Rebel Violence Against Civilians in Sierra Leone

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Rebel Violence Against Civilians in Sierra Leone

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Abstract: I test if wartime rebel violence against civilians is strategic. Theories of strategic violence posit a relationship between patterns of civilian victimization and patterns of territorial control. I test a theory of strategic violence using micro level victimization data from the civil war in Sierra Leone and secondary accounts of wartime territorial control by armed actors. Recent literature on political violence suggests that different types of wars display different patterns of violence. This study contributes to the literature on political violence and civil war by explicitly testing if rebels use violence against civilians strategically in *Symmetrical Non-Conventional wars (SNC).* I find that rebels used violence strategically during the civil war in Sierra Leone, but with important caveats. Rebels only use selective violence in areas very close to their base. In addition, rebels are not deterred from non-selective violence, as suggested by a strategic theory of violence. I argue that we can make sense of these patterns when we consider how the incentives of SNC war differ from the incentives of irregular war. The observed departures from strategic violence may be characteristic of SNC war in general.

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1. Introduction

Paul Richards relays the following story in the opening pages of his book on the civil war in Sierra Leone: A war refugee turns up in a small village in Kono district and is given land to farm by local elders. Only later do the members of the community find out that this 'refugee' was actually a rebel spy, passing along information about the identities of leaders of local civil defense units (Richards 1996 p. 12). The rebel wanted to know the identity of local civil defense units so these people could be targeted in an upcoming village attack. The rebel spy was trying to solve a classic problem of civil war: it is difficult to identify who is friend and who is foe. These actions by the rebel spy suggest a certain degree of strategic violence on the part of the rebels; the act of espionage could be used to inform selective targeting of civilians in the upcoming attack. However, this act of strategic violence must be held against the atrocities of indiscriminate violence committed against civilians for which the war in Sierra Leone is infamous. How are we to understand the fact that rebels can be so indiscriminate in their violence on some occasions and so selective in their violence on other occasions?

The conditions and incentives under which rebels use selective violence—that is, whether rebels target specific individuals or attack civilians collectively or indiscriminately—has been subject to debate. Kalyvas (2006) presents a theory where rebels always have a strong incentive to use violence selectively and instances of indiscriminate violence occur in the rare instances where rebels decide to use uninformed violence. Indeed, a recent review of the political science literature on political violence refers to a growing consensus that wartime violence against civilians is due, at least in part, to strategic decisions by violent political actors (Valentino, 2014).

However, other scholars challenge the proposition that rebels generally have incentive to use violence selectively. Even if we are to assume that indiscriminate civilian violence has negative consequences for the success of an armed group, there is no reason to assume that individual fighters are ultimately motivated by the success of the group they fight for. For example, Weinstein (2006) contends that different fighters are motivated to fight for different reasons. His theory predicts that violent organizations that attract rebels motivated by material interests are more likely to use violence indiscriminately. In this sense, the incentive for strategic violence during wartime cannot be assumed, but rather it may differ across individuals based on personal motivation.

New literature suggests another factor that may shift individual incentive to use violence strategically during war: the technology of war—the ways in which wars are fought. For example, in guerilla wars rebels need collaboration from civilians. In these wars rebels are much weaker than their opponent and need civilian collaboration to conceal their location and identity in order to avoid direct confrontation with a much stronger military opponent. In guerilla war rebels rely on civilians and this relationship forces guerilla rebels to be discerning and strategic with civilian violence (Kalyvas 2006).

While literature on civil wars—following Fearon and Laitin's influential article (2003)—has tended to equate all civil wars with guerilla wars, recent scholarship has shown that different types of wars follow different patterns and logics of civilian violence (Balcells 2014; Balcells & Kalyvas 2010). This potential

difference becomes more important when we consider that only half of the wars fought between 1944 and 2004 can be categorized as guerilla wars, while the remaining are best defined as *conventional* wars or *Symmetrical non-conventional (SNC)* wars (Kalyvas & Balcells 2010). When both state and rebels have access to high technology weaponry, the struggle can be classified as *conventional* war. The American civil war, fought between relatively evenly matched sides marching in order into face-to-face battle, is an example of *conventional* war[2]. On the other hand, some wars are fought between evenly matched military opponents, but where both sides have little resource capacity. This type of warfare, between equal but low capacity opponents, is referred to as *Symmetrical non-conventional (SNC)* war.

The way in which a war is fought—the technology of warfare—may modify rebel incentives for forming strategic relationships with civilians. By "strategic relationship" I mean that rebels structure their actions in ways that are meant to modify civilian behavior. In the same vein "strategic violence" refers to a form of violence that rebels use against civilians in order to modify civilian behavior. While rebels in a guerilla war may be very dependent upon civilians, and are therefore deeply concerned with how they handle civilians, rebels engaged in either conventional or SNC war may not be as reliant upon their relationship with civilians[3]. If this is true, it might be the case that rebels engaged in either conventional or SNC war have less incentive to be strategic with their violence.

Four characteristics of SNC war may reduce incentives for rebels to form strategic relationships with civilians and use violence strategically.

First, in SNC wars rebel survival is less dependent upon civilian action because SNC wars are fought between sides of similar military capabilities. Compared to guerilla wars where rebel opposition is much stronger, rebels during SNC wars have less incentive to avoid direct confrontation with their military adversary.

Second, rebels have less incentive to use violence strategically if the opposition lacks the capacity to effectively protect civilians. For example, Group A is strategic in their use of violence because they want to influence civilian behavior and gain the collaboration of civilians. If group B is not strategic and kills civilians at random, civilians will defect and join or aid the strategic Group A. However, this logic is undermined if Group A cannot offer a minimum level of protection to civilians. Without this protection, civilians are not better off defecting to group A—civilians are still subject to the full wrath of Group B violence[4].

Third, limited resource capacity makes it difficult for rebels to monitor and collect information about civilian behavior in the areas that they control. Information about civilian behavior is needed to inform strategic violence. If rebels do not know the loyalties of civilians living in their area rebels have less opportunity to link violence to undesirable civilian behavior. For a violent act to modify civilian behavior,

[2] Another prime example is the Spanish Civil War.

[3] As Balcells (2014) notes "references to the relative weight of popular support are much less common in conventional civil wars or SNC conflicts".

[4] One side "can afford to be indifferent about the type of violence they use when [their opponent is] unable to offer any protection to civilians" (Kalyvas 2006, p. 167). See Appendix A for more details on the limited ability (or willingness) of the government to protect civilians in the civil war in Sierra Leone.

the act needs to be linked (at least plausibly) to a behavior that worked against rebel interest. However, if rebels know very little about the behavior of civilians living around them, they have less opportunity to use violence in a way that modifies behavior—that is, use violence strategically.

Fourth, limited rebel resource capacity makes it difficult for rebels to establish long-term presence in any one place. If rebels are constantly moving they have less incentive to invest in strategic relations with civilians because rebels will not be around to either reap the rewards or face the consequences of their actions.

In this paper, I test if rebel violence against civilians in SNC wars is strategic. The above four characteristics of SNC wars offer logics for why the violence during SNC war may be less strategic compared to the violence used during guerilla wars. Given these four characteristics, it is worth asking if SNC wars display patterns of strategic violence at all. The need to understand violence patterns in SNC wars becomes even more important when we consider that SNC wars have become increasingly more common in the post-cold war world (Kalyvas & Balcells 2010).

In this paper I turn to a paradigm of Symmetrical Non-Conventional war, the civil war in Sierra Leone, to examine patterns of violence in SNC wars. The civil war in Sierra Leone took place in a context of state collapse (Richards 1996). The government of Sierra Leone, crippled by Siaka Stevens' one-party rule, had already begun withdrawing its presence from parts of the interior during the 1970s and 1980s. When rebels stormed across the Mano River and into Sierra Leone the Sierra Leonean military simply did not have the resources at its command to create the type of military power imbalance of guerilla war (Reno 1995). Rebels were equally ill equipped. In the post-Cold War world, no Superpower rushed to the aid of either the crumbling government or the rag-tag rebels. Given the symmetrical lack of military sophistication, the civil war in Sierra Leone offers a prime example of SNC warfare.

To test if violence against civilians is 'strategic' I generate predictions based on the theory of wartime violence put forward by Kalyvas (2006). By using this theory to generate predictions, I can test if belligerents during the war in Sierra Leone displayed violence patterns congruent with strategic violence. I also consider wartime events that may reduce rebel incentive for strategic action. One such event is suggested by point four above: territorial transitions. To understand how territorial transitions might diminish incentive for strategic action I draw on Mancur Olson's (1993) concept of "roving bandits".

This study contributes to the literature on political violence and civil war by explicitly testing if rebels use violence against civilians strategically in Symmetrical Non-Conventional wars. By doing so, I also forward the trend of disaggregating wars by the ways in which they are fought. Moreover, I spell out why specific characteristics of SNC wars may decrease the incentive for rebels to use violence strategically.

In this paper I use an innovative strategy for coding wartime events that allows me to test predictions about micro-dynamics of rebel violence and territorial control by military actors. Measuring territorial control is a tricky in the context of civil war, where control of specific territory may shift back and forth between military actors over the course of the war. However, at any given point in time a village finds

itself in one of several potential states of control. Using secondary data to reconstruct the war within our study region event by event, I am able to break the war down into nine periods of relatively stable states of territorial control. This strategy has several advantages: first it allows me to make theoretically grounded analysis of the relationship between territorial control and rebel violence against civilians. After all, we can only test for predicted relationships if we can accurately determine which military actor was controlling a village when that village was attacked. Second, this strategy will defend me against claims of reverse causality, as we will see later.

I find that rebels used violence strategically during the civil war in Sierra Leone, but with important caveats. Rebels only use selective violence in areas very close to their base. In addition, rebels are not deterred from non-selective violence, as suggested by a strategic theory of violence. I argue that we can make sense of these patterns when we consider how the incentives of SNC war differ from the incentives of irregular war. The observed departures from strategic violence may be characteristic of SNC war in general. I also find evidence that territorial transitions increase the probability and intensity of attacks. I interpret this as partial support for proposition that territorial transitions decrease incentives for strategic violence.

The rest of the paper is structured as follows. Section 2 discusses theoretical framework. Section 3 introduces the data and sample, section 4 presents the model, and section 5 presents the results. Section 6 offers a robustness check and section 7 concludes with a discussion. Before proceeding to section two, I look briefly at other studies of civilian violence in Sierra Leone.

1.1 Previous studies

Wartime violence against civilians in Sierra Leone has been looked at before. Humphreys and Weinstein (2006) find no evidence that violence is a function of territorial control and offer evidence for the hypothesis that civilian violence is better explained by characteristics internal to the unit doing the fighting. Two points are worth making. First, their dependent variable measures fighters' responses about several characteristics of day-to-day life and from which they infer a "civilian abuse" variable. Our own approach, described below, collects victimization data directly and allows us to model both the probability of an attack and the intensity of an attack independently. Second, in testing hypotheses based on territorial control, Humphreys and Weinstein assume that control over a village is solely a function of relative military power between fighting units. Humphreys and Weinstein (2006) define control as the relative number of troops present in a chiefdom (or under another specification district) at a given point in time. Yet, in Kalyvas's theory control over a village is only important in so far that it allows information to be gathered about the loyalties and actions of civilians. While civilian willingness to share this information is dependent upon relative military power, information can only be collected if there are troops spending sufficient time in the area to do so. Therefore, violence is also a function of the ease at which troops can access villages. By placing troops at the chiefdom level, Humphreys and Weinstein have no ability to capture variations in the ease of access to civilian information with a region.

Using a countrywide data set Raleigh & De Bruijne (2015) argue that it is local politics and customary authority which best explains and violence; chiefdoms with powerful leaders, who are not easily co-

opted by rebels, experience more intense violence.[5] Below, I explore the report that this data set is based on and point out how the report's composition does not allow for a micro-level territorial control analysis. Again, the data set conflates information concerning the occurrence and intensity of an attack.

2 Theory of violence

This section outlines the theory of wartime violence against civilians offered by Stathis Kalyvas in his book *The Logic of Violence in Civil War* (2006). Following this theory we generate several hypotheses. The first two hypotheses make predictions about rebel violence against civilians when territorial control is stable. Then, I use Mancur Olson's concept of 'roving bandits' make predictions about how rebels will respond and use violence during periods of territorial transition.

2.1 The Identification Problem

Recall Richard's rebel spy that was introduced above. The incentive to spy comes from what Kalyvas calls the *identification problem*, the common feature in civil war that it is difficult to understand *who* exactly the enemy is; who is a participant in the armed struggle? One way to answer this question is to do as the 'refugee' in Richard's story. Short of this, each side must rely on civilians for insight. The information needed to solve the identification problem necessitates civilian collaboration. Political actors need information about local populations if they want to find out whom amongst that population supports them and their political opponent. Moreover, because opposition forces are often hidden as part of a local population, civilians can provide political groups with information concerning the plans and ongoing of the opposing group. Providing this information is a form of *collaboration*.

Violent organizations need civilian collaboration, but why should civilians collaborate with political groups? To say that civilians collaborate with organizations they support is a bit too simple. Civilians make strategic decisions to collaborate with rebels based on both civilian preferences and constraints in the face of some combination of persuasion and coercion from rebel (Kalyvas 2006, p. 101). Building on this, Kalyvas formulates and defends the following hypothesis: civilian collaboration with a political actor is higher in areas where that political actor exercises high levels of control (Kalyvas 2006, p. 111). The path of causality runs from *territorial control to collaboration*. A political actor needs civilian collaboration to solve the identification problem, and a political actor can induce collaboration through territorial control. Therefore, victory in civil war is "primarily a military task entailing extension of control over the entire territory of a country" (Kalyvas 2006, p. 138). No small task, the military and resource requirements for establishing and preserving control over the entire territory of a country are staggering (Kalyvas 2006, p. 139). To solve this resource problem political actors use violence as a means of controlling territory when resources are finite.

2.2 Violence as Deterrent

Lacking unlimited resources, political actors cannot establish control through sheer numbers, which places a premium on efficient use of existing military resources. One resource the military has at its

[5] Raleigh & De Bruijne (2015) is based on the data set developed by De Bruijne (2014), which I discuss in depth below.

disposal is violence and resource constraints thus place a premium on the effective use of violence. Violence attempts to alter future behavior (or kills off the possibility of future behavior), for example inducing collaboration and preventing defection, by shifting incentives, and modifying the costs associated with certain actions (Kalyvas 2006, p. 141). In this way, political actors wield violence using a theory of deterrence, which reason that threats can reduce the likelihood that certain actions will be undertaken. As to what makes violence effective, Kalyvas first distinguishes between *indiscriminate* and *selective* violence, both "aiming to generate collaboration via deterrence" but differing in the level at which they assign "guilt" (Kalyvas 2006, p. 142). Selective violence attempts to ascertain individual guilt, and this entails personalized targeting. Indiscriminate violence implies collective targeting, assigning blame at the group level.

2.3 Indiscriminate Violence

Think again of the 'refugee' spy in Richard's story. Imagine that after the first night in town, the rebel spy became scared and fled back to the RUF base. During the day he had discovered that, in fact, leaders of local defense units were staying in the village, but the spy hadn't been able to figure out who they were. When the spy reports this information to RUF commander, the commander decides he will attack village on the grounds that it contains enemy leaders. Not knowing the exact identities of their enemies, the rebels will be forced to take their best guess. When the selection criterion for violence is rough and approximate, this is *indiscriminate violence*. Indiscriminate violence has a logic which says: "if the 'guilty' cannot be identified and arrested, then violence ought to target innocent people that are *somehow* associated with them. The underlying assumption is that the innocent will either force the guilty to alter their behavior or the guilty will change their behavior when they realize the impact upon innocent people they care about- or both" (p. 150).

Indiscriminate violence can actually work *against* deterrence because the threat is so unpredictable. First, indiscriminate destroys the ability for an individual to predict violence from action, and therefore avoid it. With no relation between crime and punishment and incentives for good behavior are destroyed (Kalyvas 2006, p. 143). Second, random violence eliminates the safety of passivity and reduces the cost of joining the opposition. The risk of joining the opposition is still the same (death if found out), but the risks of "remaining neutral" and collaboration rise, as death may visit you randomly. In this way indiscriminate violence diminishes the cost of defection, preciously the action the violence is meant to prevent. Attacks in which violence is administered on such vague criterion and guilt is assigned on a collective level, rather than violence aimed at individual targets who perpetrated specific offense, produce a greater quantity of casualties. Remember, political actors have less information about the specific identity of their enemies when they have less control over that territory. This means that when political actors have more control over territory, they have more information about their enemies, are more discriminating, and attacks produce less casualties. This brings us to our first hypothesis:

H1: When political actors have more control over a territory, attacks on villages in that territory produce lower casualties, compared to attacks by a political actor on villages outside of their control.

2.4 Selective Violence

Let's return to the spy from Richard's story. Instead of leaving after the first night, imagine that the spy stayed three weeks in the village, and gather information about the exact identity of several leaders of the local civil defense unit. When violence is targeted at a specific individual, it is *selective violence*. For violence to act as a deterrent, civilians need to believe that the person killed could have been guilty of collaborating with the opposing political group.[6] Unlike indiscriminate violence, selective violence can be an effective way to shape behavior; it raises the cost of defection, which is met with violence, while leaving "good behavior" unharmed.

Selective violence is the dominant form of violence close to a political actor's base, where information can be effectively gathered. This describes only the *intensity* of an attack, not the likeliness that it will occur. Individuals differ in their preferences of which group they would like to offer their allegiance (support), but if an individual defects to and collaborates with the opposition, he faces the possibility of being found out. The probability that a defector is either detected directly or denounced and caught increases as the dominant party consolidates control. When control is absolute only a martyr defects, knowing he will be found out. As control moves away from absolute, more individuals are willing to take on the cost of defecting. While the probability of being detected prohibits defection when control is total, this probability diminishes as control wanes; willingness to defect is negatively related to control. This means that that a civilian's willingness to defect reaches its highest point where control is completely contested by the two organizations.

Defection is just one side of the violence equation. An individual who decides to inform on his peer is left vulnerable to a counter-denunciation by the kin of the denounced. Consider again our spy. Beyond identifying local defense leaders he has been actively but covertly courting local youth to join the rebels. The spy has struck a chord with a youth named Ibrahim, who is contemplating sharing information about where the local defense units are conducting training. When Ibrahim is sharing his thoughts with a friend another youth named Alex is walking by and overhears the conversation. Alex knows he should report Ibrahim immediately, as not doing so would put many people at risk. However, Alex must be careful because Ibrahim will know that Alex has given him up and this may put Alex's family in danger. What is to prevent Ibrahim's family from going to the rebels and denouncing Alex's family as government lackeys, in order to seek revenge? While the possibility to defect rises with territorial contestations (as opposition become more available), the actual act of denouncing is limited by the possibility of counter-denouncement. Therefore, actual denouncement is highest where a group has dominant, but not complete, control. This reasoning leads us to our second hypothesis.

H2: Political actor are less likely to attack villages outside of the territory they control, compared to villages within their own territory.

[6] Though it is not actually essential that the person killed was guilty, the effect is the same if people believe the victim could have been guilty. Political actors "need to cultivate a *perception of credible selection*" (Kalyvas 2006, p. 190).

2.5 Violence & Territorial Transition

Our focus thus far has been on violence that takes place when territorial control is already determined. Several scholars emphasize territorial transitions, especially the loss of territory, when explaining civilian victimization. Hultman (2007) suggests that rebels target civilians to increase their bargaining position with the government. Using cross-national data Reed (2010) argues rebel violence against civilians stems from a lack of capacity and inability to coax loyalty from civilians with benefits. However, my own approach is to consider the way that territorial transitions affect the relationship between rebels and civilian and therefore rebel incentives towards selective violence. To do this, I turn to Mancur Olson's concept of 'roving bandits'.

Olson tells us that 1920s China was a playground for banditry, and that roving bands of thieves plagued civilians. However, civilians preferred one warlord, Mr. Feng, above the rest. While other warlords moved from town to town and region to region, Mr. Feng ran a sedentary operation. When Mr. Feng realized that other *roving bandits* were cutting into his own take, he deployed his own army to control them, to the immense joy of surrounding villagers. Mr Feng extracted plenty of resources from the people he lived amongst; he was still a bandit, but a *stationary bandit.*

Mr. Feng's stationary nature gave him a different incentive structure than the roving bandits that his army put in check. It wasn't Mr. Feng's kind heart that lead him to be preferred by the surrounding peoples, he was just as much concerned with extracting rents from the local population as the other bandits. Rather, Mr. Feng was preferred because he had an interest in keeping the local economy moving. After all, it was from this local economy that Mr. Feng would be extracting his rents. And because he was stationary rather than always moving Mr. Feng actually had an incentive to maximize the productivity of the local economy, even if only to steal from it. In contrast, roving bandits never remain long in the same location. Therefore, the incentive structure for roving bandits is to take as much as they can from a local population in the current time period; there is no incentive to consider the productive capacity of the local economy in future time periods.

This has wartime implications. Events where rebels are especially uninterested in establishing long-term relations with civilians are instances where rebels are more likely to use indiscriminate and non-strategic violence. Like the roving bandits, roving rebels will not remain in a region long enough to feel the wrath of angry civilians or capitalize from the benefits of civilian favor; roving rebels have no incentive to court civilians or avoid their fury. I argue that events in which rebels either gain territory or lose territory are instance where rebel actors are most disinterested in forming long-term relations. Loss of territory is more intuitive; if rebels are forced off of territory where they previously occupied they are severing their relations with the civilians living in the area and will face minimum costs for non-strategic violence. When rebels gain territory, many of the rebels who carried out the attack will continue to push the front lines and will not establish long-term relations with civilians in the 'gained' area. If the decision to use violence is made at the individual level (or at least within small fighting forces), fighters who plan to move on from the area being 'gained' will have limited incentive for strategic violence.

Non-strategic decision-making affects both the probability that rebels will carry out and attack and the type of violence they are incentivized to use in that attack. First, if strategic decision-making incentivizes

rebels use of violence to patterns that are clear and understandable for shaping civilian behavior, rebels must exercise restraint on when and where violence is used. However, if rebels use violence non-strategically, there are no restrictions on when rebels can use violence.

H3: When political actors undergo events of territorial transition—they gain or lose territory—they are less strategic in their use of violence and attacks against civilians are more likely.

It is strategic decision-making that incentivizes rebels to use selective violence. However, if rebels have no need for strategic decision-making, and therefore no need for selective violence, attacks should produce more casualties.

H4: When political actors undergo events of territorial transition—they gain or lose territory—they are less strategic in their use of violence and attacks produce more casualties.

3. Data and Sample

3.1 Data Sources

This study draws from two data sources. The first source is a community level survey administered in 2010 in 193 villages across seven chiefdoms near the Gola forest in the southern regions of Sierra Leone. This region was a hotbed of rebel activity during the war years because the proximity to Liberia and presence of several key rebel bases. We asked village leaders about attacks that their village experienced during the war. We recorded the month and year of each attack, how many people were killed and wounded in the attack, and who was the perpetrating party. We also asked village leaders about migration out of the village during the war, and gathered information concerning the timing and group size of these migration events, and return migration events. Additionally, we asked respondents to estimate the pre-war population in the village.

The second source of data is the conflict mapping project released in 2004 by the organization No Peace Without Justice (NPWJ). The project sought to identify human rights violations and was eventually admitted as evidence at the Sierra Leone Truth and Reconciliation Commission. The NPWJ report mapped conflict events chronologically and geographically over the course of the 10 year war. Data was collected from key persons throughout the county who were in a position to follow wartime events as they unfolded. I use this data for determining patterns of territorial control in the southern regions near the Gola Forest, where the above mentioned study took place.

Our data differs from the data that has previously been used to analyze wartime violence in Sierra Leone in three important ways. At least five data sets contain information on violence during the civil war in Sierra Leone, though the most comprehensive is the data set compiled by Kars De Bruijne in his "SLL-LED" data set, which is based on NPWJ data.[7] However, there are still several potential biases in this dataset that stem from the nature of the NPWJ data source. First, the NPWJ protocol was to identify "key persons" within a chiefdom to recount wartime events. However, on average on there was only

[7] See his data note in: De Bruijne, Kars. 2014, "Introducing the Sierra Leone Local - Location Event Dataset (SL-LED)" for in-depth comparisons between data sets and potential biases. I reproduce some of this here.

three key people per chiefdom. Considering that these individuals probably lived in one village for the duration of the war (or large periods of time) they may not be aware of all of the events happening in all the other villages in the chiefdom. This may bias data towards major towns where "key people" live. In addition, this underreporting may be especially pronounced in more inaccessible villages. Patterns of violence may be different in these larger "key towns" compared to more rural villages. Our community level survey attempts to avoid this urban bias by visiting rural communities. While the sample is not exhaustive of all the villages in the area, the community level survey can draw a more representative sample.

Second, the NPWJ report lacks both geographic precision and time precision. Many events in the SLL-LED data set are geo-referenced only at the chiefdom or district level. Our community level survey can pinpoint the exact village for all of its victimization information. This allows for a more finely tuned spatial factor in our analysis. This is important because conflict dynamics may operate on a micro-level (Van der Windt & Humphreys 2016). When dealing with theories of territorial control, this level of geo-precision is imperative, as we can observe the precise distance between an attacked village and military base locations. A chiefdom is a large geographic area, and locating an attack as occurring *somewhere* in the chiefdom does not allow us to consider micro-dynamics of territorial control.

Third, previous data sets code violence against civilians as singular units. This merges two separate outcomes that our data disentangle: the occurrence of an attack and the intensity of an attack. To untangle these outcomes, our survey records the event of an attack but also the number of people killed and the number of people wounded in each attack. This allows us to separately analyze the factors driving the occurrence of an attack and the factors driving the intensity of an attack.

3.2 Dependent Variable: Violence

Data on the violence committed against civilian is taken from the 2010 Gola forest community survey. As noted above, one of the advantages of this community level survey is that we obtain information regarding both the occurrence of an attack event, and the violence intensity of that attack. Therefore, we use this data to construct two dependent variables.

The first dependent variable is the number of attacks that occur in a village during given time period of the war. A time period stretches the duration of a fixed pattern of territorial control amongst militant actors. In the theoretical section I introduced the concept of territorial control and made predictions based on a fixed state of territorial control. Below I discuss how I divide the war up into these "periods" of fixed territorial control. At the moment it is only important to understand that this *occurrence* variable measures the number of attacks that happen in a village in each period. There are 193 villages and nine war period, which means there is 1737 observations of 'VillagePeriods' in which a village could have been attacked. In most Periods, in most villages, rebels do not attack. This is shown in the histogram below (figure 1). More details can be seen in Panel 1 of Table 1 Summary Statistics. Over 85% of the VillagePeriods do not contain a rebel attack. Rebels attacked a village one time in a period in 201 instances. Occasionally rebels attacked a village multiple times in the same period. On 29 Occasions rebels attacked a village twice in the same period, on four occasions rebels attacked a village 3 times and on a single occasions rebels attacked a village four times in the same period. The histogram also

shows that the dependent variable for attack occurrence—how many times a village was attacked during a VillagePeriod—has a non-normal distribution. The standard deviation of the number of attacks that occur is greater than the average number of attacks that occur. This variable is used to answers questions about the likelihood of an attack occurring.

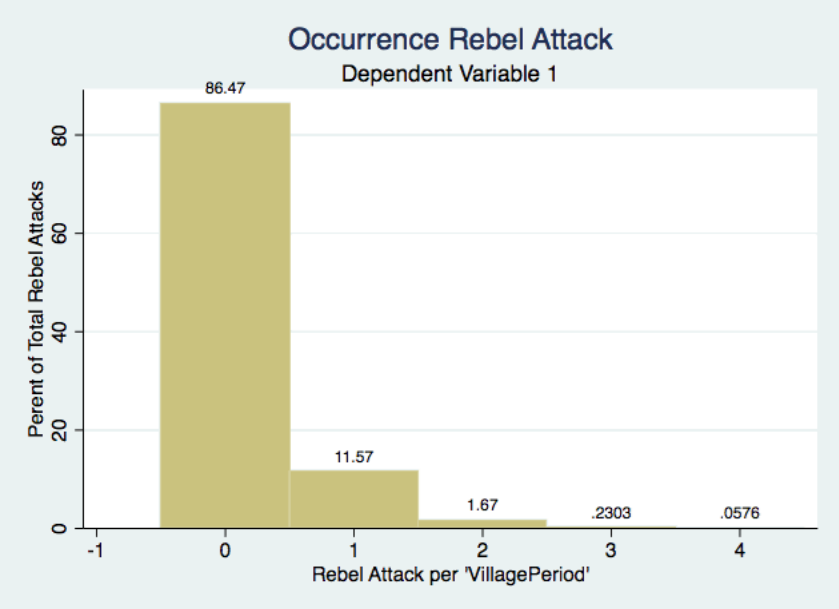

Figure 1 - Occurrence of rebel attack

The second dependent variable is the number of people killed in each attack and is used to answer hypotheses about the intensity of attacks. In the terms of the theoretical approach introduced above, the number of deaths per attack is a proxy for the selectivity of violence; more deaths means more indiscriminate violence. In essence, this variable attempts to capture the degree of collective targeting of civilians by violent actors. Previous studies of wartime violence against civilians have used the number of civilians killed to proxy for collective targeting (ex. Fjelde & Hultman 2013). By focusing on the number killed, rather than the number wounded, I follow Kalyvas who argues that lethal attacks offer a more clear-cut indicator of the intentionality of violence (Kalyvas 2006). This information about civilian victimization is count data, where the number dead or wounded is discrete and cannot be a negative number. My final sample contains 273 attacks. The attack intensity data has a non-normal distribution and is overdispersed; the standard deviation of more than 20 people killed is larger than the mean 8.5 civilians killed in an attack. This can be seen in the histogram below (figure 2) for civilians killed per attack, and by referring to the summary statistics in Panel 2 of Table 1. Zero civilians are in 33% of the rebel attacks but in the most intense attack, rebels killed 250 civilians.

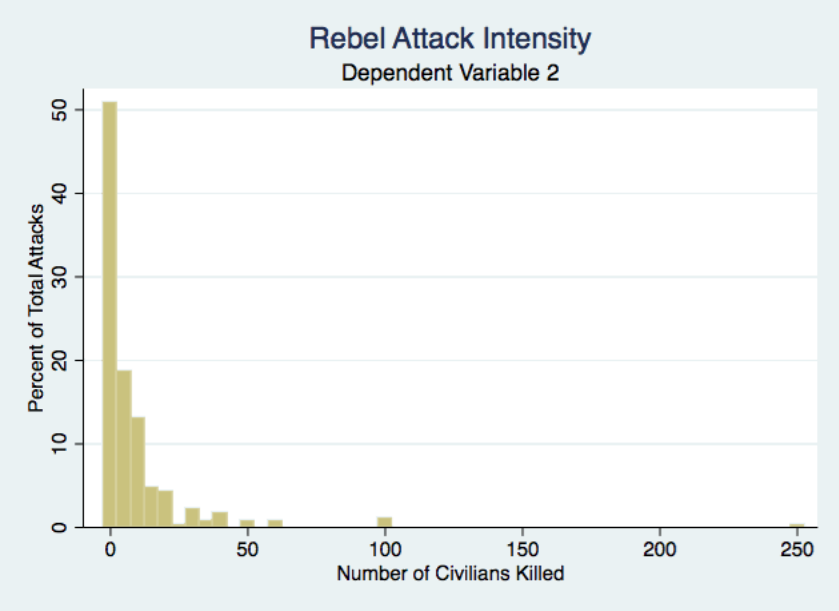

Figure 2 - Intensity of rebel attack

3.3 Explanatory Variables

Territorial Control

My key explanatory variable is a dummy variable, which signifies the state of territorial control in a village at a given time, ie war Period. This variables indicate whether a village was under rebel control, or outside of rebel control at any given point of time. To determine the state of territorial control in a village and how it changes over time, I follow the method used by Kaylvas (2006) and break the war into relatively stable "periods" of control. Using the NPWJ report I record every event in the districts of Pujehun, Kenema, or Kailahun (in which the 7 chiefdoms are located) that suggests *establishment or changes in military control*. As the military struggle develops, a group's control over certain villages also changes. When control changes in any of the villages in our study area, I consider the war to have entered a new period; the following events take place in a new *period*[8]. After Periods of the war are delineated, I code every village for its level of territorial control by period. To determine the state of territorial control in a village in a given period, I look the distance from the village to surrounding military bases in that period. Occasionally, there are locations of on-going struggle and military contestation, where military actors are continuously exchanging control In these instances I also take into account the distance that a village is from these loci of struggle. By using GIS software to draw a sphere around military bases and points of contestation I code for territorial control using the following coding rules:

1:If a village falls within a sphere around a rebel base, that village is under **rebel control**.

[8] A more detailed description of this process, as well as the outcome of the event mapping is recorded in Appendix C.

2: If a village falls within a sphere around an incumbent base, that village is under **incumbent control**.

3: If a village falls within a sphere of both groups, it is a **contested village**.

4: If a village falls within a sphere of a contested event, it is **contested village**.

5: If a village falls outside the above zones of control, the village is a **Low Control** village.

In addition, the war in Sierra Leone was linked in a fundamental way to war and politics in neighbouring Liberia.[9] Therefore, all villages within 3K of the Liberian border are labelled as RUF control.

I offer an example of my coding procedure:

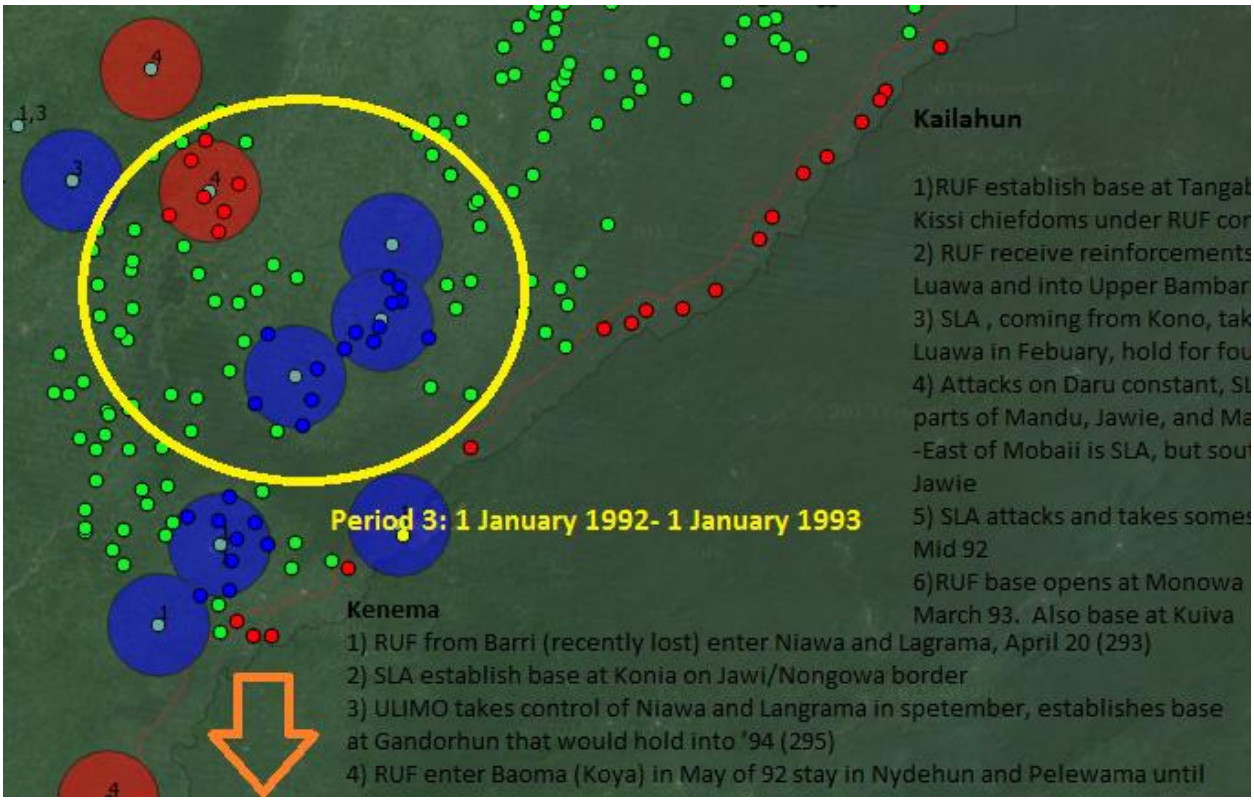

Figure 3 - Coding territorial control

Figure 3 displays Zones of Control during period 3 and 4. Period 3 runs from January 1992 to January 1993 and Period 4 runs January to May 1993. The yellow circles in each frame encircle the same group

[9] In 1989 Taylor flew to Sierra Leone with the hope of convincing president Momoh to host his revolution. Momoh demurred and Taylor again found himself in prison. Soon free, Taylor and managed to link up with Foday Sankoh over the next few weeks while Taylor lingered in Freetown. When Taylor led a force of 150 fighters across the Cote d'Ivoire border and into Liberia's Nimba County during Christmas of 1989, Sankoh was among the troops. African scholar Stephen Ellis (1995) goes so far as to suggest that Foday Sankoh only had "nominal" control of the RUF when it invaded Sierra Leone; he asserts the RUF was simply a proxy for Taylor's NPFL. The RUF obtained its weapons from the same sources as Taylor. Whatever the case, that RUF launch their "revolution" from Liberian soil is no coincidence and Taylor's increasing control over Liberia would frequently provide RUF safe harbour.

of villages. In period 3, the top frame, the yellow circle contains 4 spheres, three blue and one red. In the bottom frame, period 4, the yellow circle does not contain any spheres. The blue spheres are areas of incumbent (government) control around incumbent bases and the red sphere is an area of rebel control around a rebel base. The villages within the red sphere are under rebel control, villages within the blue sphere are under incumbent control and villages outside either sphere are in low control (green). According to the process described above, I map the relevant spheres during all periods of the war, and use those control spheres to code for territorial control of a village. This process allows me to code a zone of control for each village in each of the 9 periods. However, the size of the sphere contains an implicit assumption about size of territory a military actor can control. To manage this uncertainty I repeat this coding process a total of three times for three different sphere radiuses: at five kilometres, ten kilometres, and fifteen kilometres.

When I discuss results, I will look at the effects of territorial control and transition on violence outcomes across different specifications for control. It is important to understand why territorial control coding for a village might change depending upon the distance at which control is specified.

Figure 4 highlights the extent to which zone coding changes depending on whether control is specified at 5k, 10k, or 15k from a base. Figure 4 displays three rebel zones of control. The orange points are villages. The red inner circle marks the rebel controlled area, defined at 5k, and all villages within the red circle are coded as rebel control in the 5k specification. The middle blue zone marks the increase of villages under rebel control, when we specify control at 10k. The widest yellow circle specifies rebel control at 15k and under that specification all villages within the yellow circle are rebel controlled. When rebel control is defined at 5k, we compare events that occur in villages very close (five kilometers) to a rebel base, to event that occur outside of that area. As the control specification is expands to 10k and 15k, we increasingly consider events that occur further from a rebel base as occurring in “rebel controlled” areas.

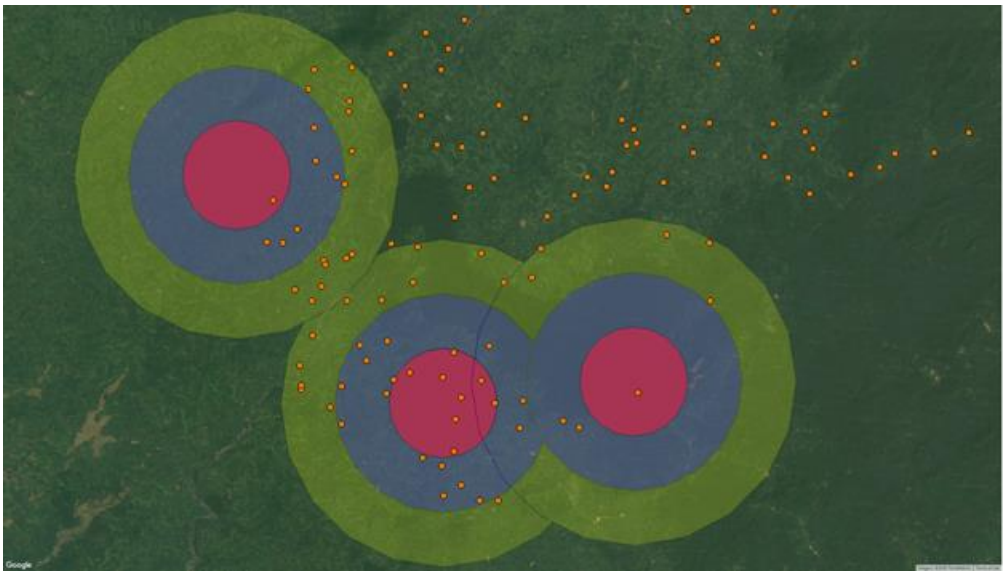

Figure 4 - Comparing zones of control

3.4 Dealing with Reverse Causality

This coding strategy avoids problems of reverse causality. Kalyvas's theory suggests that patterns of territorial control cause patterns of violence. However, if we are looking for correlational relationships between territorial control patterns and violence patterns, couldn't it also be the case that patterns of violence cause patterns of territorial control? This seems intuitively plausible. Maybe in the places where rebels are most discerning and selective with their violence they generate good will from the local population and gain the support needed to set up a military base. In this line of reasoning, the causality would run from selective violence to territorial control.

My coding strategy avoids this concern by delineating time periods as points in the war where either rebels or government established a new base. To see why this coding strategy avoids issues of reverse causality consider Figure 5.

Figure 5 (below) compares the intra-period relationship between territorial control and violence under two scenarios. In scenario 1 patterns of territorial control cause patterns of violence, while in scenario 2 violence patterns cause territorial control. In both cases, the left column represents the current time period, P1, and the right column represents the following time period, P2.

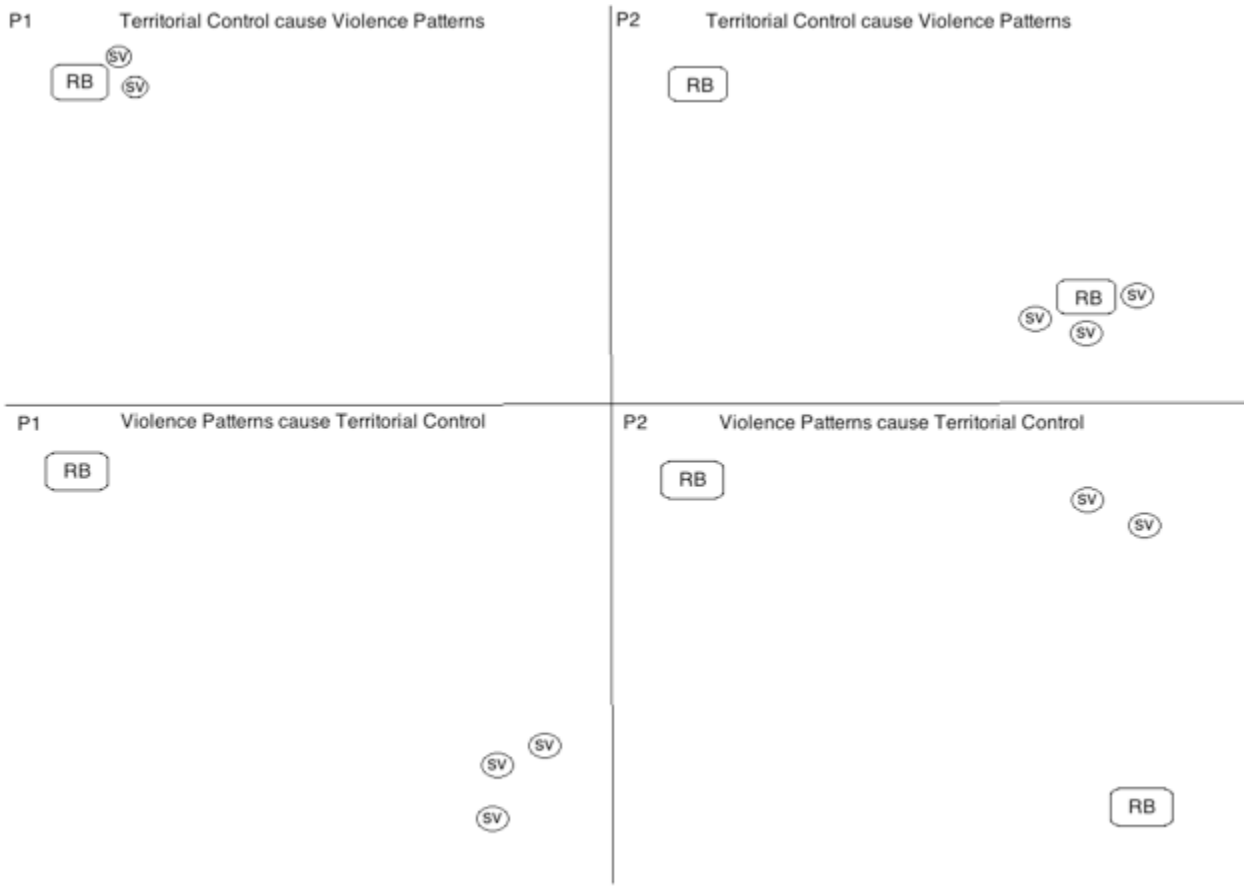

Figure 5 - Dealing with reverse causality

In scenario 1, rebels have a base during P1, and this causes selective violence around the base. We observe the predicted correlation in this scenario; selective violence occurs near the base in P1. Rebels set up another base—at the moment a new based is established we enter P2. Selective violence is used around the base and again we observe the predicted relationship of selective violence occurring proximate to a rebel base.

Scenario 2 considers the situation in which selective violence *causes* rebels to establish bases. Rebels have a base during P1 and (for whatever reason) the military units operating in the bottom right have been very selective with their use of violence. This use of selective violence garners support from the local population and rebels set up a second base in the area where they used selective violence. However, based on coding procedure, the establishment of a new base pushes us into a new time period, P2. The predicted relationship, that selective violence is observed proximate to rebel bases, is not observed in P1. In P2, the rebels have a new base, but the selective violence that caused the establishment of the base occurred in P1. The predicted relationship is not observed.

If we observe the predicted relationship between territorial control patterns and violence patterns, my coding technique rules out the possibility that we are observing a situation in which violence patterns caused territorial control patterns. This doesn't rule out the possibility that there exists a causal pathway where violence patterns bring about territorial control patterns. Rather, I only make the case that my design allows for observing intra-period relationship that only capture the causal pathway from territorial control to violence.

Although my coding process delineates four areas of control—rebel control, incumbent control, contested control, low control— my hypotheses deal with rebel zones of control and that is my substantive focus. Overall rebel control is the highest in the beginning of the war, but rebel control falls off after the initial rebel rush. Rebel territorial control plateaus in the middle of the war, but spikes again after the AFRC coup in May 1997 brings rebels to power in Freetown. Under the 5k specification, rebels never control more than 18% of the study villages and at their weakest control just under 9% of the study villages.

Territorial Transitions

Using the variable I variable I constructed for territorial control, I construct another variable to describe territorial transition. Given the theory I use for territorial transitions and my focus on rebel attacks, I am only interested in territorial transition in which rebels gain or lose control over villages. This can happen in two ways. First, a territorial transition occurs if a village moves from outside of rebel control in the previous period to within rebel territorial control in the current period. Second, a territorial transition occurs if the village was under rebel control in the last period, but falls out of rebel control in the current period.

Most of the time, a village does not undergo a territorial transition when moving between periods. Depending on distance at which control is specified (the size of the control sphere around a military base) a territorial transition occurs about 5-14% of the time as a village moves from one period to the next. About 8-12% of attacks that did occur came directly following a territorial transition.

3.4 Control Variables

Village Population

Intuitively, it seems possible that the population of a village is correlated with both the number killed in an attack and the probability that an attack takes place. One mechanism for this possible effect could be because the village has more people. Another possibility is that more populous villages are closer to the road; in situations like this population size serves as a proxy. To control for these effects we include the estimated population of the village in 1990, as estimated by the village leaders who completed our surveys. Panel 3 of Table 1 shows that village populations ranged from the smallest at 40 civilians to the largest at 8000 civilians. The mean population size was just under 600 people and the standard deviation of village size is 865 people. These numbers change very little when we consider population size in villages that were actually attacked (the right hand column in Panel 3, Table 1). In attack events, the mean village population is about 575 people and the standard deviation is 683 people.

Wartime migration

As mentioned above, the population of a village may have an effect on the intensity of an attack or probability of an attack occurring. However, the number of people who lived in a given village varied widely over the course of the decade long war. Numerous refugee camps were set up within Sierra Leone and in neighboring countries during the war, and hundreds of thousands left their homes during the war.[10] Failing to account for migration patterns could bias our results, especially considering the substantial migration numbers. If migration is a significant factor and migration levels differed over zones of territorial control then we might attribute variations in our dependent variables to a Zone of control when in fact the effect is actually due to migration fluctuations. For example, if greater migration out of a village diminishes attack intensity, and there is greater migration out of rebel controlled areas, failing to control for migration would give a negative bias (on attack intensity) to villages in rebel controlled territory, leading to a false impression that attacks in rebel zones were less intense. I account for this by using migration data from our surveys to estimate the number of villagers who had migrated out of the village before an attack took place.

Panel 3 of Table 1 displays the number of civilians who have left a village, measured at the start of each period. For example, if 10 people left a village after period 1 and another 10 left after period 2, the migration number listed in period 3 would be 20—20 people left before the start of period 3. A mean average of 330 people left a village before the start of a period, with a standard deviation of 684 people. The right hand column displays the mean and standard deviate of migration events that occurred before an attack took place; the sample considers only attacks that took place. A mean average of 237 people left a village before an attack occurred in that village, with a standard deviation of 428.

[10] For example, during the peace process, a de-militarized "humanitarian corridor" running from Forecariah in Guinea to Port Loko Town in Sierra Leone allowed for the return of "hundreds of thousands of refugees from Guinea to Sierra Leone" (NPWJ, 162). This helps to grasp the magnitude of refugees generated by the war.

Previous Attack

Often times, villages were attacked more than once. Whether or not a village had been attacked before may effect rebels decision to attack that village again. However, it is difficult to say in which direction the effect might be. Maybe after attacking a village once, increases the probability that the same village is attacked again as rebels get to know area and are comfortable with the bush paths that lead to that village. On the other hand, maybe rebels ransack the village in their first attack, and avoid villages they have already plundered. The occurrence of a previous attack may also affect the intensity of violence in a future attack. Again, it is hard to say what the direction of an effect might be, as logic exists in multiple directions. Maybe the fact that rebels have already attacked a village signals a particular distaste for that village, and the intensity of violence is higher in villages that have been attacked before. Or maybe rebels take out most of the civilians that they distrust in the first attack, and therefore second or third attacks are much less intense because these villages now contain little threat. To control for these possibilities I create a variable to measure the number of attacks that have occurred in a village before the current time period.

Periods of the War & Event Location

The decade long civil war in Sierra Leone provided multiple regime changes, instances of external intervention from both foreign governments and private mercenaries, and continuously changing and splintering command chains amongst rebel and incumbent military forces. I divide the war into 9 periods of relatively stable territorial control in the study region. By using these time periods as control variables, I account for broader social, political, and military events, which may drive violence patterns in my study area. In addition, the war undoubtedly played out differently in different locations. I included a chiefdom level dummy to control for potential chiefdom specific effects on patterns of violence.

3.5 Issues with the data

The survey data suffers from two main limitations: First, on occasion our data contains insufficient information about the timing (dates) of events. This affects my ability to 1) accurately place an attack in the correct war Period, and 2) identify if a migration event took place before or after an attack. The second data limitation concerns a bias in the perpetrator of an attack: nearly every attack is attributed to rebels. I deal with these issues in turn.

Insufficient Information

First, some attacks were recorded without being adequately dated. Generally, this meant that the observation did not contain a month of attack. The timing of an attack is very important for my identification strategy, as it determines which Period the attack took place in, and therefore the zone of control at the time of the attack. Observations are dropped where a missing month inhibits my ability to accurately place the attack in the proper period. Observations that are missing a year or have an improbable date (for example June 1982) are dropped. Before dropping attacks due to insufficient time information there is 348 attacks; 227 of these attacks kill at least one person. 75 attacks are dropped and the data set now contains 273 attacks.

The migration data suffers from similar issues. To develop an accurate Migration variable for my intensity dataset, I need to account for the number of people who left the village *before* the attack took place. However, migration events are listed by year, without specifying a month. While I can accurately place a migration event if it occurred in a year prior to or after the attack, I cannot accurately place a migration event if it occurred in the same year as the attack. For example, if a migration event is listed in 1993 and the attack occurred in 1995, then I know to include that event in the migration variable. But if a migration event and the attack both occurred in 1995, I cannot be certain if those people left the village before or after the attack, thus I am uncertain of my migration variable.

To deal with this I need to use a systematic coding pattern that makes one of two assumptions: my in doubt, I need to assume either all migration events happened *after* the attack or all migration events happened *before* the attack. In both strategies we bias the estimated effect of migration and in doing so we don't fully control for migration. I spell out this reasoning in Appendix B. For the moment I construct my migration variable under the assumption that uncertain migration events happened after an attack. That is, when a migration attack happens in the same year as an attack, I do not include this migration event in my variable. If migration events appear to be associated with violence patterns I will return to this discussion to explore how different coding options may shift estimated effects. Appendix B contains a thought experiment to explore potential biases.

Uncertain perpetrator of attack

The second data limitation concerns an obvious reporting bias for the perpetrator of an attack. Nearly every attack has been attributed to rebels. Just 10 of the 451 attacks are reported to have been perpetrated by the Sierra Leone Military (RSLM, also referred to as SLA) or the Civil Defense Forces (CDF). Of the remaining 441 attacks, 349 are reported to have been committed by the RUF, 30 by AFRC and 41 by foreign mercenaries. The remaining attacks are missing information about attacked identity. I classify groups RUF and AFRC as "rebel". While the category "foreign mercenaries" was intended to code for external participants such as Executive Outcomes and Sandline International, many of the comments left in the survey refer to 'rebels' and suggest that attacks by *foreign people* (namely Liberians affiliated with the RUF) were labeled as foreign mercenaries. However, given the ambiguity it is safer to consider foreign mercenaries as a separate category. Given that both qualitative accounts of the war and the government's own official Truth and Reconciliation commission implicate all sides in wartime atrocity, the breakdown given by the respondents in our survey seems implausible.[11] Either attacks on villages perpetrated by non-rebel groups were not mentioned to enumerators or attacks committed by non-rebel groups were attributed the rebels. In the former situation we miss incumbent violence, but still have an accurate depiction of rebel violence patterns. In the latter situation attacks made by other parties are attributed to rebels. I want to discuss the implications of this latter situation

This misidentification will bias our results in a systematic way. If we consider rebel attacks, theory would predict the bias to raise the observed intensity of attacks that occurred in areas close to rebel

[11] For involvement of many actors in committing atrocities see Richards (1996) or Peters (2011) or Gberie (2005). For survey data on wartime violence see Humphreys and Weinstein (2006). The Truth and Reconciliation commission attributes 70% of the human rights atrocities to the RUF (Conibere et al., 2004). According to Bellows & Miguel (2009) the NPWJ reports that 75% of attacks and battles have RUF as primary fighting force.

base above their true level. The logic here is that some of these attacks, while attributed to rebels, were in fact committed by non-rebel forces. As non-rebels are predicted to have higher attack intensity near a rebel base compared to rebels, the misidentification raises the observed rebel attack intensity near rebel bases. By the same logic, the misidentification lowers the observed intensity of rebel attacks below their true level for attacks in non-rebel areas. Some of these attacks, while attributed to rebels, were in fact committed by non-rebels. Theory predicts non-rebels would have lower attack intensity in these areas than rebels and therefore the observed attack intensity of rebels is lower than the true level in the areas far from rebel base. This means that the estimated coefficient for rebel zone of control will have an upward bias, and the estimated coefficient of non-rebel zones will have a downward bias possibility covering our prediction that attacks in rebel control zones are less intense. While this may cloud results, it means we are more likely to reject a real effect than accept a non-existent one. This bias also affects predictions about attack occurrence, lowering the observed rebel attack probability in areas of rebel control and raising the observed attack probability in areas of non-rebel control. Of course, we cannot simply assume that a theoretical pattern is true in the process of empirically testing it. We need to be wary of the potential of this misidentification bias to cause us to accept an non-existent effect. For example, the only pattern that would bring about a false positive (incorrectly accepting a non-existent effect) for the attack intensity hypotheses is if non-rebel attacks are more intense close to non-rebel bases and less intense near rebel bases. We should keep this in mind, but it would seem to be an odd pattern. It might also be the case that these misidentified attacks do not follow a systematic pattern and their intensity and occurrence are random. Again, this works only to cloud any effect that we see, and will raise the chance of a false negative. While there is very likely a measurement error here, it may not be very large. The survey results surely overestimate how many attacks were committed by rebels, but 70-80% of the attacks being committed by rebels would be in line with other empirical investigations. What this means, however, is that I restrict my analysis to patterns of rebel violence against civilians.

4. Model

4.1 Modeling Attack Occurrence

To estimate the probability of an attack occurring I exploit a panel data created when I broke the war into time periods. Each village is observed in each of the nine time periods. The dependent variable is the number of attacks that occurred during a given period. There are two key explanatory variables: the first key explanatory variable is dummy for if a village is located in rebel-controlled territory during a given period. The second key explanatory variable is a dummy for if a village underwent a territorial transition from the last period to the current period. The dependent variable is over-dispersed count data and I therefore use a negative binomial regression, specified random effects (I discuss this decision at length below).

I estimate attacks per period:

$$A_{vt} = \beta_0 + \beta_1 Rebel_{vt} + \beta_2 TT_{vt} + \beta_3 Previous_{vt} + \beta_4 Pop_v + \beta_5 Mig_{vt} + Xchf_v + Xper_t + \mu_{vt} + \epsilon_{vt}$$

Where A_{vt} refers to the number of attacks that occurred in village *v* during Period of the war *t*, with *v*=1...,193 and *t*=1...,9. $Rebel_{vt}$ takes the value 1 if village *v* was under rebel control in period *t and* 0 if village *v* is outside rebel territory during period *t.* TT_{vt} takes the value 1 if village *v* experienced a territorial transition in moving from the previous period, *t-1,* to the current period t and takes the value zero if the village experienced no such transition. $Previous_{vt}$ is a dummy variable, which take the value of 1 if village *v* has been attacked before time period *t*, and takes the value of 0 if village *v* has not been attacked before time period *t.* Pop_v is the control for village population, which is time-invariant and Mig_{it} is a time-variant migration variable, which is the total number of people who left the village before the start of the current period *t.* $Xchf_v$ is a vector of dummy variables, which takes a value of 1 if the observation village falls in the corresponding chiefdom. $Xper_t$ is a vector of dummy variables, which take the value of 1 if the observation falls within the corresponding time periods. In the model presented above the constant β_0 is the average of $\alpha_{v,}$ unobserved village level characteristics. μ_{vt} is the between village error term and $\mathcal{E}_{it}$ is the within village error term.

4.2 Modeling Attack Intensity

To estimate the effect territorial control and transition on intensity if a given attack—defined as the number of people of I take as observations only those instances where an attack has occurred. I pool all these observations and model with negative binomial regression, as we are dealing with dispersed count data. Standard errors are clustered at a village level. I estimate the number of civilians killed in an attack:

$$D_a = \beta_0 + \beta_1 Rebel_a + \beta_2 Transition_a + \beta_3 Previous_a + \beta_4 Pop_v + \beta_5 mig_a + Xchf_v + Xper_t + \epsilon_{av}$$

Where D_a refers the number of civilians killed by rebels in attack *a* where *a*=1..,273. $Rebel_a$ is a dummy variable, which takes the value of 1 if an attack occurred in a rebel-controlled village. $Transition_a$ is a dummy variable, which takes the value of 1 if attack *a* occurred in a village following a territorial transition. Pop_v is the population of the village *v* in which the attack *a* occurred. $Previous_a$ is the number of attacks that have occurred in the village where attack *a* occurred, previous to the occurrence of attack *a*. Mig_a is the number of people who left the village where attack *a* occurred, before attack *a* took place. $Xchf_v$ is a vector of dummy variables, which takes a value of 1 if the observation village falls in the corresponding chiefdom. $Xper_t$ is a vector of dummy variables, which take the value of 1 if the observation falls within the corresponding time periods. $\mathcal{E}_{av}$ is an error term where the error for attacks *a* are clustered at the village level, *v*.

4.3 Potential for Omitted variable bias

In this paper I look at relationships between wartime rebel territorial control and rebel violence against civilians. I hypothesize that patterns of territorial control and transition lead to certain patterns of civilian violence. The models presented estimate relationship between territorial control/ transitions and patterns of violence against civilians. However, if we observe a relationship between territorial control and rebel violence, how can we be certain that the violence effect is actually due to territorial control/transitions and not some other third factor associated with both my explanatory and dependent variable? For example, it might be the case that rebels set up bases in villages where they enjoyed

popular support. If this is true and rebels kill less civilians in places where they have more support, we would witness a relationship but it would not be do to our specified mechanism; the predicted patterns would be due to the variable Popular Support which we do not include in our model.

One potential for dealing with this problem is to use a Fixed Effects specification when we look at the probability of attack occurrence. The data contains the observations for the number of people killed in a village in each of the nine periods of the war. This allows us to see if the number of people killed during the war covaried with factors beyond village specific characteristics. A fixed effects approach only compares variation *within* villages, and we control for all characteristics that do not change over time. Therefore, if popular support is relatively static, our estimation can control for that village specific characteristic.

However, a Fixed Effects specification will drop groups (villages) that have do not have within group variation in the dependent variable. In the case of the occurrence analysis all villages that were not attacked will be dropped from the analysis because there is no variation in the dependent variable—it will be zero at every point in time. Yet, the information that a village was not attacked is important. If territorial control is correlated with villages that were not attacked at all, the FE estimator will present biased results, estimating attack probability with observations *only from villages that were attacked at least once*. The subpopulation these effects are based on is likely different than the total population. Therefore, Fixed Effects is not a good strategy.

An RE specification assumes that the unobserved characteristics of each village that drive the dispersion of the dependent variable, are not correlated with other explanatory variables. This leaves us open to omitted variable concerns that we mentioned above. For example, villages in very remote geographic regions may have attack intensities that are more highly dispersed than villages in less remote regions. The remoteness of a village, in this case an unobserved village specific characteristic, may also be correlated with territorial control- say they are easier for rebels to control. This would violate the RE assumptions. It might also be the case that rebels gain and controlled land through the way that they used violence against civilians. That is, in places where rebels deployed selective violence they were able to control land.

The actual wartime dynamics seem to belie these concerns. Rebels set up bases in main towns on the main roads that would allow them to access the interior of the country. More importantly, rebel often set up bases in the exact same place that their opposition either had previously held a base or would establish a future base. Of the 7 bases that rebels established in the area of our study, 5 were at one point in time a government base. Only 2 bases, both located in the Koya forest, were used exclusively by rebels. There are only 11 study villages within 5km of the bases that were used only by rebels.

This fact suggests that it is unlikely an unobserved variable will drive any observed effects. A potential omitted variable problem would stem from some (unobserved) village level characteristic that is correlated with the locations rebels established bases, that *really* drives patterns of violence. However, if rebels and government had a base in the same location, it cannot be differences in unobservable factors of surrounding villages that drives a difference in violence patterns—the villages are the same!

That said, unobserved factors of villages near where rebels set up bases *and gov/incumbent did not set up bases* could be driving difference in observed violence patterns. As mentioned above, there are only 11 such villages. I can test for the possibility that unobserved factors, particular to these 11 villages, drive violence patterns adding a dummy variable that takes the value of 1 if an attack (or VillagePeriod) occurs in one of the 11 villages. I make this check in the Robust section.

5. Results

My hypotheses make predictions about the probability of rebels attacking a village and the intensity of attacks that have occurred. Above, I presented how I model each of these processes separately. Below, I present the results to each model. I present the results from the occurrence model first, and then the attack intensity model.

5.1 Attack Occurrence Results

[Insert Table 2: Attack Occurrence]

Hypothesis 2 makes a prediction about the relative probability of an attack occurring inside a rebel controlled territory compared to an attack occurring outside a rebel controlled territory: *(**H2**) Rebels are more likely to attack villages inside of the territory they control, compared to villages outside of territory that they control.*

Table 2 compares the probability of an attack occurring in a rebel zone to the probability of an attack occurring outside of a rebel zone. The estimated effect of rebel control on the probability of an attack occurring is positive (the predicted direction) in all specifications However, the effect only approaches significance in the 10k specification (p=.16) and 15k specification (p=.15). In the 5k specification, the point estimate is smaller and does not approach significance.

Hypothesis 3 makes predictions about the effect of territorial transitions on the probability that a village will be attacked. A territorial transition refers to rebels either gaining or losing control over a village from one period to the next. The effect of territorial transition is significant and positive (the predicted direction) under the 5k and 15k specification. The coefficient remains positive in the 10k specification, but the effect is no longer significant. Under the 5k specification, a territorial transitions doubles the likelihood of a village experiencing an attack. Under the 15k specification, a territorial transition increases the likelihood of a village experiencing an attack by 45%.

In regards to the specified control variable, a village that has experienced an attack in the past is an estimated 46-52% more likely to be attacked (again), when compared to a village that has never been attacked. This is highly significant at all specifications. The pre-war population of a village and the number of people who fled the village during the war do are not correlated with the probability that a village is attacked.

5.2 Attack Intensity Results

[Insert Table 3: Attack Intensity]

Table 3 presents results from my model on the intensity of attacks. Table 3 compares rebel attacks that took place in rebel zones of control to rebel attacks that took place outside those territories. Hypothesis 1 contains predictions about the effect of territorial control on violence: (**H1)** *When political actors have more control over a territory, attacks on villages in that territory produce lower casualties, compared to attacks by a political actor on villages outside of their control.*

Rebel attacks on villages in rebel territory are less deadly than rebel attacks in areas outside of rebel control, but only when control is specified at 5K. When control is specified at 5K, rebel attacks in rebel territory kill about 46% less civilians than attacks on villages outside of rebel territory. For example, an attack that occurs in period 1 in Barrie chiefdom, in a village *outside of rebel control*, kills an expected 4.22 civilians. If a village in the same situation were *inside rebel control*, the attack would kill an expected 2.29 civilians. Obviously, the effect size represents a substantial difference. This effect is still negative in both 10k and 15k specification but the effect size diminishes and becomes insignificant.

Hypothesis 4 makes predictions about the effect of territorial transitions on attack intensity: (**H4)** *when rebels undergo events of territorial transition—they gain or lose territory—they are less strategic* in their use of violence and attacks produce more casualties.

There is a large and significant positive effect of territorial transitions on attack intensity in the 10k specification. While the estimated effects at the 5k and 15k specifications are in the predicted direction, they are just beyond significance. In the 10k specification, rebels kill 1.9 times as many civilians when the attack follows a territorial transition, compared to attacks that do not follow a transition.

The population control variable has a significant effect in the predicted direction. Depending on the specification an additional hundred people estimated to have lived in the village before the war correlates with about a 5% increase in civilians killed during an attack. Attacks are less intense when they take place in villages that have already been attacked. This result is highly significant across specification. Each additional previous attack is correlated with a 20% reduction in the intensity of the current attack. Migration is not significant in any specification.

My initial results indicate some evidence for my hypotheses about the effect of territorial control and transition on the probability of attack occurrence and the intensity of an attack. While the statistical significance of the effects often differs across specification, estimated effects for all hypotheses were in the predicted direction across all specification. Before attempting a more nuanced interpretation of the findings, there are two potential problems that I want to address.

6. Robustness Tests: Collateral Damage and 'Unique Villages'

The first potential issue I discussed above: Rebels held two bases in Koya chiefdom where government military forces never set up a base. There are 11 villages within 5k of these rebel bases. It is possible that unobserved factors of villages near where rebels set up bases *and government/incumbent did not set up bases* is driving the observed effects. To deal with this, I create a dummy variable that takes the

value of 1 if the observation comes from one of the 11 "unique" villages. I call this variable 'Unique'. This will control for any unobserved variable, particular to those 11 villages, that is potentially driving observed effects.

The second issue concerns battlefield events and collateral damage. Rebel violence against civilians may be related in some way to military confrontations between rebels and their opposition. For example, it could be the case that observed territorial control effects are due to limited battlefield fighting in rebel-controlled territories. This would offer little chance for battlefield violence to spillover to civilians. Maybe the observed effects of territorial transitions are due to a correlation between territorial transitions and battlefield activity and this battle activity is what is driving the observed effect. I test for this possibility using data about battle events in the NPWJ report, as coded by De Bruijne (2015). I construct a variable the counts number of battles that took place between rebels and an opposition fighting force within a given chiefdom and in a given war period. For example, the NPWJ report lists 11 battles in Barri chiefdom during war Period 1. In this case, the new variable would counts 11 battles for all observations in Barri in period 1. I call this new variable 'ChiefdomBattle'.

Table 4 and Table 5 address these questions by presenting results for estimates where these variables are added to the model. Both Table 4 and Table 5 present three different models: one with each the 'ChiefdomBattles' variable and the 'Unique' variable added separately to my existing model and a third where both are added together to my existing model. I look at the robust results for attack occurrence before moving onto attack intensity.

[Insert Table 4: Robustness Test for Attack Occurrence]

We find that territorial transitions increase the probability of attack, but the effect is only significant in the 5k specification. This is inline with our previous findings. How should we interpret the result that territorial transitions increase the likelihood of attack occurrence only in the 5k specification? Our theory of 'roving bandits' suggests that rebels are most non-strategic when they are on the move, because the incentives for rebels to behave strategically breaks down during territorial transitions. It could be that villages that are closest to rebel bases are most 'exposed' to the post-transition non-strategic behavior form rebels.

The effect of rebel control on attack probability remains insignificant in the 5k specification and hovers just outside significance in the 10k and 15k specification. While effects are insignificant in all specifications, it is interesting to note that the effect size is substantially larger and the p-value substantially lower in 10k and 15k specification. This is of interest because it follows a pattern predicted by theory. Kalyvas makes non-monotonic predictions for attack occurrence across space; where rebel control is absolute, theory predicts a very low probability of attack. The probability of attack occurrence increases as we move away from the base, and then falls again beyond a certain threshold where rebels avoid violence because they have limited information. Therefore, it could be that our 5k specification is picking up two competing effects—low probability of an attack where rebel control is absolute closest to the rebel base, and increasing probability of attack just outside of this area where rebel control is dominant but not absolute.

Table 5 shows robust results that attacks are less intense in areas of rebel control, when control is specified at 5k. The effect size declines in 10k and 15k specifications, and both fall just outside significance. It makes complete theoretical sense that this effect shrinks as we move away from the rebel base. Selective violence, and therefore less intensive attacks, needs information. As rebels move away from their locus of control, information about civilians declines and violence becomes less selective, and therefore more intense.

[Insert Table 5: Robustness Test for Attack Intensity]

Above we found some evidence for the hypothesis that territorial transitions lead to more intense attacks. Our robustness test strengthens the evidence for this proposition. The effect is significant when control is defined at 10k, and the 15k specifications are insignificant but have p-value under .20 in every model. The estimates for the 5k specification are more variable, turning up significant when we control only for battles, but insignificant when we included our 'unique' variable. Under the 5k specification, only a limited number of attacks are defined as experiencing a territorial transition; when rebel control is defined so tightly there is less opportunity for territorial transition. Therefore, it may be the case that the lack of effect is due to a lack of observations.

This paper set out to examine two propositions:
1) Rebels use violence strategically
2) Territorial transitions reduce incentives for strategic violence

I interpret these results as providing evidence for the proposition that rebels use violence strategically. Taken alone, the finding that attacks are more probable in rebel-controlled areas is not strong enough to suggest the use of strategic violence, even if the effect was statistically significant (it is not). It could be the case that attacks are more common in villages close to rebel bases because these villages are the most accessible for rebels to attack. However, when this result is coupled with the robust finding that attacks are less intense in rebel-controlled areas, I interpret both together as evidence for strategic violence. The finding that rebel attacks are less intense near rebel bases makes it less plausible that rebels attack villages close to base only because they are most accessible—in that case, why would these attacks also kill the least civilians? Instead, it seems plausible that rebel attacks are more common in rebel zones of control because rebels can better identify enemies in villages near their base and rebels are more comfortable exercising lethal violence when they have information to know they are targeting an enemy. These selective attacks, while more common, produce fewer deaths per attack. Our results show that the (negative) effect of rebel territorial control on rebel attack intensity shrinks in the 10k and 15k specification, where information for selective violence is less available. These pattern patterns consistent with the use of strategic violence.

In addition, these results provide some evidence for the proposition that territorial transitions diminish incentives for selective violence. There is partial evidence that territorial transition both increase the probability of at attack and increase the intensity of an attack. While the estimated effects vary in their

statistical significance across specification, effects are always estimated in the predicted direction. Territorial transitions act as a counterweight to the strategic incentives, which work to curtain rebel violence towards civilians. Territorial transitions weaken strategic incentives and allow rebels a more liberal use of violence.

7. Discussion and Conclusion

7.1 Characteristics of SNC War

In this paper I asked if the incentives for strategic violence existed in context symmetrical non-conventional warfare. To test this, I compared violence patterns predicted under the assumption of strategic violence to violence patterns observed during the civil war in Sierra Leone, a test case for SNC warfare. I also made predictions about events that might diminish incentives for strategic violence, namely territorial transitions. In some ways, results support the strategic conception of wartime violence. However, the ways in which observed patterns of violence differed from predicted patterns of violence may offer insight into patterns of violence under SNC warfare. Below I highlight three observed violence patterns which maybe indicative of violence during SNC warfare more generally.

First, I found evidence that attacks were less intense when they occurred in rebel-controlled territory. I interpreted this as evidence that rebels used selective violence when information was available to them. However, the effect was never significant beyond 5 kilometers from a rebel base. Even if this does indicate the use of strategic violence in areas close to rebel base, it also suggests the limited capacity for rebels to gather information and monitor the actions of civilians in SNC warfare. In turn, this may mean that large swaths of territory in SNC warfare are subject to indiscriminate use of violence.

Second, while rebels may use violence selectively when they have access to information, rebels do not seem discouraged from using indiscriminate violence when they lack information about civilians. Kalyvas's theory of strategic war predicts that rebels will avoid violence where they do not have access to information lest they kill innocent civilians and stir up civilian resentment. At the beginning of this paper I suggested that rebels in SNC war might lack the incentive to avoid indiscriminate violence because of both the military parity between opposing forces and the lack of capacity that either side has to protect civilians. In other words, rebels need civilians less in SNC warfare. I argued that there was some evidence that rebel attacks were more likely in rebel-controlled areas, but if anything this effect is weak.

Third, I found some evidence that territorial transitions may make attacks against civilians more likely and more intense. Limited capacity from actors leads to difficulty in holding territory and therefore a multitude of territorial transitions. Also, if rebels are no militarily outmatched, they do no need to rely on close relationships with civilians and may decide to move around more often than during irregular warfare. I should point out that while my theoretical approach posits the effect of territorial transitions are because these events reduce incentives for strategic behavior I cannot test if my posited mechanism—that territorial transitions reduce incentives rebels to engage in strategic behavior— is at the heart of the relationship. Other explanations and theoretical approaches are congruent with this

observed pattern. For example, Randall Collins (2009) offers a micro-sociological perspective where violent actors build up anxiety/tension in preparation and anticipation of a violent confrontation with the opposition. Civilian atrocities occur when fighters, emotionally over-loaded from the expectation of meeting the, find passive and weak civilians. Fighters release the built up energy by falling violently upon civilians. It is possible that this explanation, or other non-rationalist explanations, may better describe the mechanisms at play in the territorial transition effect. However, in this paper, I have no way to test these micro-mechanisms.

7.2 Consequences of SNC characteristics for Intervention Policy

Given these three characteristics of SNC wars, and preliminary evidence that these characteristics may drive unique violence patterns in SNC wars, I consider policy implications for the intervention in foreign wars.

As noted above, rebel violence in SNC war is more selective and less intense near rebel bases, similar to irregular war. However, in SNC settings fighting units have limited capacity for monitoring civilians and gain access to information, and therefore the area in which rebels use selective violence is small. Often external actors decide to support one side of a war. If this actor can provide channels of communication between the fighting factions they support and the communities around where those fighting factions live and operate, they may increase the information about civilians available to the fighting faction and therefore reduce incentive by fighting factions to use indiscriminate violence on civilians.

Second, given that territorial transitions are deadly for civilians, interventionist foreign powers need to think twice about providing support to one side in a war with the intention of gaining territory. If that territory cannot be permanently held and the supported side falters and loses control of the territory, civilians within that territory could suffer the violence consequences of a territorial transition. In some instances there is pressure to "do something", but proper the humanitarian consequences of territorial transitions needs to be taken into account.

Third, SNC wars are particular in that fighting forces lack the incentive to avoid indiscriminate violence. Indiscriminate violence raises the cost of remaining neutral and forces civilians to chose a side, but only if they think that one side can protect them. By providing protection for civilians, external powers might increase the incentive for violent actors to avoid indiscriminate violence. In this situation, the intervening power might support in securing territory for the fighting force they support. This might give civilians the possibility to flee to safe areas if they experience indiscriminate violence, and therefore raise the cost of using indiscriminate violence.[12]

[12] The assumption here is that fleeing civilians may join the opposition forces or that military forces need civilians likving in the area they operate in order to survive. An extension of this logic is that refugee camps or humanitarian zones do not increase incentive to avoid indiscriminate violence because the person who flees there *will not join the opposition*. So while refugee camps (if properly protected) may take people out of the fighting, they may not increase incentives to avoid indiscriminate violence.

Echoing the call of Balcells (2010) the findings here emphasize the need for disaggregating civil wars according to the nature of their warfare. The spatial and temporal dynamics of irregular wars, such as the current war in Syria might be different than conventionally fought wars, like the war in Ukraine, or symmetric non-conventional wars similar to the civil war in Sierra Leone. In addition, this study shows the importance of matching micro-level victimization data with micro-level explanatory data. The key concept of territorial control takes place at a lower than chiefdom aggregation. In SNC wars, the difference between a village being inside or outside of an actor's control may be just a few kilometers.

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TABLES

Table 1: Summary Statistics

Panel 1: Dependent Variable 1 – Occurrence						
	Attacks per Period					
	0	*1*	*2*	*3*	*4*	Total
VillagePeriods	1502	201	29	4	1	1737
Percent	86.47	11.57	1.67	0.23	0.06	100%

Panel 2: Dependent Variable 2- Intensity					
	Mean	**St. Dev**	**Min**	**Max**	**N**
Death per attack	8.59	20.38	0	250	273

Panel 3: Explanatory Variables						
	Occurrence (N=1739)			**Intensity (N=273)**		
	5k	***10k***	***15k***	***5k***	***10k***	***15k***
Rebel Zone=1	227	299	311	53	71	76
Territorial Transition=1	85	208	239	22	31	34
Previous=>1	884			169		

	Mean	**Std dev**	**Min-Max**	**Mean**	**Std dev**	**Min-Max**
Migration	329.7	684.2	0-8000	237.5	427.6	0-3000
Population	596.5	865.6	40-8000	575.5	683.2	40-5400

Notes: Panel 1 of the table relates descriptive statistics about the first dependent variable: the number of attack on a village in a given period. Panel 2 describes the second dependent variable: the number of civilians killed in an attack. Panel 3 describes explanatory variables. Panel 3 is split between observations related to 'VillagePeriod" (left Column) and observations related to attacks that have occurred (right column). The first three row of Panel 3 display the number of observations that occur in rebel-controlled zones, after territorial transitions and if the observation village has previously experience an attack. Rows 4 and 5 describe summary statistics for migration and population. The left column is the average across villages. The right column is the average migration and population in attack events.

Table 2: Attack Occurrence

	5k			10k			15k		
	Coef.	*Std. error*	*p-value*	*Coef.*	*Std. error*	*p-value*	*Coef.*	*Std. error*	*p-value*
Rebel	.1168	.1804	0.52	.2314	.1646	0.16	.2452	.1707	0.15
TT	.7255***	.2882	0.01	.1765	.2501	0.48	.3683*	.2254	0.10
Previous	.3812**	.1704	0.02	.4184**	.2501	0.014	.4033**	.1703	0.02
Pop	.00002	.0001	0.81	.00004	.0001	0.68	.00004	.0001	0.68
Mig	-.0001	.00017	0.6	-.00011	.00017	.517	-.00011	.00017	0.52

Notes: Significance levels indicated by *p < .10, **p < .05, ***p < .01. The Left column presents estimates with control specified at 5k, the middle column presents estimates where control is specified at 10k, and in the right column control is specified at 15k. N=1638 (182 villages * 9 periods) in all estimates. Coefficients are difference in expected log count (constant not shown). The reference chiefdom is Barrie and time period is period 1.

Table 3: Attack Intensity

	5k			10k			15k		
	Coef.	*Std. error*	*p-value*	*Coef.*	*Std. error*	*p-value*	*Coef.*	*Std. error*	*p-value*
Rebel	-.6091**	.2602	0.02	-.3218	.25	0.198	-.2029	.2374	0.39
TT	.4233	.3443	0.219	.6674*	.3893	0.086	.5307	.355	0.135
Previous	-.2212**	.0957	0.021	-.2238**	.09364	0.017	-.2201**	.0945	0.02
Pop	.00048**	. 00019	0.012	.00045**	.000195	0.021	.00049**	.00021	0.02
Mig	. 000245	.00045	0.59	.00041	.00049	0.405	.00039	.0005	0.44

Notes: Significance levels indicated by *p < .10, **p < .05, ***p < .01. The Left column presents estimates with control specified at 5k, the middle column presents estimates where control is specified at 10k, and in the right column control is specified at 15k. Estimates include additional controls for the chiefdom and the period of the war in which the attack occurred. N=261 in all estimates. Coefficients are difference in expected log count (constant not shown). The reference chiefdom is Barrie and time period is period 1.

Table 4: Robustness Test for Attack Occurrence

	(1) ChiefdomBattles	(2) Unique Villages	(3) Combined
Rebel Zone (5k)	.0883 (.182)	.0866 (.182)	.0631 (.183)
Rebel Zone (10k)	.2489 (.167)	.2123 (.165)	.1924 (.167)
Rebel Zone (15k)	.2338 (.171)	.2182 (.171)	.208 (.171)
Territorial Transition (5k)	.8594*** (.304)	.5995** (.308)	.7344** (.326)
Territorial Transition (10k)	.2489 (.261)	.119 (.254)	.19 (.266)
Territorial Transition (15k)	.4039* (.229)	.3164 (.228)	.352 (.231)

Notes: Significance levels indicated by *p < .10, **p < .05, ***p < .01. Coefficients are difference in expected log count (constant not shown). The reference chiefdom is Barrie and time period is period 1. The first column displays results from a model that adds the variable for 'ChiefdomBattles' into existing attack occurrence models. The middle column displays results from a model that adds my control variable for 'Unique' Koya villages into existing attack occurrence models. The last column presents results from a model that adds both 'ChiefdomBattles' and 'Unique' variables into existing models of attack occurrence. The first three rows look at the effect of rebel territorial control (specified at 5k, 10k, 15) on attack occurrence. The next three rows looks at the effect of territorial transitions (specified at 5k, 10k, 15k) on attack occurrence.

Table 5: Robustness Test for Attack Intensity

	(1) ChiefdomBattles	(2) Unique Villages	(3) Combined
Rebel Zone (5k)	-.6414** (.257)	-.6181** (.261)	-.65** (.259)
Rebel Zone (10k)	-.3471 (.244)	-.3222 (.249)	-.3477 (.244)
Rebel Zone (15k)	-.1326 (.241)	-.2059 (.237)	-.1379 (.241)
Territorial Transition (5k)	.5769* (.334)	.2578 (.35)	.4265 (.347)
Territorial Transition (10k)	.8244** (.377)	.6295* (.388)	.791** (.38)
Territorial Transition (15k)	.5065 (.352)	.5013 (.353)	.4781 (.351)

Notes: Significance levels indicated by *p < .10, **p < .05, ***p < .01. Coefficients are difference in expected log count (constant not shown). The reference chiefdom is Barrie and time period is period 1. Standard errors are in parentheses. The first column displays results from a model that adds the variable for 'ChiefdomBattles' into existing attack intensity models. The middle column displays results from a model that adds my control variable for 'Unique' Koya villages into existing attack intensity models. The last column presents results from a model that adds both 'ChiefdomBattles' and 'Unique' variables into existing models of attack intensity. The first three rows look at the effect of rebel territorial control (specified at 5k, 10k, 15) on attack intensity. The next three rows looks at the effect of territorial transitions (specified at 5k, 10k, 15k) on attack intensity.

Appendix A: Government Failed to Protect Civilians

The government of Sierra Leone failed to protect civilians against rebels. One reason for this was a struggle for power within the military. This situation distracted high ranking officials from the task of providing civilian protection while creating an environment that produced disaffected rank and file soldiers. Several prominent commentators of the war have argued that tensions and competing interests and loyalties within army created an environment in which protection of civilians was secondary to serving these rivalling claims. For example, the NPRC drew international outcry for the execution of 29 people allegedly involved in a December 1992 coup plot (Gberie 2005, 79).[13] Among those executed were several soldiers (Gberie 2005, 79). For Richards (1996, p. 13), "It seems possible the regime seized the opportunity to rid itself of some of its most influential enemies". Here we see that even within the "incumbent" power structure, there is a great heterogeneity of interests. The military may have been spending more time fighting over power, then concentrating of protecting civilians.

These tensions frayed organizational structure within the military, further complicating the military's ability and desire to protect civilians. Kalyvas's theory assumes that organizations can deter certain individual actions, like indiscriminate violence, which are strategically costly for the organization, implicitly attributing a certain level of coherence between the goals of the organization and the action of its individual members. Yet, if the organization loses control over its members, and actions that are costly for the organization are not necessarily costly for the individual (or small groups), there is less reason to believe that the organization will be able to protect civilians. Rising tensions meant the military simply could not keep the allegiance of all its members. Keen (2003) argues that the NPRC coup subverted many of the patronage links within the armed forces that typically led to power, provoking discontented senior officials stirred up rank and file soldiers, who were already unhappy about lack of war progress and difficult conditions. Many of these rank and file were irregular men on the front line who were without salary and "felt betrayed by their superiors as a rearmed RUF overwhelmed previously liberated areas...they may have resorted to banditry or eve have joined the RUF in frustration" (Gberie, 2005 pg.81). Those jealous of the benefits reaped by NRCP favourites took it upon themselves to obtain rewards they had missed out on. Soon there would be speculation that the army was helping the insurgents in many more ways than simply indiscipline. "Alleged incompetence, 'sabotage', and fraternization with the enemy resulted" (Richards 1996 pg12). These charges refer to an emerging '*sobels'* phenomenon- that someone might be a soldier by day, but a rebel by night. When, in December of 1994, Strasser (the head of NPRC) called on UN for support, even the government was admitting things were about of control; they estimated at least 20 percent of their soldiers were disloyal (Gberie 2005, 90-91). By losing control, the government lost the ability to ensure that the members of the military acted in ways as to benefit the goals of the organization. This lack of control modified incentive structures for individuals and removed barriers to civilian abuses.

[13] In February 1994 over 400 soldiers absconded from their barracks. It was suggested that his action was caused in part by the soldier's loyalty to a "hugely popular" officer lost to the mass execution. Importantly, he had been asked to head the NPRC on the day of the coup but said he would rather remain a soldier (p. 81).

It is in this context of total lack of protection felt by communities that civil defence militias were formed, the most famous being the Kamajors. These groups, created to defend local villages against *whomever* attacked, and clashed with NPRC soldiers on a number of occasions. Keen (2003) states that "Civil defense organizations aimed to check soldiers' as well as rebels' abuses". In this way we can understand the rise of the civil defense militias as a sign of military inability and incompetence in protecting civilians.[14]

Above I sketched an environment where the government of Sierra Leone could not or would not protect civilian communities. When one "side" cannot offer or is not willing to offer protection to civilians, the opposition does not face the full costs of using indiscriminate violence (recall the Tree Graph). This does not mean that groups have no incentive for pursing selective violence, only the cost difference between selective violence and indiscriminate violence is diminished. While we can continue to suspect that rebels will use selective violence where it is cheaply available we have less reasons to believe rebels will seek to avoid the use of indiscriminate violence; they may calculate that some show of (indiscriminate) violence is better than none. This would explain the our inability to detect differences in the probabilistic usage of indiscriminate and selective violence and therefore why we see no difference in the probability of an attack occurring in rebel territory or outside of rebel territory.

Appendix B: Migration

To understand the potential biases of different coding options I explore the two coding options under the assumption that *migration has a negative effect on attack intensity.* The more people who left a village, the less intense an attack in that village will be. When confronted with a migration event that has occurred in the same year as an attack event, my first option is to assume that all migration events happened *after* the attack. This option constructs a variable which registers migration only where outmigration really did occur, but fails to include *all* migration events that really occurred. Therefore, this strategy assigns "zero migration" to attack observations that in reality were (negatively) affected by migration. This introduces a bias which shrinks estimated the (negative) effect of migration. If the true effect is negative, then it will push the estimated effect back towards zero. The logic here is that a real negative effect of migration will reduce the intensity of an attack, all things equal. However, by accounting for only *some* of the migration events which happened before an attack and therefore had a real negative bias, we fail to account for instances where migration (if properly accounted for) really did co-vary with intensity. In addition to mitigating the magnitude of the estimated migration effect, this will bias the estimations of my variables of interest.

If some zones of control had more migration than other zones, and the effect of migration is underestimated, this will attribute an (presumably negative) effect to the zone that had the most migration. In effect, estimated differences between zones, might in part be due to an underestimation of migration, which is experienced more in some zones and less in others. For example, if zones of rebel control experienced more migration that other zones, then it is likely that more of the attacks that occurred in rebel zones will have migration that is not controlled for. If the true migration effect is negative, then the estimated effect rebel zone will pick up this unaccounted for negative effect. This is

[14] Remember the inability of government to protect civilians greatly reduces rebel incentive to avoid indiscriminate violence.

especially important considering one of our major predictions is that attacks in rebel zones are less intense and it seems intuitively possible that rebel zones experience more migration than other zones.

The Second option is to assume that all migration events happened *before* the attack. This would make my estimation of Migration based on migration above true levels. While this strategy would account for all observations where migration did occur before an attack, the estimation of the migration effect would also include instances where the migration event happened after the attack, and migration had no real effect. The effect on my overall migration variable depends on these two competing forces. Assuming the true effect of migration is negative, this strategy also underestimates the effect of migration. The logic here is that including all true migration events brings the migration effect towards its true level, but including 'false' migration events (events that could not have had an effect on the dependent variable) pulls the estimated effect away from real level.

This (negatively) biases control zone effects in those with control zone with the most migration. The strategies differ in one important respect. The first option is better if most of the questionable migration events actually took place after the attack. This is because attacks that took place after will raise intensity relative to those migration events that took place before, and this strategy assigns them a true low migration. But if most of the migration took place before the attack, option one will not include them in the estimation. There should not be a difference of effect size in these two instances, but we will have fewer observations to generate an estimate. The second method is better if more of the questionable events actually took place before the attack. This would mean that relatively few attacks are included that are mean intensity higher. This strategy will have a lower effect size, will include more 'true' observations (migration events that affected the dependent variable). The first should give us the best point estimate, but may not have the power to observe significance.

Appendix C: Conflict Mapping and Control Coding

Method

We now turn to the local military dynamics in the Gola forest border region, a hotbed for rebel activity and the focus of our study. I will describe the local military movements, as meticulously gathered by the NPWJ report. Our theory has left us in a position to analyze wartime violence for exogenously given states of control, and I will describe the process of how these states, or periods, are generated. The process contains 4 steps:

1) First I entered the GPS coordinates for all the villages in the study and plotted them on a map using QGIS.

2) Next, I read through the relevant sections of the NPWJ report (sections on Pujehun, Kenema, Kailahun) and highlighted events that indicated military movements by any political actor. I assigned this movement a number and then placed a corresponding number onto the map where the action took place. For example, the first event in Pujehun notes that "RUF cross Union Bridge on March 28...enter

Fairo and open Training camp". This event is record on the map and a "1" is placed at Fairo, indicating this event.

3) I specifically recorded where political actors set up bases (in the example above the RUF opens a base at Fairo). When a new base is established that changes the territorial control of any village in the study area, we have entered a new "period" of the war. A war Period is a block of time where territorial control patterns are relatively stable within the study region. I continued this process for the entirety of the war. I recorded over 150 events of interest and divided the war into 9 relatively stable "Periods" of territorial control.

4) Next I coded each village in every time period for which actor was in control. To do this I identified the bases of political actors in each period, then draw a sphere around each base. There are four potential control options: Rebel controlled, incumbent controlled, contested, low control. Villages that fall within a sphere around a rebel base are coded under rebel control, villages that fall within the sphere of a incumbent base are coded incumbent control, villages that fall within both the sphere of both bases are coded as contested, and villages that fall within neither sphere are coded Low control.

Event Mapping

Period 1: 23 March, 1991- 1 September, 1991

Pujehun

1) RUF crosses *Union bridge* on March 28, takes Malema, enters *Fairo* and opens a training camp there (486)
2) April 3rd, RUF enters **Zimmi**, establishes base (486) and **Baquima**
3) RUF establishes base at **Daar es Salaam** in April (487/488)
4)Early April RUF forces capture **Potoru** (488)
5)From Potoru, forces split, some to *Peje* and Sowa others to *Pujehun Town*, through *Gallinas Peri* and *Kpaka*, April 17 (488)
6) SLA are stationed at *Bandajuma* in Sowa. Are pushed out briefly by RUF, but soon return with ULIMA and retake, late April, (489)
7)RUF captures Pujehun Town on April 20th coming from both Sowa and through GP/ Kpaka (490)
8) Arrive in Sahn April 24, establish *Camp Kuwait* (492)
9)Training base opened near *Massam* in May (492)
10) SLA/ULIMO forces capture *Dandabu* (on Bandajuma/Pujehun road) in late June
11) RUF driven from Pujehun Town, July 14 and Sahn, July 17
12) RUF briefly settles at *Bumpeh*, but soon forced to move onto *Saama*, Aug 3

RUF Bases
Zimmi
Baquima
Daar-es-Salaam
Potoru
SLA Bases
Key Towns/Places
Union Bridge
Fairo
Peje

Gallinas Peri
Kpaka
Pujehun Town
Bandajuma (Sowa)
Camp Kuwait (Sahn)
Massam (HQ of Kpaka)
Sowa
Dandabu
Bumpeh
Saama

Kailahun

1) RUF enters Upper Bambara at *Bomaru* on march 23 (253)
3) RUF enters Kissi Teng at Koindu on March 27, SLA fall back to **Daru barracks** (253)
4) RUF captures *Kangama* (Kissi Teng) April 6th, SLA withdraws to *Kailahun Town*
5) RUF moves on to Dia (Biawala) and then captures Mobai on April 11th (254)
6) RUF enters Jojoima April 12, and use as base (256)
7) RUF enters Kailahun and spreads through Luawa chiefdom April 13th (
8) RUF captures Manowa between 18th and 27th of April (259)
9) RUF takes Benduma, then falls back to 'defensive positions'at*Baiima*, *patama*, *Kuiva* May (255)
10) SLA takes Benduma, RUF sets up base at Baiwala, Mayish (259)
11) RUF pushes to *Yawei* (260) also to *Penguin* by Mid May (261)
12) RUF makes several attempts at Daru but can never take it. Mandu firmly RUF as Koluma, Bombohun-road to Daru (261)

RUF Bases

Baiima
Patama
Kuiva
Baiwala

SLA Bases

Daru Barracks

Key Towns/Places

Bomaru
Koindu
Kangama
Kailahun Town
Biawala
Mobai
Jojomima
Manowa
Beduma
Yawei
Penguin
Mandu

Kenema

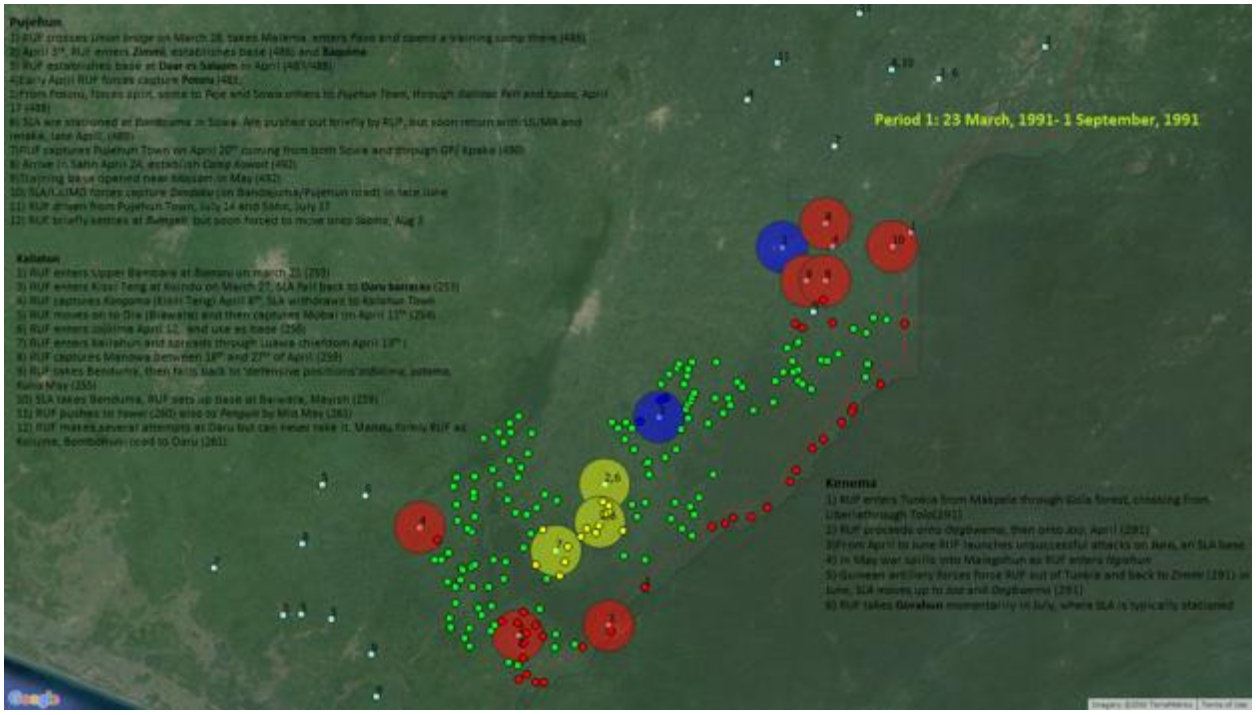
1) RUF enters Tunkia from Makpele through Gola forest, crossing from Liberiathrough *Tolo*(291)
2) RUF proceeds onto *Gegbwema*, then onto *Jao*, April (291)
3)From April to June RUF launches unsuccessful attacks on **Juro,** an SLA base
4) In May war spills into Malegohun as RUF enters *Ngiehun*
5) Guinean artillery forces force RUF out of Tunkia and back to *Zimmi* (291) in June, SLA moves up to *Joa* and *Gegbwema* (291)
6) RUF takes **Gorahun** momentarily in July, where SLA is typically stationed

RUF Base
SLA Base
Joru

Key Town/Places
Tolo
Gegbwema
Jao
Zimmi
Gorahun
Ngiehun (Malegohun)

Summary: RUF enters Sierra Leone at multiple points in late March of 91, and press inward from these points of incursion. Taking our seven chiefdoms as central, we see that the RUF makes great progress to the northwest, gaining steady ground until first meeting resistance at Bandajuma. From the east, FUR forces push south west, meeting stiff resistance at Daru. By Mid July the RUF starts to be rolled back in the "Eastern Theatre" and It is around the same time (Mayish) that the RUF gets held up just outside of Daru. Within our Territory RUF forces Yo-yo back and forth between Zimmi and Joru, never losing Zimmi, nor taking Joru. They are on the offensive until June, when Guniean artillery forces beat them back. RUF is briefly on the offensive again in July, but pushed back fully to Zimmi by September.

5k



Period 2: 1 September, 1991-1 January 1992

Pujehun

1)RUF retreats from *Potoru* and crosses the Moa, SLA patrols Peje and Bari occasionally experiencing an ambush(495) Sept1

2)RUF retreats from *Bumpeh* to *Bonpon*, out of the chiefdom of GP (495)

3) Combined Guinean/SLA forces retake Mano River Union Bridge, cutting off supply line, September (469)

4) By late 91 there is fighting on the east side of the Moa

RUF Base

Zimmi (P1)

Daar-es-Salam (P1)

SLA Base

Potoru

Key Town/Places

Bumpeh

Bopon

Mano River Union Bridge

Kailahun

1) Rebels (NPFL) still hold strong east of Moa (**Baiima,Patama,Kuiva,Baiwala**)

2) RUF establishes base (without NPFL) in october of 91 at *Bgorworbugn* (sp?)

RUF Bases

Baiima (P1)

Patama (P1)
Kuiva (P1)
Baiwala (P1)

SLA Bases
Daru Barracks (P1)

Key Towns
Bgorworbugn

Kenema
1) Majority of RUF driven from positions in Kenema and back to Liberia border in September (29_)
.

RUF Bases

SLA Bases
Joru (P1)
Gorahun (P1)
Gegbwema (P1)
Joa (P1)

Key Towns
Liberian Border (Tunkia)

Summary: On the Eastern Front RUF still hold strong east of the river near Daru and its positions in eastern Kailahun. But in September, RUF loses ground on the Western Front and is forced back across (east) of the river Moa. This signals a change in control within our territory (Barri is lost) and therefore the beginning of a new period. Moreover, the RUF forces are driven out of Kenema in September, ending the back and forth of prior months.
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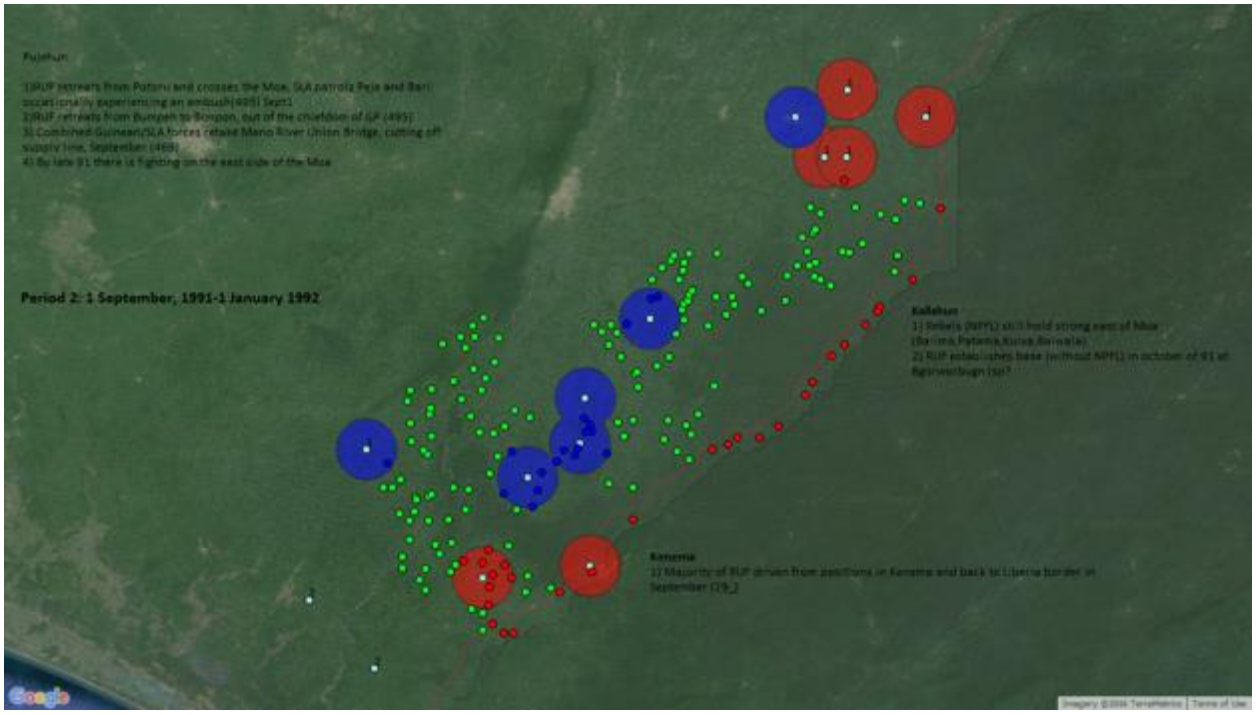


Period 3: 1 January 1992- 1 January 1993
Pujehun
1) SLA takes control of Makpele in January, capturing **Daar-es-salaam**,**Zimmi**, and **Baquima**[2] become SLA base and establish camp at**Gofor** (497)
2) SLA recruits stationed at **Bumpeh** January 92 (497)
3) SLA is well established on the far west front at *Panga Krim*
4)In May, RUF at crosses Moa from Soro Gbema to Gallinas Peri and attacks at **Saama** ,which they hold as base (488)
5) a regrouped RUF takes control of **Soro Gbema**, which becomes their stronghold (499)

RUF Bases
Saama
Soro Gbema

SLA Bases
Daar-es-salaam
Zimmi
Baquima
Gofor
Bumpeh

Key Town/Place
Panga Krim

Kailahun
1)RUF establish base at *Tangabu* in Kissi Teng, all three Kissi chiefdoms under RUF control, January (263)
2) RUF receive reinforcements through *Batwoma* in Luawa and into Upper Bambara at Ngebgema (263)

3) SLA , coming from Kono, takes Penguia and most Luawa in Febuary, hold for four months (264)
4) Attacks on Daru constant, SLA control segbwema and parts of Mandu, Jawie, and Malema, Mid-April
-East of Mobaii is SLA, but south is more contested as is Jawie
5) SLA attacks and takes somes area in Kissi Teng (265) Mid 92
6)RUF base opens at Monowa in December, open until March 93. Also base at Kuiva

RUF Bases
Baiima (P2)
Patama (P2)
Kuiva (P2)
Baiwala (P2)

SLA Bases
Daru Barracks (P2)

Key Town/Place
Tangabu
Batwoma (Luawa)
Ngebgema (Upper Bambara)
Penguia
Kissi Teng
Monowa

Kenema
1) RUF from Barri (recently lost) enter *Niawa* and *Lagrama*, April 20 (293)
2) SLA establish base at **Konia** on Jawi/Nongowa border
3) ULIMO takes control of Niawa and Langrama in spetember, establishes base at **Gandorhun** that would hold into '94 (295)
4) RUF enter Baoma (Koya) in May of 92 stay in **Nydehun** and **Pelewama** until December

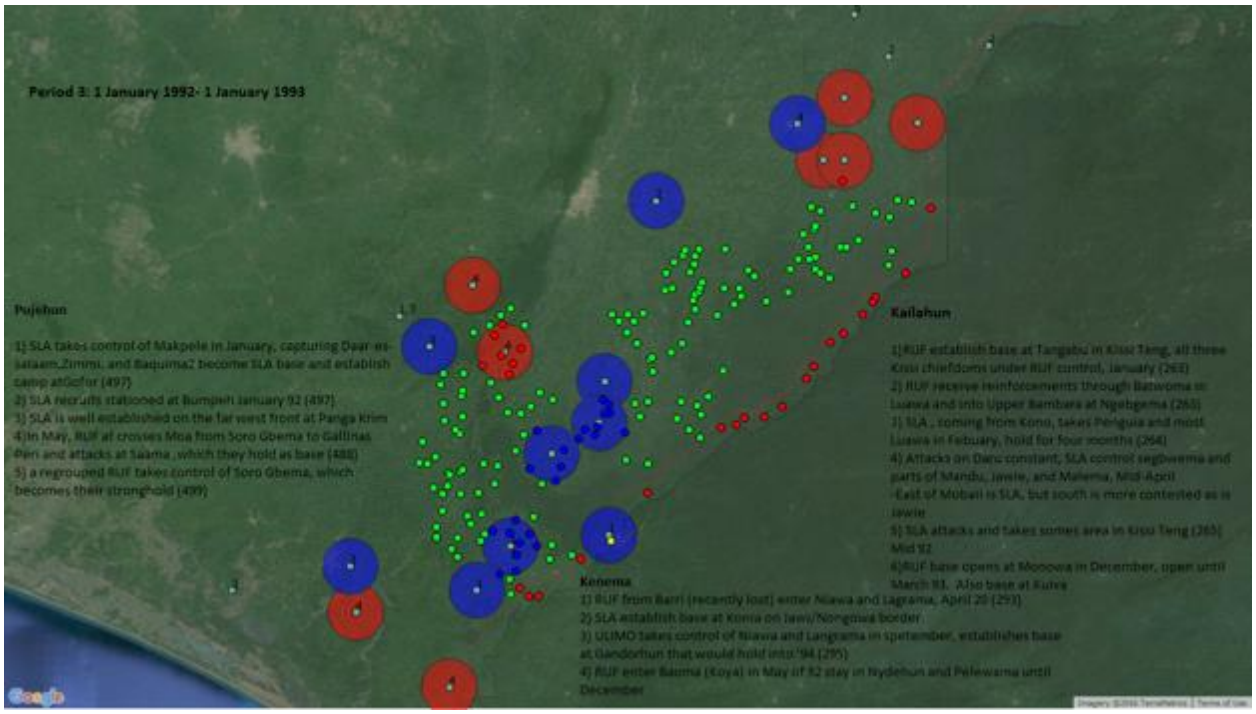
RUF Bases
Nydehun
Pelewama

SLA Bases
Konia
Gandorhun
Joru (P2)
Gorahun (P2)
Gegbwema (P2)
Joa (P2)

Key Town/Place
Niawa
Langrama

Summary:

SLA forwards its offensive by taking Zimmi in January. Some remaining RUF go on to Niawa and Langrama and Koya. Though RUF are expelled from Niawa and Langrama in September, they are uncontested in the forests of Koya. On Western Front, RUF and SLA remain separated by Moa, with SLA taking up positions on the west side, and RUF building strong hold is SG on the east side. On the Eastern Front SLA coming from Kono challenge RUF superiority in February, but RUF remains strong to the south east. The January shifts in control necessitate a new state of control.



Period 4: 1 Jan 1993- 1 May 1993
Pujehun
1) RUF take **Potoru** Jan 13, go onto *Peje* and *Sowa*, move north and take *Blama*
2)Take *Pujehun* for two weeks, SLA reclaims on Jan 28. (500)
3) SLA retake Blama (Gallinas Peri) in March (500)

RUF Bases
Potoru
Saama (P3)
Soro Gbema (P3)

SLA Bases
Zimmi (P3)
Gofor (P3)
Baquima (P3)
Dar-es-salaam (P3)

Key Town/Places

Peje
Sowa
Blama (GP)
Pujehun Town

Kailahun
1) In January 93 RUF retreat from *Koidu* (Kono) to HQ at *Kailahun Town*; also base at *Dia* (kissi Kama)
2) SLA advances capturing Kailahun, also **Baiima, Kuiva, Pendembu** and **Mobai** in April (269)
3)RUF retreats to **Baiwala** April (269)
4) As SLA rolls back RUF, stations at **Jojoima** (273)

RUF Bases
Baiwala

SLA Bases
Baiima
Kuiva
Pendembu
Mobai
Daru Barracks (P3)
Jojoima

Key Town/Place
Koidu (Kono)
Kailahun Town
Dia (kissi Kama)

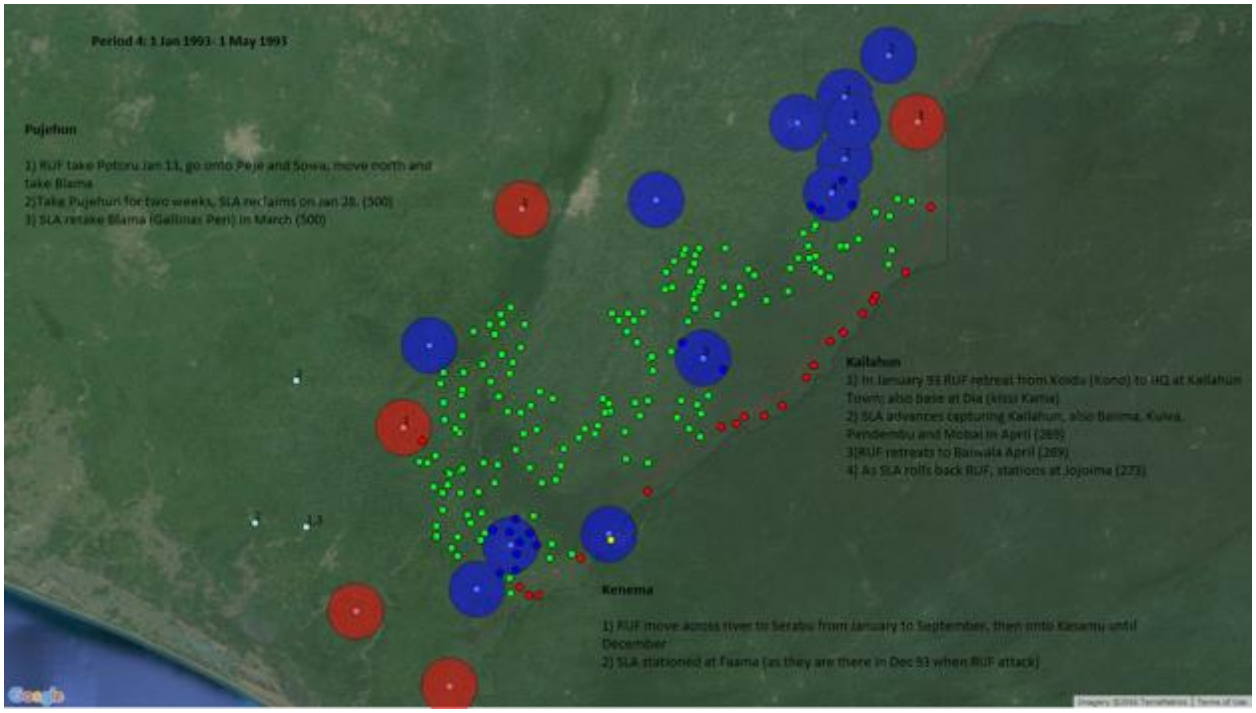
Kenema
1) RUF move across river to **Serabu** from January to September, then onto **Kasamu** until December
2) SLA stationed at **Faama** (as they are there in Dec 93 when RUF attack)

RUF Bases
Serabu
Kasamu

SLA Bases
Faama
Konia (P3)
Gandorhun (P3)
Joru (P3)

Summary: In January of 93 the West Front goes on the offensive, taking Potoru, driving north and taking Blama and West and taking Pujehun town. SLA claims back Pujehun town two weeks later and Blama in March, but RUF continues to hold Potoru. While RUF is gaining in early '93 on the Western front, they are losing ground on the Eastern Front. They retreat from the Kono region of Koidu in January, then Kailahun falls in April and RUF lose their positions east of Daru. In the Territory, RUF seems to move around Koya unbothered, and we have evidence that SLA is stationed at Faama.

5k



Period 5: 1, May 1993- 15, Dec 1993
Pujehun
1) May 1993 SLA retake **Potoru**, spreading RUF throughout chiefdom (500)
2) Some RUF forces are cut off on the West coast, Main SLA/ULIMA bases at *Pujehun Town* and **Gofor** (501)
3) The south, Soro Gbemba chiefdom, stayed in RUF control Stationed at majors town **Fairo** and **Malema**(501)

RUF Bases
Malema
Fairo
SLA Bases
Potoru
Gofor
Zimmi (P4)
Baquima (P4)
Dar-es-salaam (P4)
Key Towns/Place

Kailahun
1) **Biawala** captured by SLA, May 6
2) In May SLA forces succeed in completely repelling RUF from *Jawie*, Also parts of *Penguin* and *Yawei*
3) SLA takes *Buedu* in Kissi Tongi, RUF falls back to Liberia
4) SLA capture *Koindu*, November. At this time RUF only in extreme east and north Kissi Teng (270)

RUF Bases

SLA Bases
Biawala (P4)
Baiima (P4)
Kuiva (P4)
Pendembu P4)
Mobai (P4)
Daru Barracks (P4)

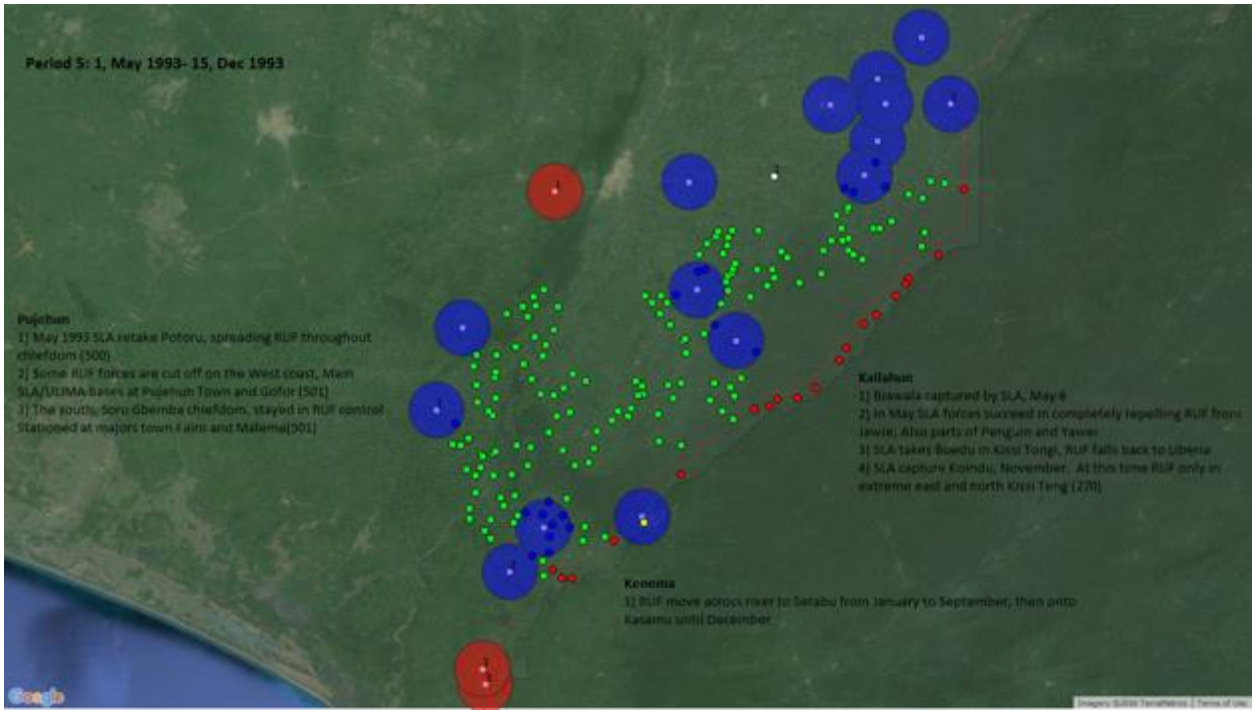
Key Towns/Place
Jawie
Penguin
Yawei
Buedu
Koindu

Kenema
1) RUF move across river to **Serabu** from January to September, then onto **Kasamu** until December

RUF Bases
Serabu (P4)
Kasamu (P4)

SLA Bases
Faama
Konia (P4)
Gandorhun (P4)
Joru (P4)
Key Towns/Places

Summary: On the Eastern Front, SLA keep RUF on the run, pushing them back to the most remote north east of Kailahun and into Liberia. On the Western Front, Potoru returns to SLA in May, thus creating a new period.



Period 6: 15, Dec 1993- 1 Spetember 1996
Kenema
1) RUF crosses the Mano and attacks *Nomo*, end of December '93
2) RUF forces advance into *Tunkia* and *Guara*.
3)SLA from **Daru** retake **Faama**, and have base at **Joru** January
4)Furth north, RUF establishes base in *Peyama*, *Tongo* is SLA base (302)
5)RUF spreads into *Lower Bambara*, *Malegohun*, and *Nongowa* (302) Feb
6) SLA has base in Nongowa at **Jormu**
7) Coming from Lower Bambara RUF reached Simbaru in Feb '94 and set up *Camp Joe*
8)RUF reach *Dama*, also *small Bo*, *Niawa*, *Langrama* in "early 94"(298), enter *Koya* in early March
9) RUF establishes a base at **Woyema** in Langrama march (299)
10) RUF build **Camp Zogoda** in the forest of Koya and an airfield between **Menima** and **Jai**(299)
11) RUF establishes a bases right outside Blama at **Yaweuma**; RUF attacks **Blama** 6X between March and April (300)
12) SLA base at *BoaJibu* (Simbaru) sometime between June '94 and end of '95 (310)
13)By April ULIMO is deployed at **Jao** and **Gegbwema** (300); SLA forces still stationed at **Gorahun**(301)
'95
14) RUF set up base at *Tongi* (GM)
'96
15) CDF and SLA destroy *Camp Joe* at Simbaru (312)

RUF Bases
Woyema
Camp Zogoda
Menina
Jai

Yaweuma
SLA Bases
Joru
Jormu
Faama
Blama
Jao
Gegbwema
Gorahun
Key Towns/Places
Nomo
Tunkia
Guara
Peyama
Tongo
Lower Bambara
Malegohun
Nongowa
Simbaru (camp Joe)
Dama
Small Bo
Niawa
Langrama
Boajibu
Tongi

Kailahun
1) RUF captures SLA base east of *Pendembu* Jan 1994 (272)
2)SLA withdraw from *Luawa* (272)
3) **Mandu** and **Dia**(Dea) under SLA control through 94,95,96 (272) previously held bases
4)RUF coming from *Kono*, take *Sandaru* (Penguin) use as base, May (
5)SLA challenge RUF at *Kangama*, but remains RUF (272)
'95
6)RUF recapture *Buedu* in Kissi Tongi, Jan 1995 (
7) SLA remains in control of **Jojoima** (SLA controlled since '93) (273)
96
8)At the time of March 1996 elections four chiefdoms considered unsafe: Malema, Jawie, Mandu, upper Bambara

RUF Bases

SLA Bases
Biawala (P5)
Kuiva (P5)
Daru Barracks (P5)
Jojoima
Key Towns/Places
Pendembu

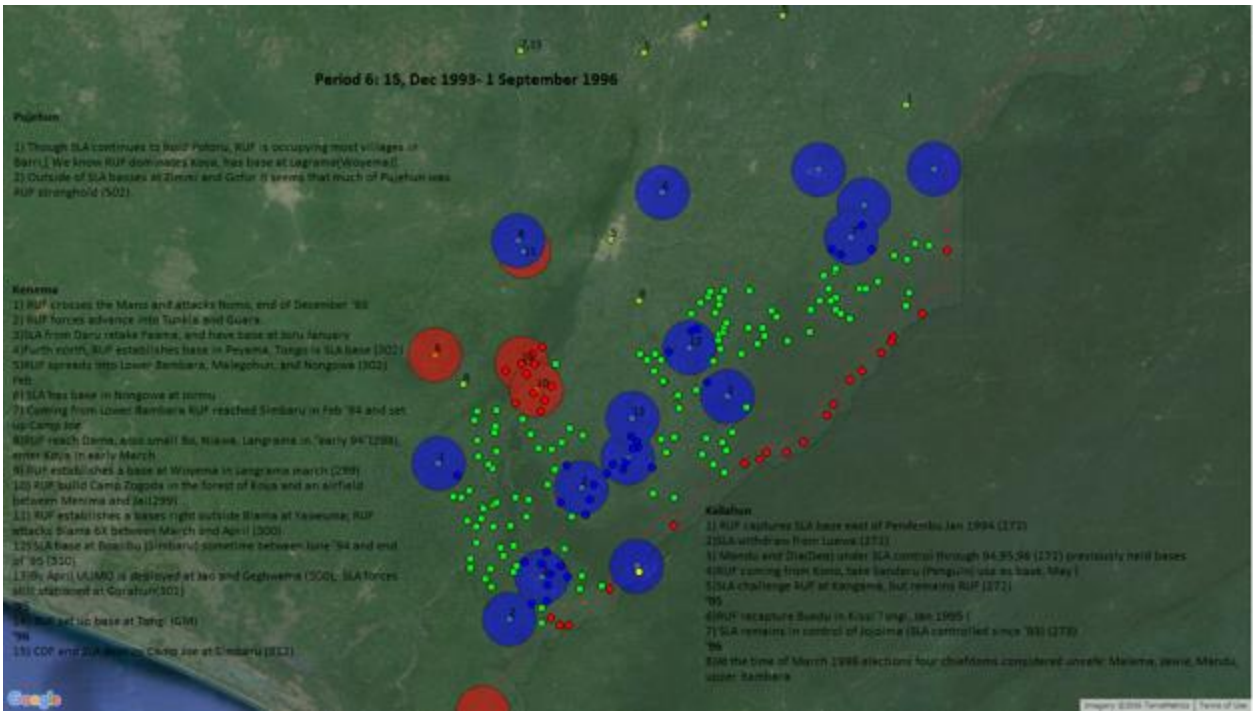
Luawa
Kono
Sandaru (Penguin)
Kangama
Buedu

Pujehun
1) Though SLA continues to hold **Potoru**, RUF is occupying most villages in Barri,[We know RUF dominates **Koya**, has base at Lagrama(**Woyema**)].
2) Outside of SLA basses at **Zimmi** and **Gofor** it seems that much of Pujehun was RUF stronghold (502).

RUF Bases
Malema (P5)
Fairo (P5)
SLA Bases
Potoru
Zimmi
Gofor
Baquima (P5)
Dar-es-salaam (P5)

Summary: When Strasser calls for a ceasefire in December of 1993, many soldiers leave the front, thinking the war is over. RUF takes advantage with an offensive, moving north from Nomo in Late December '93. They drive north and northwest, establishing bases at Peyama, Simabru, Woyema, Yaweuma and the intensifying presence in Koya; all this by Mid '94. RUF also has an eastern push coming from east of Pendembu, but not cracking West to Dea or Daru, though they the RUF has more success north in areas closer to Kono.In the Territory, RUF exerts pressure on Barri from Koya and Langrama. The South of Pujehun is a rebel stronghold.

It is around this time that the Sobel phenomenon starts to come to light and by the end of '94 Strasser is calling for UN support and the government itself estimates that 20% of the armed forces are "disloyal". Rebels get close to the capital in March of '95 but are stopped short with the help of EO. EO and CDF pursued rebels back to the eastern southern providences. Sierra Leoneans go to the polls in March of 1996 and elect a civilian government who begins to recruit CDF in earnest.



Period 7: September 1, 1996-May 27 1997

Kenema

1) Coalition of Kamajors, SLA, ECOMOG repel RUF from *Niawa*, *Small Bo*, *Langramaand Zogoda/Koya*, September (315)

2) Kamajors deployed at *Kandu Leppeama*, September (315)

3) Kamajors return to *Wandor* repel RUF, September (315)

4) Kamjors Drive RUF from *Peyama* September (315)

5) Kamajors force RUF out of *Gorma Mende*

6) Kamajors dislodge RUF from *Nomo*, Nov '96, establish presence at Dambala (316)

7)SLA establishes base an *Tongo* March '97

RUF Bases

SLA Bases

Joru (P6)
Jormu (P6)
Faama (P6)
Blama (P6) (CDF)
Jao (P6)
Gegbwema (P6)
Gorahun (P6)
Dambala (CDF)

Key Town/Places

Niawa
Small Bo
Langrama

Camp Zogoda
Kandu Leppeama
Wandor
Peyama
Gorma Mende
Nomo
Tongo

Pujehun
1)*Gallinas Peri* "rebel free"by November
2)SLA and Kamajors fight in **Barri**, Kamajors take control (503
3) **Blama** (Gallinas Peri) is under Kamajor control in November
4) Kamajors were based at Madina (Makpele) (504)
5)Kamajors fight all the way down to Liberian border, pushing RUF into Liberia, only remaining stronghold at *"Libya" (SG)*(504)

RUF Bases
Camp Lybia (SG) 7.090691, -11.526529
Gov Bases
Potoru (CDF)
Blama (GP) (CDF)
Zimmi (SLA) (P6)
Gofor (SLA (P6)
Key Towns/Places
Mano River Union Bridge

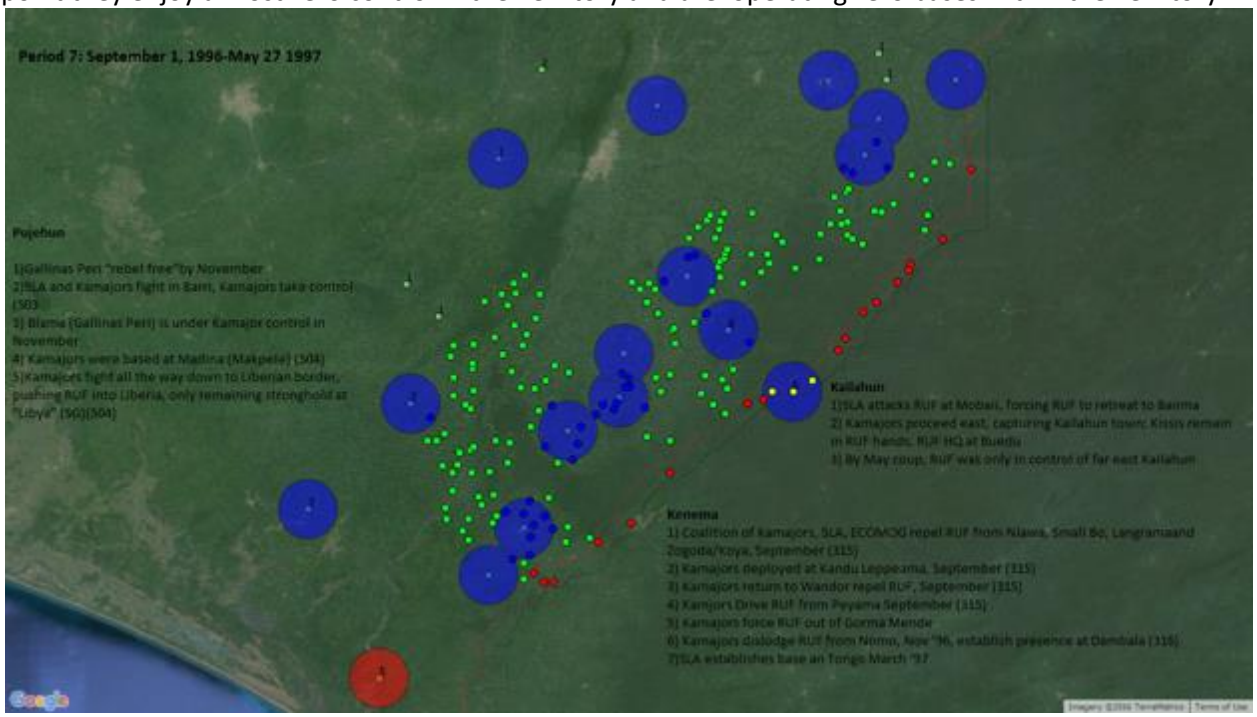
Kailahun
1)SLA attacks RUF at *Mobaii*, forcing RUF to retreat to *Baiima*
2) Kamajors proceed east, capturing Kailahun town; Kissis remain in RUF hands, RUF HQ at *Buedu*
3) By May coup, RUF was only in control of far east Kailahun

RUF Bases

SLA Bases
Biawala (P6)
Kuiva (P6)
Daru Barracks (P6)
Jojoima
Key Towns/Places
Mobai
Baiima
Kailahun Town
Buedu

Summary: This period is marked by the rise of the Kamajors and their systematic removal of RUF. The RUF is removed from their bases in Kenema and most importantly from Camp Zogado in Koya. The RUF is forced to retreat south, eventually across the border. This leaves "camp Libya" on the Moa River in Soro Gbema as the only RUF base on the Western Front. They retreat east to the Kissies on the Eastern

Front. In November, Kamajors and SLA remove RUF from Nomo and this out of the Territory. At this point they enjoy almost zero control in the Territory and are operating zero bases within the Territory.



Period 8: May 25, 1997- Feb 13, 1998
Kenema
1) RUF/AFRC establish "**CampSS**" between Dama and Nongowa
2)Early June RUF station at **Kenema Town** (276)
3)RUF/AFRC take **Blama** (318)
4)RUF base at *Victoria* in north of small Bo (319),
5) AFRC/RUF base at **Joru,** (took over in coup) (320)
6) By second half of the year rebels take *Kandu Leppeama* (319)
7) CDF based at **Faama** (320/321)
8) Tunkia is unheld territory (321), no positions is held within it. (320/321)
9) Kamajors forced out of *Lower Bamabara* by forces coming from *Kenema Town* (320)
10) By octorber 1997 Kamajor regrouping at *Lower Bambara,Jormu* is CDF stronghold (320)
11)By August Kamajor based at *Punduru* in Gorama Mende (320)
12) January 1998, RUF forces from Joru push CDF to *Bo waterside* (321)

RUF/AFRC Bases
Camp SS
Kenema Town
Blama
Joru

CDF Bases

Faama
Key Towns/Places
Victoria
Lower Bambara
Kandu Leppeama
Tunkia
Lower Bambara
Punduru
Jormu
Mano Union Bridge

Pujehun
1) Immediately after the coup, AFRC/RUF took base at **Zimmi**(pg?) and **Potoru** (503)
2) AFRC/RUF established themselves at *Bandajuma* (505)
3) RUF main base at *Pujehun Town*
4) ECOMOG and Kamajors came together based over the border in Liberia, By Nov making in-roads in the southwest
5) CDF stationed at **Gofor**, July (507/508)
6) In November 1997 Kamajors take back Sowa (506)
7) between the coup and the CDF/ECOMOG capture of Zimmi there were over 20 battle to take possession of Zimmi.
8)AFRC/RUF also held Zimmi so the areas between Zimmi and the south were certainly contested.

RUF/AFRC Bases
Potoru
Zimmi

CDF Bases
Gofor

Key Towns/Place
Union River Bridge
Pujehun Town
Bandajuma
Sowa

Kailahun
1) Kamajors from *Penguia* take the bush in guinea
2) CDF/Guinean forces repel RUF from *Peje west* and *Monowa* August
3) CDF in *Jawie* repel RUF, under complete CDF control (276) September
4) *Kailahun Town* remains AFRC/RUF stronghold

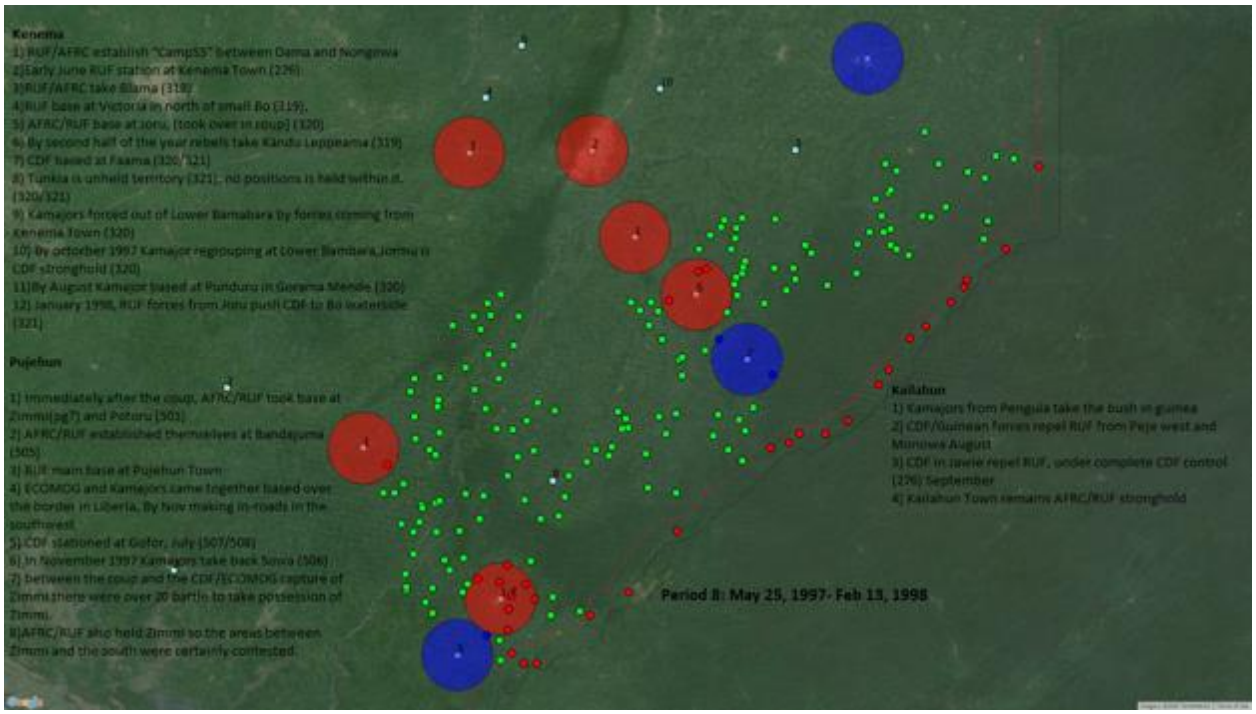
RUF/AFRC Bases

CDF Bases
Daru Barracks

Key Towns/Places

Penguia
Peje West
Monowa
Jawie
Kailahun Town

Summary: A Military coup removes the civilian government from office and invites rebels to be part of the governing council. CDF refuses to disarm and is forced underground. The CDF gains a foothole north of the Territory at Dodo, but RUF/AFRC dominate the Territory. On the eastern Front, CDF starts to press in around August and September. On the Western Front, the CDF is locked in intense battles with the RUF over control of Zimmi, but by February 12 (intervention in Freetwon) they still haven't taken it. However, a month previous to that on January 5, RUF pulls out of Kandu Lepeaman. Sensing a change of the tides, RUF abandon Kenema Town in late January. AFRC finally fell to Nigerian forces on February 12, and things would soon change in the south.



Period 9: February 13, 1998-
Kenema
1)Kamajors from *Dodo* take **Blama** ,rebels had already left by February 15 (322), CDF establish base
2) CDF deploys troops at **SS Camp, Gofor, Giema, Joru**
3)While there is some fighting in Lower Bambara there is almost no reports of fighting in the south (323)
4) RUF moves to *Gegbwema* (Tunkia) but is forced out by CDF April 1998
5) by December of 1998 Kamajors control much of *Gorma Mende*
'99
6) RUF take *Tongo* field (LB) form Kamajors (324)
7) Disarment starts on Oct 20th 1999.

RUF Bases

CDF Bases
Blama
SS camp
Giema (dama)
Joru
Faama (P8)

Key Towns/Places
Dodo
Gegbwema
Gorma Mende
Tongo field

Pujehun
1) CDF/ECOMOG take **Zimmi** on Feb 17, after intervention district is clear of rebels.
2) Some RUF linger in *Kpaka,* in March forced out, march (508)
3) early '98 kamajor battle RUF at *Sowa*, RUF leave chiefdom (508)
4) last RUF base in district is *Panga kabone*, driven out it march (508)
5) CDF HQ at **Potoru**
6) CDF constructed checkpoints, 8 between Zimmi and Liberian Border, four between Zimmi and Tunkia Border (509)
7) Mid October '98 some clashes at the border

RUF Bases

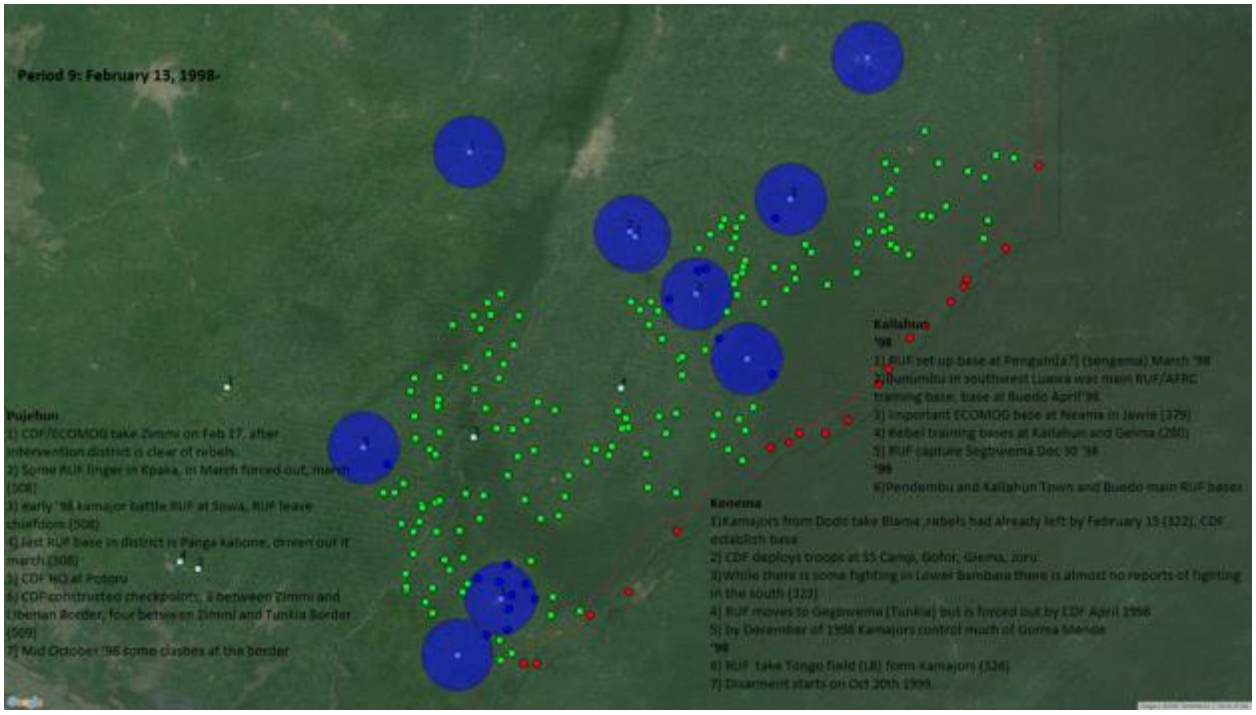
CDF Bases
Zimmi
Potoru
Gofor (P8)
Key Towns/Places
Kpaka
Sowa
Panga Kabone

Kailahun
'98
1) RUF set up base at *Penguin[a?]* (sengema) March '98
2)*Bunumbu* in southwest Luawa was main RUF/AFRC training base, base at *Buedo* April'98
3) Important ECOMOG base at **Neama** in Jawie (379)
4) Rebel training bases at *Kailahun* and *Geima* (280)
5) RUF capture *Segbwema* Dec 30 '98
'99
6)*Pendembu* and Kailahun Town and Buedo main RUF bases

RUF Bases

CDF Bases
Neama
Daru Barracks (P8)
Key Towns/Places
Penguina
Bunumbu
Buedo
Neama
Kailahun
Geima
Segbwema
Pendembu

Summary: After the removal of AFRC, RUF/AFRC again retreating to the southeastern bush, but they weren't going away.By December of '98 they were back in Kono and by Christmas they were on the Freetown doorstep. Finally chased from Freetown In late January 1999 after three weeks of Apocalyptic carnage, rebels retreated south again and established several bases in Kailahun. Kailahun seems to be there only real area of action after the retreat from Freetown.



The Sphere of influence: Control

Our method of till this point has allowed us to discern changes of control that occur with our territory and therefore delineate "Periods", or States of Control, within the Territory. Now comes time to make distinctions about *who* controls where, *how much* control that actor has. Theory suggests that villages closer to military bases, will be easier to control by the actor who controls that bases. And because predictions of violence differ with the level of control an actor exerts, we need to a measure for varying levels of control. My approach will be theoretically grounded pragmatism.

We want to separate out situations of high control from situations of low control that occurred in the Territory over the course of the war, and then analyze these situations comparatively to see if we find patterns predicted by theory. (For Kalyvas the presence of a permanent stationed garrison near by factors largely into his method). To do make this segregation I look at how far a village is from present military bases. But where then do we draw the line between "low" and "high" control?

I conceptualize, and visualize, control as a "sphere of influence" pulsing from every military base. The "spheres" will be drawn at multiple points and then compared. I draw spheres around bases with radiuses of 5k, 10k, and 15k.

The border

As we have seen there are fundamental links between the wars in Sierra Leone in Liberia. The RUF used Liberia as a staging zone for their initial incursions (with support of Taylor) and the Liberia side of the Mano was to where the RUF would flee in time of trouble to regroup. For all intents and purposes, it was a "safe zone". While are focus is on military bases, as they are obvious locusts of military control, much the same argument could be said of the Liberia border. Villages close to the border could be easily visited and were ripe for information gathering. Therefore, I will regard the Liberian border as the same as a rebel base.