Rebecca. "The Government Has Long Hands: Institutionalized Arbitrariness and Local Security Initiatives in Northern Uganda." *Development and Change* 48, no. 2 (2017): 263-285. <https://doi.org/10.1111/dech.12294>.
- Terrestrial Ecoregions of the World (tnc_terr_ecoregions.shp; last updated December 3, 2012). The Nature Conservancy. http://maps.tnc.org/gis_data.html.
- The Resolve: LRA Crisis Initiative. "Key Statistics." Accessed March 20, 2018. <http://www.theresolve.org/the-lra-crisis/key-statistics/>.
- The World Database on Protected Areas (accessed March 1, 2018). Cambridge, UK: Protected Planet, UNEP-WCMC and ICUN. <https://protectedplanet.net/>.
- Tollefson, Andreas Forø and Halvard Buhaug. "Insurgency and Inaccessibility." *International Studies Review* 17, no. 1 (2015): 6-25. <https://doi.org/10.1111/misr.12202>.
- Weidmann, Nils B. and Michael D. Ward. "Predicting Conflict in Space and Time." *The Journal of Conflict Resolution* 54, no. 6 (2010): 883-901. <https://www.jstor.org/stable/pdf/25780759>.
- Wise, David. *The Role of Sanctuary in an Insurgency*. Degree monograph, School of Advanced Military Studies. Fort Leavenworth, KS: United States Army Command and General Staff College, 2008. <http://www.dtic.mil/dtic/tr/fulltext/u2/a485625.pdf>.
- WWF. "Terrestrial Ecoregions." <https://www.worldwildlife.org/biome-categories/terrestrial-ecoregions>.

Appendix A: Large-Scale Maps for Figures 1-7

Figure 1: Period 1 (1989 to 1993)



Figure 2: Period 2 (1994 to 1999)



Figure 3: Period 3 (2000 to 2005)

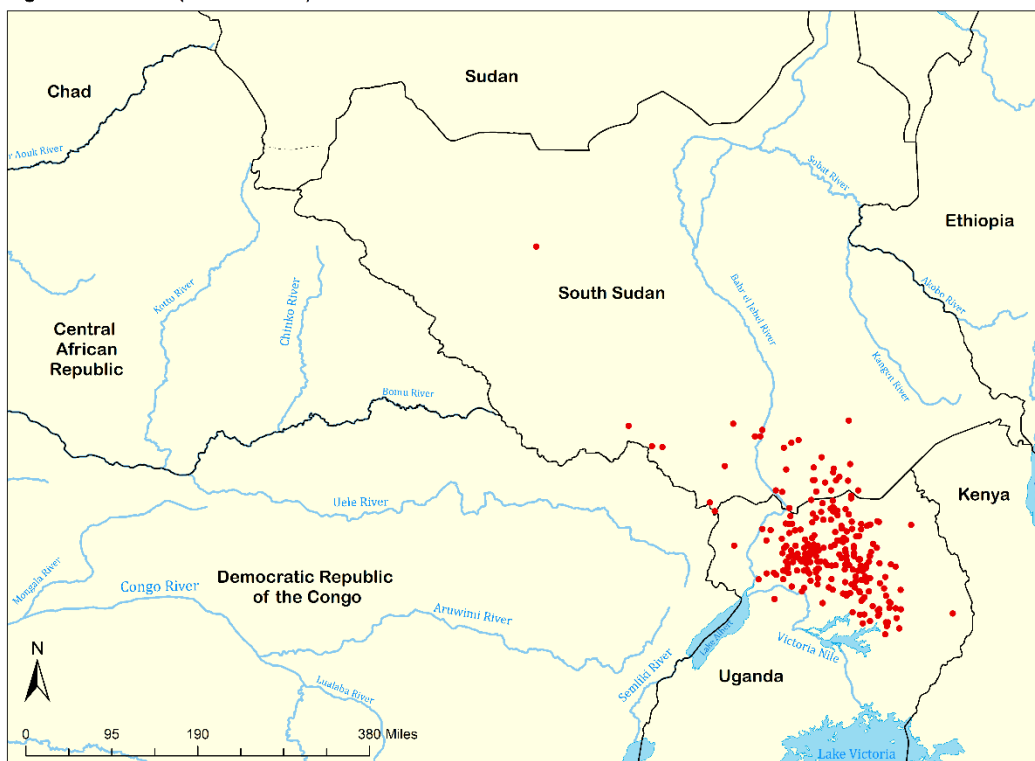


Figure 4: Period 4 (2006 to 2008)

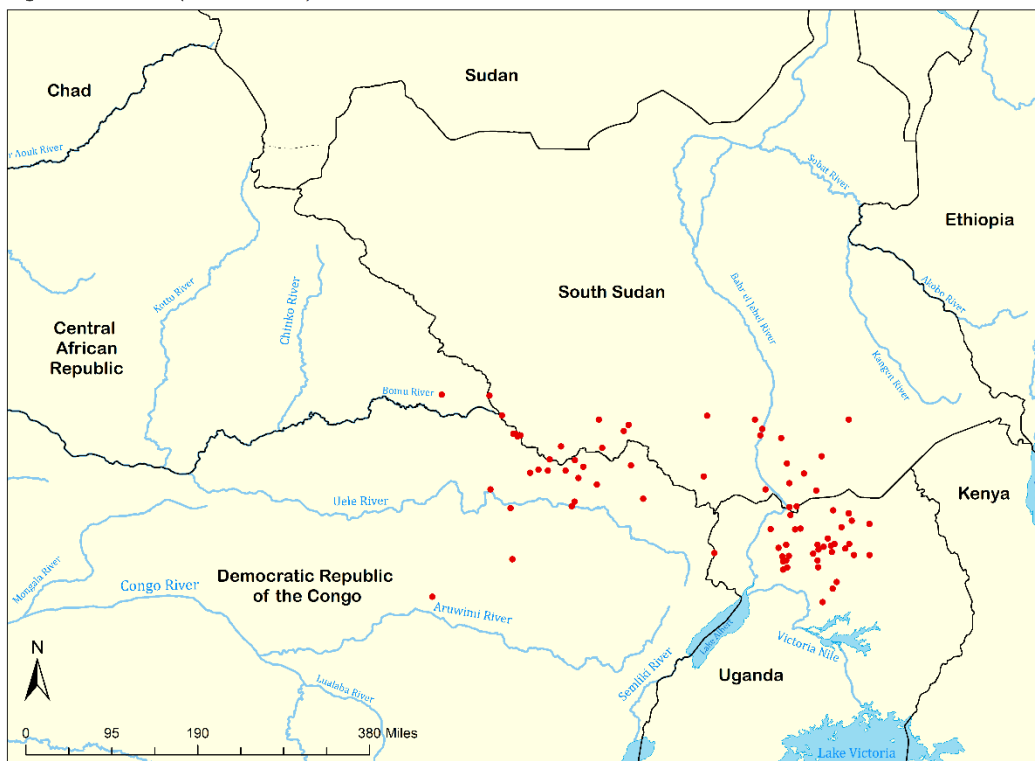


Figure 5: Period 5 (2009 to 2012)

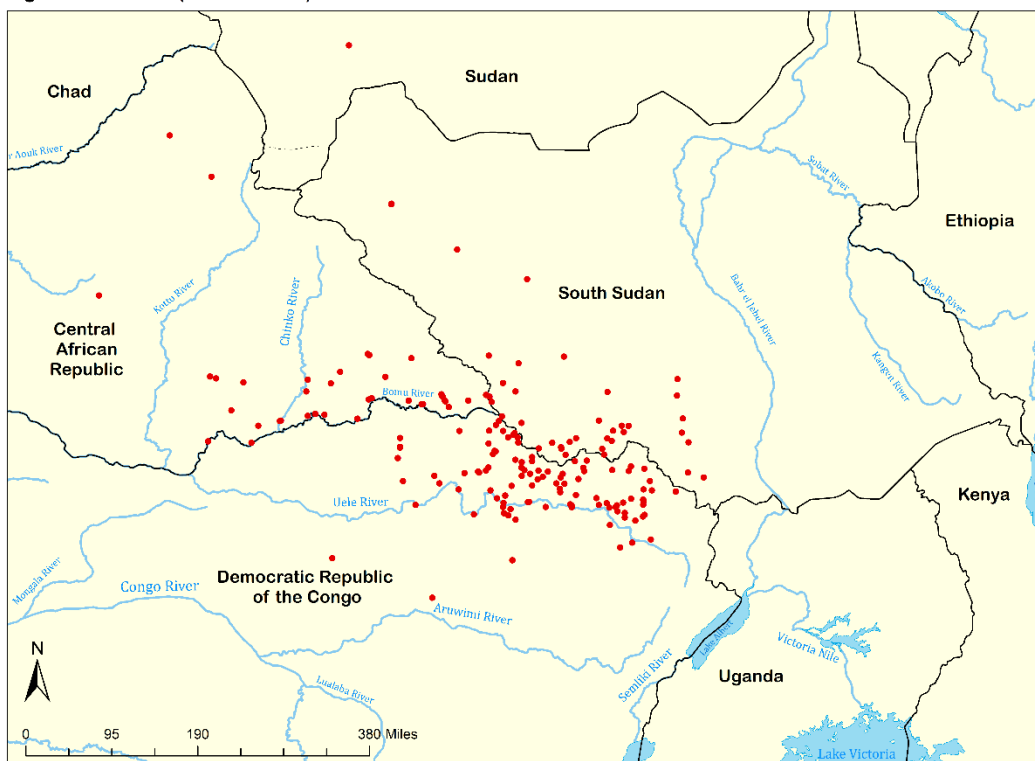
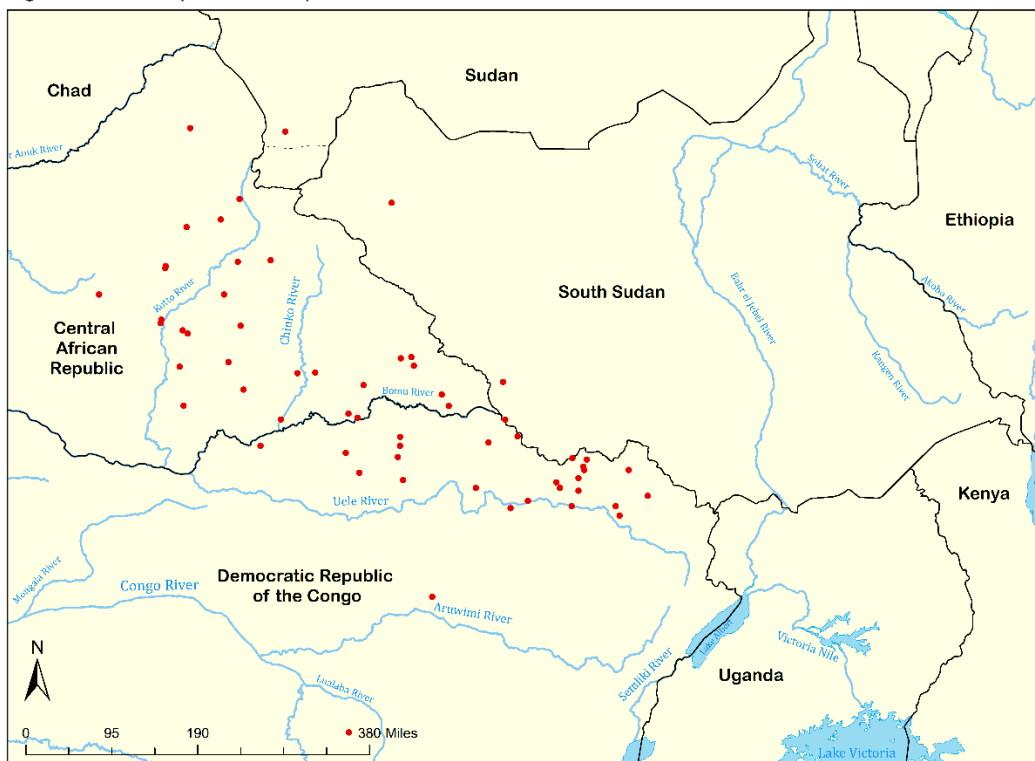
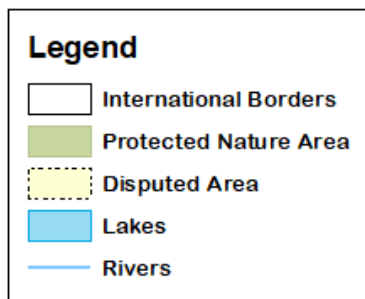
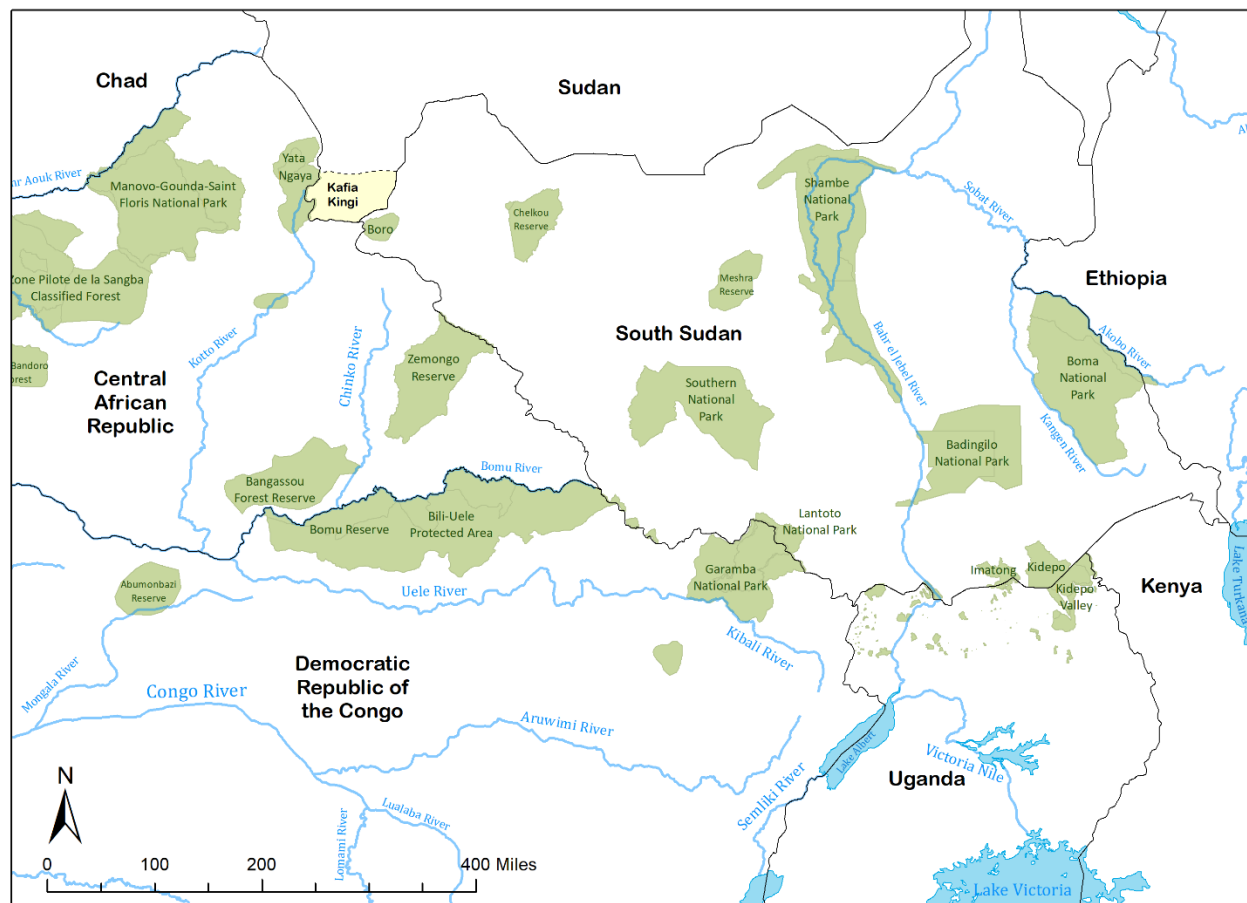


Figure 6: Period 6 (2013 to 2016)



A map of South Sudan and its surrounding countries: Chad, Sudan, Ethiopia, Kenya, Uganda, and the Democratic Republic of the Congo. The map displays major rivers such as the At Aouk River, Kono River, Chinko River, Boma River, Uele River, Congo River, Mungala River, Aruwimi River, Luabala River, Sobat River, Sobat el Jebel River, Kalongo River, and Nile River. Lake Victoria and Lake Nyanza are also shown. Numerous red dots indicate sampling locations across the country. A scale bar at the bottom left shows distances from 0 to 380 miles, and a north arrow is located above it.

Figure 8: Protected and Disputed Areas



Appendix C: Glossary of Acronyms

AU RTF = African Union's Regional Task Force

CAR = Central African Republic (Bangui)

CPA = 2005 Comprehensive Peace Agreement

DRC = Democratic Republic of the Congo (Kinshasa)

EDF = Equatoria Defence Force

FACA = Central African Armed Forces

FARDC = Armed Forces of the Democratic Republic of the Congo

GIS = Geographic Information Science/Systems

HSMF = Holy Spirit Mobile Forces of Alice "Lakwena"

ICC = International Criminal Court

LRA = Lord's Resistance Army

MAUP = modifiable areal unit problem

MINUSCA = United Nations Multidimensional Integrated Stabilisation Mission in the Central African Republic, 2014-present

MONUSCO = United Nations Organisation Stabilisation Mission in the Democratic Republic of the Congo, 2010-present

NIF = National Islamic Front

NRA = National Resistance Army

SPLA = Sudan People's Liberation Army

UCDP GED = Uppsala Conflict Data Program's Georeferenced Event Dataset, version 17.1

UNLA = Uganda National Liberation Army

UNMISS = United Nations Mission in the Republic of South Sudan, 2011-present

UPDA = Uganda People's Defence Army

UPDF = Uganda People's Defence Forces (Museveni)