Rwandan Political Violence in Space and Time

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Note – because of some problem with endnote, we could not import my references. All you will see is the name of the person being cited. When repaired, we will post an updated version of the paper that addresses this problem.

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In certain respects, we are all quite familiar with what took place in Rwanda between April and July 1994 – 100 days that will be remembered for some time. Rather quickly after violence began on April 6th, bodies began washing up on the shores of the Kagera river, tales of the horrors reached refugee camps in Burundi, Tanzania, Uganda, and the Democratic Republic of the Congo (as people ran for their lives) and photographs as well as video of the carnage made their way into newspapers and television shows globally. Viewing the bloodshed and hearing the tales, we know that what transpired was extremely violent, fast-paced, and large-scale. Any of these dimensions individually were noteworthy but taken together they represented one of the worst mass killings in modern history.

The explanation offered for the violence was relatively straightforward. As conceived, a group of extremist Hutu (members of the Rwandan Armed Forces [FAR], Presidential Guard, national police, the “Zero Network death squads”i as well as affiliated militias: the Interahamweii and Impuzamugambi,iii hereafter the FAR+) targeted their ethnic rivals – the Tutsi, and systematically engaged in their abuse and killing (Gourevitch; Human Rights Watch; ICTR–Prosecution; Mamdani; Power; Prunier; Straus).iv This readily and appropriately led to claims of genocide – the systematic attempt of political authorities in Rwanda to eliminate, in whole or in part, members of an ethnic group and, indeed, some observers referred to the events in question as the clearest example of the concept since the Holocaust.v The only variation in the work advocating this position was exactly how many people were involved: some highlighted a small clique whereas others highlighted a large proportion of the Hutu population.

A growing and diverse group of academics, politicians and students of African politics, however, disagree with this exclusive characterization, noting that other forms of killing were also occurring at the same time and place. Typically, the identity of perpetrators, victims and motivations differentiate these “other forms”. For example, many of the researchers above
generally acknowledge that ethnic Tutsi were not the only targets of the FAR+, identifying that politically “moderate” Hutu were targeted as well in order to eliminate resistance to the government (commonly referred to as politicide in the literature [Harff and Gurr; Harff]). Immediately after this acknowledgement, there is normally a statement that the targeting of these individuals was marginal when compared to the victimization suffered by Tutsi. Regardless of the number, if this targeting did take place, then it is inappropriate to only call what transpired genocide, as ethnicity was not the sole basis for targeting/victimization. Some note that both Hutu and Tutsi (combatants as well as civilians) were killed in the civil war being fought between the FAR+ and the Rwandan Patriotic Front (hereafter the RPF). These could alternatively be classified as battle-deaths, war crimes or crimes against humanity, generally depending upon the identity of victims, motives, circumstances and manner in which people were killed. There are others who note that there was a large degree of random political violence taking place or “wilding” (Fujii; Hatzfield). In this situation, ordinary/non-government affiliated Rwandans (both Hutu and Tutsi) squared off against other Rwandans (both Hutu and Tutsi) in an attempt to exact revenge for personal wrongs, financial gain or collective hatred – some ethnic, some political and some idiosyncratic in nature. More recently, individuals have argued that the RPF engaged in reprisal killings as they entered Rwanda (Gersony; Pean; Spanish court). As this is viewed as being disconnected from the military engagements undertaken during civil war but involved with state consolidation, these represent a distinct form of political violence. Finally, there are those who suggest that all of the different forms of conflict identified above were present (ICTR–Defense). Here, within a Hobbesian “war of all against all”, all hell broke loose.

Why should we care about exactly what took place? There are several reasons for such a concern. First, identification and classification have important legal ramifications. As
conceived, specific types of political violence bring with them specific obligations from members of the international community. Genocide, for instance, obligates attempts at elimination during the event in question as well as prosecution after. Moreover, Frulli (335) argues that the category of crimes against humanity – including but not exclusively concerned with genocide, is generally a graver offense than the category of war crimes thus yielding greater punishments. Second, identification and classification influences the lessons drawn from the case. For example, if one classifies the event as exclusively genocidal, then the discussion becomes one of understanding and exploring our collective inability to prevent this particular form of political violence (Power; UN General Assembly). If one classifies the event as politicide, civil war, crimes against humanity, wilding, reprisal killing, some combination or a violent free-for-all, however, then the nature of the reflective exercise is changed dramatically. Third, identification and classification influences specific post-conflict developments for what took place has implications for who receives aid, what type of assistance should be provided, what conditions should be monitored regarding the potential for future activity and how much leeway different actors should receive in the conduct of their national and/or international policies. As Reyntjens (2004) suggests survivors of genocide are worthy of assistance/reparation and tolerance as they attempt to reconstruct their lives. In contrast, perpetrators of war crimes or reprisal killings are worthy of investigation, scrutiny and even derision. Finally, identification and classification would assist researchers in further developing their ability to study and understand political violence. To date, analyses of political conflict tend to be directed toward the nation-year (e.g., Davenport; Fearon and Laitin; Gurr; Harff; Hibbs; Poe and Tate; Russett et al.; Sambanis; Sorokin). Newer research has emerged however to suggest that events, datasets and explanations likely vary within individual countries (Ball; Davenport and Stam; Earl and Soule; Gurr; Havard and Raleigh; Kaylvas; Mcphail; Restrepo and Spagat; Straus; Weinstein;
Wilkinson 2004). In this context, it is not only possible but also likely that nation-states experience a wide variety of conflicts within them at any one point and time.

Which is it? Of what was Rwanda, 1994 an instance? At present, we simply do not know. Some rigorous data analyses of the topic exist (Verwimp a,b; Strauss), but this work does not attempt to explore the variation in types of killing. Indeed, they largely accept the exclusive genocidal designation found within popular discourse, thus shedding little light on the subject of interest. To address the issues identified above, and further advance existing work, we propose drawing on the newer research in the field of conflict studies and parsing relevant activities into three spatial designations and observing these over time: 1) those under government jurisdiction, 2) those where government and rebels are engaged in fighting each other (i.e., the battle-fronts or frontlines) and 3) those under rebel jurisdiction. This provides an important first step in understanding what is taking place and allows us to at least begin to understand what and who is involved as well as what some of the implications of the relevant events might be.

Examining a new database on Rwandan political violence (Davenport and Stam), we find that the bulk of killings were undertaken within the jurisdiction of the extremist Rwandan government (approximately 890,000 deaths). Contrary to the expectations of the standard recounting, we find that the majority of the victims were most likely Hutu. Supporting conventional wisdom, we conclude that the largest number of individuals killed took place under what could alternatively be conceived of as genocide, politicide, crimes against humanity, and/or random political violence. We also find that there were many killings that took place under the territorial jurisdiction of the RPF (approximately 78,000 deaths) as well as on the front line of FAR+ and RPF engagements (approximately 93,000 deaths). This allows us to conclude that a significant number of killings were directly attributable to crimes against humanity, reprisal killings, and/or random violence under the jurisdiction of the RPF or civil war and battle-deaths.
within a contested space between the RPF and the FAR+. This controversial viewpoint moves against the position of the existing Rwandan government as well as activities of many individuals within the U.S. government. Equally as controversial, we find that although many of the largest killings took place within the jurisdiction of the FAR+, they were initiated when the RPF gained more territory. In a sense, the “final solution” ramped up when the political ends of the current Kagame led regime advanced.

Below, we address the conventional wisdom about Rwanda and identify some of the challenges to this position. Second, we identify how conflict studies would generally investigate the problem, afterward exploring how newer research approaches the problem. Third, we discuss how our team investigated the topic and then rigorously examine the diverse claims about what took place. The conclusion revisits the lessons of Rwanda and also how the examination presented within this research might influence conflict studies in general.

Understanding Rwandan Political Violence

From the first violent activities of April 6th, 1994 when the plane carrying the Presidents of Rwanda and Burundi was shot down, individuals throughout the world tried to comprehend what was taking place. Information was limited at first but slowly elements of the conflict were revealed. This was not an easy situation by any means. Few journalists were in the country at the time, human rights organizations did not really exist and refugees had not yet starting leaving the country en masse. This changed quickly. While the number of journalists diminished, those that remained were extremely busy trying to document everything that they saw. In addition to this, there was a large movement of individuals both within and outside of the country, providing horrific details about the Rwanda they had left behind.

Amidst the trickle of information, almost immediately a battle ensued among politicians, human rights organizations, journalists and scholars about exactly what was occurring. During
this time, there were a wide variety of opinions that emerged – each varying by the actors and actions involved, the presumed motives underlying the relevant behavior as well as the spatial and temporal parameters of the events in question. We first address the alternative opinions that emerged during the conflict and then move to the more rigorous efforts to document what took place that emerged after the relevant events took place.

Conventional Wisdom

Genocide. Clearly, one view has emerged as the predominant position, supported by the RPF rebels who overthrew the extremist government, most NGOs, the global media and many governments throughout the world. This argument characterizes the violence as genocide (Mamdani; Power). Here, there are essentially two actors: $H^1$ (the FAR as well as those affiliated with them) and $T^1$ (the Francophone Tutsi residing in Rwanda) with the former brutally attacking the latter in an attempt to eliminate them “in whole or in part”. Now, there is some disagreement about the number of perpetrators involved. Some argue that the number was actually quite small with only a few engaging in the bulk of the killing (e.g., Prunier). Others (in a Goldenhagen-like sense), argue that essentially all Hutu were involved including the military, the militia, the police, farmers, teachers, doctors, lawyers, students, mothers, fathers, cousins (Fujii). Regardless of the number, however, the basic argument is still the same.

There are some important behavioral implications that follow from adopting this perspective. Spatially and temporally, if what took place was genocide, then we would expect to find a wholesale slaughter of $T^1$ within the area under the territorial jurisdiction of the FAR+ ($H^1$). Wherever these political authorities were in charge, there would be violence and this should essentially involve all parts of the country that were under their control. Wherever these authorities were not in charge, however, there should be no violent activity.
This view of Rwanda 1994 was not the only one that was put forward. Almost simultaneously with the claims of genocide, other opinions emerged: some are crimes whereas some are not, some are systematic whereas some are more isolated, some take place in only conflict situations whereas some take place in times of relative peace and some only or generally involve governments whereas others involve a wide variety of participants. These alternatives were less well-known given the politics surrounding their identification as well as the dynamics involved with information dissemination but they were nevertheless identified and discussed during as well as after the events in question therefore meriting inclusion. We discuss several below.

**Alternative Conceptions of Rwanda 1994**

*Politicide.* The second most popular view regarding what took place characterizes the violence as politically motivated killing of a group, which attempted to bring about its destruction. Here, there are essentially three actors not two: H⁰ (the extremist Hutu in government), T¹ (the Francophone Tutsi residing in Rwanda who potentially could challenge the government and side with the RPF) and H² (Hutu not in or affiliated with the government who advocated political accommodation of the RPF or those who resisted the governments attempt to engage in violent activity). In this case, the first brutally attacked the latter two.

If one adopts this position, there are again important behavioral implications. Spatially and temporally, if what took place was politicide, then we would expect to find a wholesale slaughter of T¹ and/or H² within the area under the territorial jurisdiction of the ruling government (H¹). Wherever these political authorities were in charge, there would be violence and this should involve all parts of the country as these targets could be found in all locales. Wherever these authorities were not in charge, however, there should be no violent activity.
Civil War Battle-Deaths and War Crimes. Especially at the onset of violence, some claimed that what was taking place was a civil war (e.g., Human Rights Watch; Ruzibiza).\textsuperscript{xv} Here, in an effort to establish and secure territory, the extremist Hutu and their associates (H\textsuperscript{1}) or the RPF (Anglophone Tutsi entering from Uganda, T\textsuperscript{2}) targeted the RPF and extremist Hutu, respectively. These deaths were explicitly associated with battles taking place between military combatants and thus we would expect the majority of killings to occur on the battle-front/frontline in the area straddled by the two opponents.

There is some complexity here, as the clear identification of “combatants” was not always easily accomplished and/or attempted. For example, the extremists argued that they could not discern between the invading RPF (T\textsuperscript{2}) and the Tutsi residing under their jurisdiction (T\textsuperscript{1}) because the latter were essentially viewed as a “fifth column” waiting to arise and overthrow the government. Spatially, this suggests that some killing within the jurisdiction of the FAR+ might be related to the RPF and the war effort. Two possible mechanisms link these two: 1) where advancements of the RPF into the territorial jurisdiction of the FAR+ prompted the latter to attack the alleged “fifth column” and 2) where killings taking place either along the front or behind the lines of the RPF prompted them to attack T\textsuperscript{1};\textsuperscript{xvi} these should especially be seen in the zones immediately behind the front. As these violent activities take place in the context of armed conflict, they could be classified as a war crime.\textsuperscript{xvii}

There is some complexity in the other direction as well. For example, some claim that the RPF was not able to differentiate or not interested in differentiating between the extremists (H\textsuperscript{1}), the remaining Hutu population (H\textsuperscript{2}) or – most controversially – the Tutsi residing in the country (T\textsuperscript{1}). Essentially, they engaged in a scorched earth policy, eliminating all that stood in their path as they came in. Taking place within the territorial jurisdiction of the RPF and associated with the armed conflict, these could also be considered war crimes.
** Crimes Against Humanity.** Some characterized the events in Rwanda as crimes against humanity but not in the class of genocide. According to leading scholars in the field (e.g., Schabas; Frulli), these acts: 1) refer to violent activity directed against civilians that is widespread as well as systematic, 2) are not exclusively tied to ethnicity or the intent to destroy the target in total (like genocide) and 3) can take place in times of peace as well as times of conflict (unlike civil war related deaths and war crimes). Here, the FAR+ (H$^1$) and/or the RPF (T$^2$) target the remaining Hutu population (H$^2$) and/or the Tutsi in the country (T$^1$). These are differentiated from politicide because they did not exclusively involved governments and they are clearly identifiable and punishable crimes.

This form of violence again has specific spatial and temporal implications. In this situation, we would expect to see political violence all throughout Rwanda within the territorial jurisdiction of both combatants as they attempted to eliminate rivals, secure their control, plunder/pillage and/or take revenge for some perceived wrong.

**Reprisal killing.** In something of a gray-zone between crimes against humanity and civil war/war crimes, specifically focused on the RPF, there has been discussion of the violent activities undertaken by the rebels. Here, in an effort to exact revenge on those within their path as they came into the country, killings took place as the RPF moved into and through Rwanda. Now, there are some important differences in the classification here from that discussed above. If the events were widespread as well as systematic or they could be directly tied to the war effort, then they would be classified as crimes against humanity or war crimes. If the events were sporadic, lower in number and they could not be directly tied, however, then they could be classified as reprisal killings. Another difference concerns the targets. In crimes against humanity, the targets are civilians whereas in war crimes the targets could be either combatants or civilians. In this case, as RPF activities (i.e., those of T$^2$) were directed against all targets (i.e.,
H₁, H² and T¹), it seems closer in nature to war crimes. Again, this depends on one’s ability to tie the violence directly to the military confrontation.

Random Violence. Some researchers and observers of the conflict highlight the fact that individuals/groups seemingly unaffiliated with either combatant engaged in predatory behavior for either personal gain and/or for revenge of some sort. Although these activities could presumably take place within the jurisdiction of either the Rwandan government (H₁) or the RPF (T²), it is normally assumed that these were smaller in scale because the average citizen lacked the military capability to kill a large number of individuals. It is generally understood that such weaponry was needed for the largest episodes of killing.

“War of all against all”. Finally, some have maintained that all of the forms of violence identified above were taking place at the same time (ICTR–Defense). Here, the Rwandan government (H₁), RPF (T²), non-government Hutu residing in Rwanda (H²) and Tutsi residing in Rwanda (T¹) engaged in violent behavior directed against all of the other groups. The spatial and temporal implications of this characterization are clear: all locales would have some activity occurring at the same time and place.

In an effort to facilitate clear exposition, we have summarized the different alternatives in the following table.

Table 1. Alternative Conceptions of Rwandan Political Violence in 1994

<table>
<thead>
<tr>
<th>Type</th>
<th>Illegality</th>
<th>Perpetrator vs. Victim</th>
<th>Targeting</th>
<th>Applicable Context</th>
<th>Genocide Scholars Who Support Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genocide</td>
<td>Crime</td>
<td>Rwandan government/Hutu Power/Militia (H₁) vs. Francophone Tutsi residing in Rwanda (T₁)</td>
<td>Systematic</td>
<td>War and Peace</td>
<td>African Rights; Goureutich; Human Rights Watch (HRW); IBUKA; ICTR–Prosecution; International Panel of Eminent Personalities; Kuperman; Mamdani; Newbury; Power; Prunier; Reyntjens; Strauss; Verwimp(a)</td>
</tr>
<tr>
<td>Politicide</td>
<td>~Crime</td>
<td>H₁ vs. T₁ and non-</td>
<td>Systematic</td>
<td>War and Peace</td>
<td>African Rights;</td>
</tr>
</tbody>
</table>
The different forms of violence identified above should not be automatically seen as independent of one another. Indeed, there are numerous arguments that specifically address this issue. For instance, one common perception is that the activities of the FAR prompted the activities of the RPF. Here, genocide, politicide, crimes against humanity, civil war and war crimes of the Hutu extremists prompted civil war and war crimes of the RPF. Indeed, this sequence underlies the most widely distributed information on the conflict (e.g., the popular book by Philip Gourevitch – *We Regret to Inform You that Tomorrow We Will Be Killed with Our Families*, the film *Hotel Rwanda* with Don Cheadle and the Pulitzer Prize winning book by Samantha Power (380) – *A Problem from Hell: America and the Age of Genocide*).

Related to the previous sequence, but more controversial in nature, is the issue of the “Double-Genocide Thesis” (Verwimp b). Here, it is maintained that the violence of the FAR led
to the violence of the RPF when they moved into an area. The difference in this position is that the killings undertaken by the RPF are characterized more like reprisal killings than anything else.

In a third argument, it is not the activities of the Hutu extremists that drives the violence but rather the activities of the RPF – first through their invasion and then through their enhanced territorial surges into Rwanda itself as the war moved in their direction (International Panel of Eminent Personalities, 37). There are two variants of this position: first, RPF movements prompted the FAR to perceive that their defeat was imminent and to push forward with their “final solution”; second, RPF movements led to massive population displacement, which in turn weakened social ties and made mass killing of “strangers” a much larger possibility.

**Studying Rwandan Violence**

Beginning almost immediately with the violence on April 6th, but not completed until after it had run its course, there have actually been quite a few efforts made to document what took place. These compilations (event catalogs of who did what to whom) were put together by actors within (diverse ministries of the RPF-led government that assumed power after the event was completed as well as various human rights organizations) as well as outside Rwanda (various human rights organizations that were generally interested in global human rights violations or specifically interested in the case). Interestingly and unfortunately, all of these efforts ignored the issue of classification. None attempted to adjudicate between the alternative conceptions provided above; rather, they all accepted the dominant conception of genocide and sought to document it. xviii We describe the efforts at data collection briefly below.

The international human rights organization, *African Rights* put forth one of the earliest efforts at data collection on the violence of 1994 – documenting who did what to whom in great detail (i.e., the activity, date, time, perpetrators as well as victims). Originally affiliated with
Human Rights Watch, this organization engaged in their effort to bring truth and justice to the victims of the genocide. In the publication yielded from this effort, “Rwanda: Death, Despair and Defiance” (1995), African Rights and their one-man research team (Rakiya Omar) compiled as many eyewitness accounts of the genocide as possible from the entire country, roughly following a snow-ball sampling approach. Given the inability to travel within Southern and Western Rwanda (particularly the prefectures of Kibuye, Cyangugu, and Gikongoro), which was inaccessible during the conflict early on, these areas were initially not included but were by the second edition. This was not particularly problematic for the source because the effort was conceived as being “catalytic” in nature. As they state,

We hoped that our modest attempt to tell the truth of what had happened would prompt others, including the UN itself, to carry through the task in a more comprehensive way (African Rights, xvi).

Another source that engaged in data collection about what transpired was Human Rights Watch, the international NGO dedicated to monitoring human rights violations all over the world. Similar to African Rights, the purpose of their publication, “Leave None to Tell the Story” was to compel “policymakers, the press and the public to recognize the genocidal nature of the killings and to honor moral and legal obligations to intervene to halt the genocide” (Human Rights Watch, 28). When this did not work, the organization used the compiled information to “initiate legal action against persons accused of genocide” (Human Rights Watch, 28). This is consistent with the larger mission of the group.

The research for the book began in early 1995 when Human Rights Watch and the International Federation of Human Rights Leagues (FIDH) began documenting state-sponsored political violence. Toward this end, “researchers carried on hundreds of interviews and located, organized, and translated administrative records from communes and prefectures. They also
amassed extensive materials from judicial cases and from various diplomatic sources” (Human Rights Watch, 28). As designed,

(t)he study presents both an overview of the genocide throughout the country and a closer examination of its course in southern Rwanda, where people opposed the killing campaign longer than elsewhere in the country and where the role of the authorities in directing the genocide is particularly clear (Human Rights Watch, 28).

Between 1994 and approximately 2002, the prosecution for the International Criminal Tribunal on Rwanda (ICTR) in Arusha, Tanzania engaged in a large-scale data collection effort of 10,879 testimonies regarding what actors were engaged in what activity against whom, by date and location. A small subset of these documents was made available on the Tribunal’s webpage. As for what the Tribunal was looking for was clearly delimited in Security Council Resolution 955 of 8 November 1994. Here, it was stated that

(t)he International Criminal Tribunal for Rwanda was established for the prosecution of persons responsible for genocide and other serious violations of international humanitarian law committed in the territory of Rwanda between 1 January 1994 and 31 December 1994. It may also deal with the prosecution of Rwandan citizens responsible for genocide and other such violations of international law committed in the territory of neighboring States during the same period.

Accordingly, the testimonies deal with specific cases that the court was investigating but many resulted from interviews in the country as well as in refugee camps outside of the country that had no direct connection to the cases themselves. Consequently, the records have both a systematic as well as random component to them.
Physicians for Human Rights (PHR) is an organization that uses medical and scientific methods (specifically forensics pathology and anthropology expertise) in order to uncover human rights violations. The objective of their effort in Rwanda was to collect evidence for the International Criminal Tribunal for Rwanda (ICTR). Within this seventeen-person, two-month project, PHR conducted a forensics investigation of one specific area surrounding the Kibuye Catholic Church and Home of St. Jean. Their efforts consisted of sketching maps of buildings and vegetation within this area, searching for and categorizing skeletal remains, and excavating mass graves.

A non-governmental group of Tutsi survivors called IBUKA undertook a very unique data collection effort entitled Dictionnaire Nominatif – a dictionary of names. Between 1996 to approximately 1999, this organization conducted interviews in several provinces in order to document every killing of Tutsi that took place during 1994, facilitating truth telling, healing for survivors and historical recorders for researchers and lawyers. Although they expressed an interest in documenting diverse types of killing: that for being a Tutsi, being a Tutsi-friend, looking like a Tutsi, having a Tutsi mother or taking a position of political opposition to the government, IBUKA ended up only highlighting the first category.\textsuperscript{xxv}

While several locales were initially targeted, only one province was done systematically and published as well as distributed to the public – Kibuye.\textsuperscript{xxvi} Here, they conducted a household census, meticulously noting information about the victim and perpetrator (generally by name), the method of killing, as well as the location of relevant activity. Specifically, (IBUKA) proceeded alongside the administrative organization of Rwandan society. Kibuye Prefecture (Province) is divided into nine communes. Each commune, having on average 50,000 inhabitants, is subdivided into several sections. These sectors on their turn consist of several cells. Commune by
commune, sector-by-sector and cell-by-cell, IBUKA collaborators went into all families of Tutsi survivors and of Hutu who did not participate in the genocide to find the names of the murdered Tutsi. The project was financed by the Dutch embassy in Rwanda and employed about two hundred enumerators. The enumerators came from the commune where they were doing the interviews or were familiar with it (Verwimp, 5).

After coming into power, the new RPF-led government of Rwanda also engaged in numerous efforts. These involved different ministries at different points of time with varied methodologies, interests and resource allocations. We describe these briefly below.xxvii

One of the first efforts undertaken by the new government was compiled under the leadership of The Ministry of Youth, Culture and Sport. Specifically, this project was interested in identifying the sites of the genocide and massacres that took place in Rwanda from April to July 1994. During the period between 1994 and 1995, information was compiled by interviewing prefecture and commune officials as well as guided site visits to listen to testimonies, observe and photograph relevant locales. The only noticeable difference between this effort and the next is the larger number of communes that were included.

The Ministry of Education, Scientific Research and Culture,xxviii a six-member commission of the Rwandan government, was undertaken between 1995 and 1996. During this time, the organization engaged in a project “The Commission for the Memorial of the Genocide and Massacre in Rwanda” whose purpose was to provide information to researchers and the general public on the Rwandan genocide. While the Ministry of Higher Education designed the project, it was funded by numerous organizations (e.g., HCDH, UNICEF, GTZ and UNESCO/PEER) and was executed with the assistance from other Rwandan ministries including Labour and Social Affairs, Rehabilitation and Social Integration, Home Affairs and Communal
Development, Family Affairs and Women’s Development and Defense.

The report that emerged from this data collection effort was a product of approximately two and a half months worth of research. Obtaining the necessary information for this work occurred in several stages: 1) initiating contact with the prefecture and commune officials, 2) visiting the sites, and 3) recording testimonies and any available information about each genocide site. A fourth stage involved acquiring testimonies associated with the specific area in question. In order to gather the most accurate information, only those who were present during the genocide were interviewed. While interested in being thorough, the individuals involved with the work admitted that it was “not intended to be perfect” (2). Reporting observations in about two thirds of Rwanda’s communes, the work was to be viewed as an “interim publication which will be followed by other improved versions” (2).

The Ministry of Local Administration and Department of Information and Social Affairs undertook the most ambitious data collection of the publicly available source material identified in a report called “The Counting of Genocide Victims.” Beginning in 2000 and completed in 2002, the objectives of this study were threefold (MINALOC, 15): 1) to know the families and the names of the genocide and massacre victims, 2) to know the number of the genocide and massacre victims across the country in terms of facilitating a work to remember them by and 3) to identify the most affected sites of the genocide in order to allow the Government of the National Union to concentrate their efforts to reconcile the Rwandan people.

To facilitate this effort, over two weeks in July (in cooperation with the National University of Rwanda and the National Office of Population), 1,900 enumerators canvassed the country, recorded recollections of victim’s families as well as conducted interviews throughout the nation’s prison system. During the effort, MINALOC conducted their survey within households throughout the country but they did not identify how many individuals were
interviewed or how these individuals were selected. MINALOC (16) did identify that “(i)n the case of a family completely decimated, or in the case of a family whose survivors do not live at this place any longer, the respondent was a neighbor or any other person of the commune, who could provide answers regarding the household of the victim(s).” They continue “(i)n the case of a family of which at least one survivor still lives in the commune, it is the head of the household who responds or in his/her absence all other family members” (16). One limitation of the study, directly relevant to the current effort, is that it does not disaggregate the killings across time; it provides summaries for each geographic locale but only as a cumulative total.

Table 2. Overview of Rwandan Source Material

<table>
<thead>
<tr>
<th>Only Large-Scale Killing</th>
<th>Whole Country</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>Yes</td>
<td>- Ministry of Education</td>
<td>- Physicians for Human Rights</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ministry of Youth, Culture and Sport</td>
<td>- Human Rights Watch</td>
<td></td>
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<tr>
<td>No</td>
<td>- Ministry of Local Affairs (MINALOC)</td>
<td>- Ibuka</td>
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<tr>
<td></td>
<td>- ICTR Testimony</td>
<td>- African Rights</td>
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Rigorous Analyses of Rwandan Violence Data

Researchers that were interested in understanding what took place in Rwanda have generally relied upon one or several of the sources provided above. The number of these efforts is quite small however; in fact, at present there are only three, with two of them undertaken by the same person.

In one study, Verwimp (a) utilized information from the IBUKA Dictionary, after correcting some of the errors found in the initial compilation. He also engaged in some non-systematic interviews of survivors. In the other, Strauss utilized information from IBUKA but
also Africa Rights, Human Rights Watch, the Ministry of Education and the publicly available subset of ICTR eyewitness records. With this he generated a best guess of start-dates from observing the range of values. In addition to this, Straus conducted systematic in-person interviews with about 200 convicted perpetrators.

While useful for exploring certain questions: respectively, the influence of poverty on political violence and the influence of local-national dynamics on political violence, both of the efforts are limited from the perspective of the current research because both Verwimp and Strauss conceptualize the problem in terms of genocide. As far as they are concerned, this was the only type of political violence that occurred. Now, the comment is somewhat overstated, as Strauss does repeatedly acknowledge that there was a civil war going on. This said, when it comes to running models and drawing conclusions, the focal point of his analysis is “genocidal” violence (1) – violent behavior that he argued was captured in the sources identified above.

In a third study, Verwimp (b) deviates from this pattern and utilizes a different source of information entirely. Specifically, he uses a survey of households within three provinces (Gikongoro, Gitarama and Kibuye) in order to gauge who was lost during the political violence of 1994 and afterward. In this work and directly in line with the current effort, Verwimp explicitly addresses two distinct forms of political violence: that undertaken by the extremist Hutu government against Tutsi and that undertaken by the RPF against Hutu – what he refers to as the “Double-Genocide thesis.”

Unfortunately, this study is also limited but for somewhat different reasons than those identified above. First, the RPF moved through Rwanda rather quickly (taking half the country in less than a month) but stopped right before entering the provinces of interest to Verwimp. Indeed, the three provinces sat within an area outside of RPF control for much of the conflict. While he maintains that the results are potentially generalizable to the rest of Rwanda, this does
not appear to be a reasonable assumption. Second, given the massive amount of population displacement and the problem of recall bias within surveys, it would have been useful to interview individuals in refugee or internally displaced settlement camps in order to assess their understandings of what transpired. Third, it is not clear how Verwimp identified RPF movements/jurisdiction over a particular territory nor is it clear how individuals identified different perpetrators. This is problematic because without this information it is hard to judge responsibility.

**Innovations in Conflict Studies: The Move to Disaggregate**

Our difficulty with existing research on Rwanda 1994 is that it ignores the variation in political violence that existed. This problem is connected to the broader literature in conflict studies, which generally fails to disaggregate information below the nation-year and which largely focuses on one type of violence at a time (i.e., genocide/politicide [Harff], democide [Rummel], negative sanctions/civil liberties restriction [Freedom House; Taylor and Jodice], human rights violation [Cingranelli and Richards; Poe and Tate], civil war [the Correlates of War Project; Sambanis], armed conflict [Upsalla], terrorism [Miklous]). This practice has recently been challenged, however, by a growing number of researchers in political science and sociology who attempt to disaggregate conflict processes within large-scale territorial units such as nation-states (e.g., Tilly – exploring diverse forms of contention; McPhail – exploring diverse forms of action during protest events; Ball – exploring forms of violence during large-scale state-killings; Kaylvas – exploring diverse forms of violence during civil war; Raleigh and Hegre with ACLEDxxxiii – exploring diverse forms of killing during armed conflict; Restrepo, Spagat and Vargas – exploring diverse political violence within Colombia). These efforts consistently attempt to identify the different actions and actors that engaged in relevant behavior across locales and times.xxxiv
The reasons for engaging in such effort are clear: traditional work in the field suffers from an “ecological inference problem as conclusions drawn at the national level may not apply to the localized event one is studying” (Raleigh and Hegre, 1). Drawing on scholarship concerned with civil war and armed conflict, these researchers identify that,

(a) at the nation level, it is difficult to operationalize for instance ‘mountainous terrain’ much more precise than the share of the country’s territory that consists of mountains. When rebel activity is largely local, there is no way to capture whether rebel activity really occurred in the mountainous parts of the country. Similarly, studies of the importance of country size, population, and ethnic fragmentation or domination suffer from using aggregated data to explain more local phenomena. Although this in most cases would not increase the risk of erroneously rejecting true null hypotheses, these data weaknesses are likely to severely limit the power of the statistical studies.

As one considers other factors as well (e.g., the importance of networks, mobilization and diffusion [e.g., Weinstein; Wilkinson]), they are in need of more refined data. The resolution to these problems is a simple one: we need to disaggregate existing databases and consider specifically who did what to whom – exactly where, when, how and why. In the context of Rwanda, this is exactly what we attempt to do.

**GenoDynamics**

For the last ten years, we have been engaged in what is to date the most extensive data compilation and collection effort on the subject of Rwandan political violence. We say “compilation” because we brought together all of the source information noted above. We say “collection” because in addition to bringing together existing data, we have also engaged in a variety of other efforts as well: 1) numerous interviews (both structured and unstructured
throughout all provinces in Rwanda), 2) several focus groups in Kigali and Butare, 3) one randomly-selected household survey in the prefecture/province of Butare regarding the violence and reconciliation effort (Gacaca), 4) the collection of information regarding the location of all military units before the conflict of April got underway (discussed below), 5) the collection of information on the location and strength of all radio towers in Rwanda as well as 6) the collection of census information, agricultural zones, forced migration (internal displacement and refugees) and international media coverage about Rwanda and the conflict.

To address the topic of interest to this paper, we only employ some of the information noted above. Specifically, we draw upon the data compilation in an effort to understand how many people were killed in Rwanda, when and by whom. To conduct this analysis, one needs information on victims, times, locations and perpetrators. Below, we discuss our measures for deaths (casualties) and then move to deal with zones of territorial jurisdiction – each of these was compiled by the commune-day.xxxv

Deaths. To generate estimates of who was killed during political violence, when and where,xxxvi we use information from Africa Rights, Human Rights Watch, IBUKA as well as the Ministries of Education and Youth, Culture and Sport – the sources with the most comprehensive coverage.xxxvii We also employed information from MINALOC to compare summary estimates across all communes to gauge the validity of the effort. For all communes in Rwanda between April 6th and July 19th – the 100 days that is commonly focused upon, we generate estimates by utilizing a Bayesian Latent Variable Model.xxxviii This deviates significantly from the approach undertaken by Strauss, who looked at similar sources, but it is similar in nature to the approach pioneered by Patrick Ball – commonly identified as one of the best scholars involved in data generation.xxxix

As conceived, the model suggests that each of the observed casualty figures are “caused”
by an unobservable level of intensity. With the model, we estimated this level of intensity and along with that, a predicted figure for casualties. Specifically, we model the observed casualty figures as Poisson in the following manner:

\[
\text{Casualty}_{ij} \sim \mu_{ij}
\]

where \(i\) indexes commune, \(t\) indexes time, \(j\) indexes data source, and \(\log(\mu_{ij}) = \alpha_j + \beta \text{intensity}_{it}\). Since this is a Bayesian model, all of these parameters have to be given prior distributions (our assumptions about the distributions of these parameters before we confront the data). We have chosen the following priors for the model parameters:

\[
\begin{align*}
\text{intensity}_{it} & \sim N(0, 1) \\
\alpha_j & \sim N(\mu_\alpha, 10) \\
\beta_j & \sim N(\mu_\beta, 10) \\
\mu_\alpha & \sim N(0, 10) \\
\mu_\beta & \sim N(0, 10)
\end{align*}
\]

The distributions for \(\beta_j\) and \(\mu_\beta\) are truncated so that only positive values are possible. This is mostly for identification purposes. The \textit{intensity} variable is only identified up to a mirror image, that is to say, if the coefficient is completely free, there is an equally good latent variable solution that is \(-\text{intensity}\). Predictions from the model were obtained in the following way:

\[
\log(\text{Killing}_{it}) = \mu_\alpha + \mu_\beta \text{intensity}_{it}
\]

The predictions are obtained by summarizing the posterior distribution and taking the median and as well as the 5\% and 95\% quantiles. This gives a sense of the range of the possible values. The sum across all commune-days of the predictions is 1,063,336 - at the high end of reasonable predictions about casualty figures. However, the sum of the upper and lower bounds suggest that the plausible range is between 1 and \(2.48 \times 10^{13}\), thus it is impossible with these data to discriminate between competing estimates that lie within this range. The reason for the wide range is the general lack of data.
Territorial Jurisdictions. To address the issue of who is engaged in the killing, we draw upon the insights of previous scholars; specifically, we employ the work of the U.S. Military Assistance Command Vietnam, Civil Operations and Rural Development Support’s “Hamlet Evaluation System” (HES), Patrick Ball and Stathis Kalyvas’ work on “zones of control.” These efforts are important for they explicitly focus on which actors have influence/control/jurisdiction over a particular geographic locale. This information is deemed important because through either direct action (commission) or inaction (omission), the actor with the greatest monopoly of coercion within a specific locale is generally held to be responsible for violent behavior in that locale. Exactly how control is identified varies across projects. For example, the HES relied upon a very detailed survey of distinct topics to gauge the relative magnitude of influence of a specific political actor. Ball followed a simple organizational model of military structure concluding that if killing took place in an area under the direct leadership of a particular official, then they were responsible for what took place. Kalyvas engaged in a detailed historical examination of diverse documents. There is thus no clear-cut way to make these judgments but previous efforts have been clear on the fact that any estimation should be based on some rigorous investigation of source material.

Drawing upon this work, we focus on the locale of military units affiliated with the combatants of the Rwandan conflict: the FAR and the RPF, using this information to establish battle-fronts (areas of direct engagement between units) as well as battle-zones (areas that fall under the control of specific sides to the conflict). Our conception directly corresponds to the work of Kalyvas. For example, our battle-fronts corresponds to Kalyvas’ concept of “zone 3” where both actors wield influence. Additionally, our conception of FAR battle zones corresponds to his “zone 1” where the incumbent exercises control and RPF-led battle zones correspond to “zone 5” where the insurgent exercises control. Our conception does not currently
allow us to address zones 2 and 4, which are locales that are predominantly under the control of
incumbents and insurgents, respectively (and the zones of the most conflict). They do, however, correspond to the zones within which the least amount of violence should exist.

Our tripartite division is important for providing a first step at adjudicating between the
diverse forms of violence identified above because different jurisdictions would likely be
associated with different types of killing. For instance, depending upon intent, perpetrators and
the identity of the victims (which is beyond the scope of the current paper), the area under the
control of the extremist government could be classified as genocide, politicide, crimes against
humanity or random political violence. In all likelihood the later would be associated with the
smallest amount of deaths given the greater capability of well-armed perpetrators. It is difficult
to argue that these deaths were war crimes. To make this determination, one would have to link
individuals, organizations, actions and/or ideas within the jurisdiction to individuals,
organizations, actions and/or ideas to the RPF. This is precisely what those within the extremist
government attempted to do but the information necessary for this determination are very
complex. We will attempt to explore this below.

For the territory under the control of the RPF, the killings could be classified as either
crimes against humanity, reprisal or random political violence. Again, one could attribute deaths
within this jurisdiction to war crimes but again this depends on a very explicit link to the
communities on either side of the front, a point we will explore further. One could attempt to
associate these violent activities with genocide or politicide but this appears to be a relatively
difficult case to make given the fact that establishing the RPF’s intent regarding their targeting of
Rwandans as they came in would be very hard to do. In addition to this, there would need to be
some evidence, one way or the other, that the RPF were discriminating in their targeting;
evidence which is, at present, unclear on this point.
Finally, deaths associated with the FAR-RPF battlefront are most clearly associated with
civil war casualties. It is not likely that random violence would be found here as it is expected
that non-combatants would not venture in between the military units.

To generate our estimations, we took four steps. First, we began with the work of
Kuperman (43), which was informed by information provided by the U.S. Defense Intelligence
Agency and Anyidoho (114). Second, these figures were updated with information provided
by the CIA (i.e., Freedom of Information Act, Africa Review, Rwanda-Burundi Briefs and
National Daily Reports) as well as information provided in a book by Captain Josue Abdul
Ruzibiza (“Rwanda the Secret History”), which seeks to describe the events surrounding the
Rwandan genocide and civil war with a focus on the RPF actions and troop movements. The
third step involved submitting our map to review of a former member of the RPF under the
protection of the ICTR who provided a detailed (day-by-day) evaluation of our maps. Fourth,
we worked with an expert in Arcview GIS to apportion deaths to the respective FAR, FAR-
RPF and RPF territorial jurisdictions. As the French occupy parts of Rwanda during the conflict,
we also had to account for their jurisdictions as well. We provide the discussion for the
generation of these data on the project webpage.

**Examining Rwandan Violence**

Of what is Rwanda 1994 an instance? We are now prepared to address this question.
As discussed above, there are a wide variety of arguments about exactly what transpired in
Rwanda between early April and late July. Our attempt at adjudicating between the alternatives
is to observe deaths generated within three spatial designations as they move across the country
over time: 1) those under government jurisdiction (the FAR), 2) those under rebel jurisdiction
(the RPF) and 3) those where government and rebels are engaged in fighting each other (i.e., the
front between the FAR and the RPF). In turn, we will also address some issues regarding
targeting and responsibility.

Who did what to whom? Viewing estimated jurisdictional killings over time, we account
for 1,063,336 deaths (263,336 higher than the conventional estimation). As for the
distribution of killings across zones of influence, one clearly sees that there are deaths within
each of the areas examined, albeit not at comparable levels. For example, the majority of deaths
took place within areas under the control of the FAR – totaling 891,295. There is thus evidence
that, depending upon a more detailed evaluation of perpetrators, intent and victims, events could
be classified as either genocide, politicide, crimes against humanity or random political
violence. Such a classification fits with conventional wisdom and the activities currently
being undertaken within the ICTR as well as Rwandan justice system. Our work differs from
these efforts, however, in that we do not rule out the existence of variation within and across
Rwanda; indeed, we most assuredly argue that this is the case. Our view is problematic from the
perspective of the ICTR because they have ruled that what transpired was “only” a genocide,
precluding the introduction of any evidence that counters this claim. Our view is also
problematic for the activities undertaken within Rwanda because they are focusing on only those
activities that took place under the jurisdiction of the FAR and they are largely focused on
killings that took place that were connected with genocide and crimes against humanity.
Politicide and random violent activity are categorically ignored.

The other jurisdictions are associated with far fewer deaths but they are nevertheless
important. For example, deaths under RPF control totaled 77,043. Again, depending upon
perpetrators, intent and victims, this is important because one could classify these actions as
either crimes against humanity, reprisal killings or random. This is directly in line with recent
claims of a Spanish criminal court, which indicted 40 members of the RPF (now Rwandan
Patriotic Army, RPA) for violent activity undertaken during the 100 days in question. Another 93,426 occurred at the front between the FAR and the RPF. In this case, civil war-related deaths are clearly identified.xlviii

Above, we only considered the cumulative totals. Another important part of the story is a spatial one. Where were individuals killed? This is shown below.

![Figure 1. 1994 Rwandan Political Violence Total Deaths by Troop Control](image)

Clearly, what becomes visible from the figure is that there is significant spatial variation in the violence. This is consistent with the work of Human Rights Watch, Kuperman, Verwimp and Strauss. Specifically, we find that the FAR was generally responsible for killings around the West, South, Southeast and Central parts of Rwanda. The RPF were generally responsible for killings in the North, but they were also associated with violence in the middle and Southeastern parts of the country. Consideration of the battle-front between the two units brings the violence further to the Northwest (near Gisenyi), Southeast (Kibungo) and down past the middle (below
Regardless of jurisdiction, however, very little violence was found in those parts of the country where individuals were able to flee across borders (e.g., the Southwestern part of the country between Rwasero and Gikongoro and the Northwestern part of the country around Gisenyi which had access to the Congo, the Southeastern part of the country around Kibungo which had access to Tanzania and the areas relatively close to the Ugandan border and RPF position in the Northern part of the country). The important exception here is in the area around Butare where residents were largely unable and/or uninterested in crossing over into neighboring Burundi – a place where violence was frequently directed against Rwandans.

There are numerous implications of these findings. First, the killings reveal distinct territorial patterns. Some types of violence were more likely to take place in specific locales as opposed to others. Second, some locales were likely to see a variety of different types of violence and others were more likely to experience only one form or another. Third, given the spatial dynamic, it seems that it might be extremely important to understand in which direction violence was moving. For example, if one jurisdiction was moving and the other appeared to respond to it, then this could inform us about the context within which distinct actions arose.

This is especially relevant to the issue of war crimes, which largely relies upon establishing a relationship between the activities of the combatants either on the battle field (i.e., the front) and/or what takes place within the territorial jurisdiction of the opponents. Several have made the case that the RPF pushed forward in an effort to prevent violent activities. Others however have maintained that the RPF was more concerned with securing the country, leaving the casualties as “collateral damage” to the war effort. Rather than leave this to speculation, we attempt to explore this explicitly.

To address the issue of jurisdictional movement, we animated killings over time and space. These are provided within a film placed on the project webpage.
When these figures are viewed, the findings are clear – particularly in April when the
bulk of the killing took place (estimated at 989, 387, roughly 93% of all violent deaths). On the
6\textsuperscript{th} of April, isolated killings emerged in different parts of Rwanda. For example, there were
killings within the jurisdiction of the FAR in the middle of the country in Kigali, near Kibungo to
the Southeast, in Kibuye in the West, in Gisenyi in the Northwest, and near Rwasero in the
Southwest. There were also killings along the FAR-RPF front as they surged forward from the
North downward into the Northwest and middle-eastern part of the country. The violence
essentially moved from these points as mobilization spread the violence to adjoining locales.
The largest amount of killing took place between Kibungo and Kigali, moving upward from the
former to the latter.

This pattern was fairly stable until the 12\textsuperscript{th}, when the RPF again surged forward into three
areas: near Gisenyi in the Northwest, in the middle toward Kigali and downward in the middle-
eastern part of the country toward Kibungo. At this point, there was extensive killing in the area
immediately in front of the RPF near Kigali, on the front between the FAR and RPF as well as
within territory under the control of the RPF in the middle-eastern part of the country.

On the 14\textsuperscript{th}, the RPF surged forward again, reaching Kigali and pushing further
downward in the middle-eastern part of the country. This was followed by the most lethal days
of the conflict – the 15\textsuperscript{th}. On this day, 131,280 individuals were killed within areas under the
FAR – concentrated around Kigali, Butare and Kigali, 17,800 were killed within areas under the
RPF to the Northeast of Kigali as well as in the area between Kibungo and Byumba and 3,878
were killed on the battle-front between the FAR and RPF mostly to the east of Kigali but also
further east as well as Northwest.

While things calmed down significantly on the next day within zones under the control of
the FAR (going down to 8,093 deaths – in the areas around Kibungo, West of Kigali, Gitarama
and Kigali), activities increased within the zones under the control of the RPF with 38,431 killings being identified (the highest of the conflict); this is especially the case in the areas to the East and North of Kigali. Killings continued in many of the same communes, with new ones – generally within contiguous locales. Activities largely decreased throughout Rwanda at this time, slowly increasing as the fighting increases both in front of as well as behind the lines.

On the 20th, the RPF surged forward again and violence escalated along the front and moving away from Kigali toward Gitarama. Killing continues in Butare. On the 21st, there was another surge of the RPF beginning to move around Kigali throughout the Southeast. During this time, killings increase between Butare and Kibuye under the FAR and there is a rather large killing near Kibungo under the RPF. Deaths were generated in more or less the same locales during this time, again petering out slowly as individuals are either killed off or run away.

On the 26th, following yet another surge of the RPF when they start to move below Kigali, there were large killings to the West of Butare and to the South of Gitarama under the FAR. Small-scale violence is recorded behind the lines of the RPF in Ngarama as well as in Kigali and to the North of this city.

Figure 2. Jurisdictional Violence Over Time
While useful for getting a general understanding of what was taking place, the relationships between the different forms of violence are perhaps better observed within the figure above. Here, we see that either directly in line with RPF surges as well as FAR-RPF battles or those periods slightly after these events, killings within the zones controlled by the FAR increased dramatically. Thus, the Northeast surge results in the FAR killings between the 6th and 8th; following extensive battle-deaths along the FAR-RPF front, the violence is escalated within the zone under control of the FAR; and, after Kigali is reached, the largest amount of violence is undertaken within the FAR’s jurisdiction. Preliminary exploration of ARIMA models suggests that this is a robust finding (not included here). In contrast, RPF-related violence appears to reach its highest point after the worst FAR-related violence, suggesting some form of retribution. There is also the likelihood of some effort being exerted toward pacification and consolidation as the violence moves toward Kigali.

**A Note on Ethnic Targeting**

Another reason for highlighting the activity of the FAR+ and RPF in influencing each other and downplaying the identity of the victims, concerns the problem of the latter’s identification during the conflict. According to conventional wisdom, government personnel targeted citizens – either directly or indirectly through militias and citizens targeted their neighbors. In addition to this, we add two other dynamics: government personnel targeting rebels and rebels targeting citizens. Unfortunately, the distribution of activities across categories is never discussed. Much is made of citizens turning on their family members but given the large size of many of the killings identified above, this was clearly not the way that the majority of
individuals in Rwanda died. An emphasis on the inter-personal dynamics makes for great book and article titles but it does match up with the evidence.

The information on behavioral distributions is important because it assists one in understanding why activities were undertaken. If, for example, the majority of the victims were produced from government targeting citizens – which was the case above, then it compels the researcher to discover exactly what type of relationship existed between citizens and authorities. On this point, there appears to be diverse opinions. In one view, governments are killing a citizenry that is clearly identified, categorized and defined. In another view, however, governments are killing a citizenry that they generally find unclear, mobile and alien. We support the latter position and thus suggest that the killings were more driven by the clearer defined enemy from without than to the less clearly defined enemy within; this actually also explains the behavior of the RPF as they came into the country. There are several reasons for this position.

First, there was massive population displacement within the country which hindered state as well as rebel observational capacity. As the International Panel of Eminent Personalities notes (37), between 1990-1992, RPF advances through the north and north-east, combined with the government’s cynical anti-Tutsi propaganda, produced a massive movement of terrified Hutu into settlement camps in the centre of the country. In a short time, close to 300,000 Rwandans, mostly Hutu, had been driven from or had fled their land to become “internally displaced persons” (the term used to distinguish refugee groups who do not flee across national boundaries) within their own country. In early 1993, another large-scale RPF attack led to a further million, again mostly Hutu, being displaced (emphasis added).
We thus find that at the onset of mass political violence 1/8th of the Rwandan population was living outside of their home territory – where they would most assuredly be known. Add to this a new influx of largely Hutu from Burundi who fled from political violence there.

Second, there has been much discussion of the ability of individuals within Rwanda to discern between Hutus and Tutsis. Essentially, these are distributional issues like that identified below in the figure.

![Figure 3: Seeing The Other](image)

Some suggest that there are clear distinctions that could be made between Rwanda ethnic groups. Drawing upon an older Belgium phrenological approach, this generally falls upon the stereotypical conception of Hutus (as short, darker and stocky) and Tutsi (as taller, lighter skin and thin). In this view (depicted at the bottom), there is low variability in ethnic identification; if asked to select, one could easily do so. Violence undertaken in this context directed against members of the rival community is likely limited. In this context, activities could be enacted with pinpoint accuracy. Others suggest that there is a moderate degree of variability in Rwandan ethnic identity (depicted at the top). Here, it is a bit more difficult to separate between groups and violence would be a bit less precise. Still others (and we would agree with this group)
suggest that the degree of intermarriage and similarities across groups is so great that most
individuals could not be distinguished. In this context, those engaged in violent activities would
be the most careless as well as costly and the death tolls would be extremely high.

The last point suggests that the targets of Rwandan state violence might be a bit less clear
than discussed within the conventional position. Our consideration of the data described above
suggests that this is most likely the case.

Table 3.

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<td>591,573</td>
<td>761,573</td>
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Tutsi Survivors: HRW est. 130,000
Tutsi Survivors: Ibuka est. 300,000

Tutsi Pop estimated from 1992 census, assuming 8.5% Tutsi

Considering the number of Tutsi survivors after Rwandan political violence compared to
the number that existed before relevant activity (between 130,000 to 300,000), we find there is a
range of Hutu victims between 28,573 and 958,573 – depending upon which source one utilized.
This suggests that the killing was a lot less precise than many account for. Clearly evidence of
genocide is evident within this analysis but it is also clear that a variety of other activities exist as
well, which merit discussion and consideration within journalistic, scholarly, legal and political
circles.

Conclusion

We began this study with an interest in understanding what took place in Rwanda during
100 days between April and July 1994. There has been a tremendous amount of attention given
to this subject but very little systematic evaluation of alternative arguments.
Examining a new database on Rwandan political violence (Davenport and Stam), we track three distinct zones of political violence: 1) those under government jurisdiction, 2) those where government and rebels are engaged in fighting each other (i.e., the battle-fronts or frontlines) and 3) those under rebel jurisdiction. From this effort, we find that the majority of killings take place in the zone under government control (accounting for approximately 990,000 deaths). They are the ones directly responsible for almost all of the political violence. At the same time, we also find that approximately 80,000 deaths take place within the zone under control of the Rwandan Patriotic Front – the rebels. This point is a highly controversial one that has been categorically denied by the rebels now occupying the government of Rwanda and ignored by one of the international legal proceedings created to address political violence in the country – the International Criminal Tribunal on Rwanda in Arusha, Tanzania. Another 90,000 deaths are found within the zone contested by both the government and the rebels. Although somewhat less controversial, these deaths are not frequently discussed.

Our results do not only shed light on exactly what took place within each zone but it also addresses how the different zones influenced one another. For example, we find that the largest increases in government-initiated violence generally follow from military advancements of the rebels and/or mass-killings within the territorial control of the challengers. Indeed, the final solution within the territory controlled by the Rwandan government seemed to be linked to the progression of the war effort outside of this territorial jurisdiction.

Finally, our results raise questions about exactly who was targeted within each zone. Evidence exists which suggests that there was a tremendous amount of movement within the Rwandan population and this renders the situation one that is highly unstable. In this context, it was less the case that government turned on known citizen or that neighbor turned on neighbor
than the case that government turned on unknown citizen or that stranger turned on stranger. This leads to dramatically different understandings of what took place.

Returning to the beginning of the paper, there are three implications of this work.

First, identification and classification of the relevant events has important *legal ramifications*. As found, it is clearly the case that more international and domestic law is necessary rather than less in that there was a wide variety of violent activities undertaken during the period in question. To prosecute those involved, relevant actors need to engage discussions about genocide of Hutu extremists and ordinary citizens but also war crimes, crimes against humanity as well as murder and perhaps theft on both sides of the conflict. In this light, the reduction of crimes being considered within venues such as the ICTR and the government of Rwanda are regrettable because they leave unaddressed many aspects of the conflict.

Second, identification and classification influences the *lessons drawn* from the case. For example, our results suggest that the complexity of the conflict not its simplistic identification as one thing or another may have hindered the understanding of relevant activities as well as the activation of humanitarian intervention.

Third, identification and classification influences specific *post-conflict developments*. In particular, our work suggests that the individuals involved with the violent activities in the jurisdiction of the government should be pursued and prosecuted wherever they might be. At the same time, our work suggests that the individuals involved with the violent activities within the other jurisdictions should be pursued and prosecuted as well. As one of the parties to the conflict (the RPF) are now in control of the Rwandan state their treatment is particularly delicate but it is a matter that should be explored nevertheless. This is especially the case when aid, assistance and other issues are involved.
Finally, identification and classification would assist researchers in further developing their ability to *study and understand political violence*. As noted above, analyses of political conflict tend to be directed toward the nation-year. Drawing upon newer research, our study reveals the fruitfulness of disaggregating conflict processes – revealing patterns that would not be discernable within the conventional approach.

Clearly, our research is not ended. In many respects, with the data collection completed, our work is just beginning. For example, we are now going to further explore all of our cases of political violence and bring source material to bear on pin-pointing the perpetrators, victims, weapons and aftereffects of killing in each locale. In another component of the project, we plan on exploring the influence of radio towers and broadcasts on the diffusion of violent activity – explicitly examining the influence of what an interruption of radio broadcasts would have changed on the ground. Related to this, we will also explore a more detailed analysis of diverse forms of humanitarian intervention and also how much violence would have occurred had individuals simply stayed at home.
This was noted by the study undertaken by the International Panel of Eminent Personalities (57).

This is the name of the military wing of the National Republican Movement for Democracy and Development.

This is the name of the military wing of the Coalition for the Defence of the Republic.

For this paper, we assume that the FAR+ were predominantly composed of ethnic Hutu and the Rwandan Patriotic Front were predominantly composed of ethnic Tutsi of Ugandan and Anglophone orientation.

While genocide is generally under the category of crimes against humanity it has effectively been distinguished from other forms because of the perpetrator’s intent.

Here, mortality is directly linked to the outcome of military engagements.

These are widespread or random/isolated violations of the laws of war undertaken during an armed conflict. When the former, the activities could be considered crimes against the peace and security of mankind.

This involves widespread or systematic attack directed against any civilian before or during conflict where the perpetrator is explicitly aware of the objective of the campaign.

The point here is that individuals died in the midst of violent confrontations between combatants.

See the following URL for article: http://allafrica.com/stories/200803060957.html.

Tilly should clearly be seen as an innovator here.

In the conventional view, the mass society of perpetrators were not involved in some abstract way, similar to that attributed to everyday Germans (Browning; Goldhagen) or whites in the Southern part of the US during the period of Reconstruction and Jim Crow (e.g., Tolnay and Beck). Rather, in the standard view, Rwandans typically participated in a very direct manner—wielding machetes, tracking down victims in mobs, setting up roadblocks and killing en masse. Indeed, perhaps the only thing that was as troubling to observers as the number of perpetrators and victims was the speed with which the former dealt with the later. According to one author, the rate of killing exceeded that of the Holocaust, claiming that it was the "most efficient mass killing since the atomic bombings of Hiroshima and Nagasaki" (Gourevitch, 4).

It is unclear within the work relevant to this phenomenon if the intent of the perpetrator is important. As the intent component is removed in my characterization, this could be viewed as broadly falling under the category of crimes of extermination (Scheffer, 242). These acts are not exclusively considered with political-motivation however.

This would allow them to return to the country as discussed in the Arusha Accords.

According to Sambanis (829-831):

An armed conflict should be classified as a civil war if

(a) The war takes place within the territory of a state that is a member of the international system with a population of 500,000 or greater.
(b) The parties are politically and militarily organized, and they have publicly stated political objectives.
(c) The government (through its military or militias) must be a principal combatant. If there is no functioning government, then the party representing the government internationally and/or claiming the state domestically must be involved as a combatant.
(d) The main insurgent organization(s) must be locally represented and must recruit locally.
Additional external involvement and recruitment need not imply that the war is not intrastate. Insurgent groups may operate from neighboring countries, but they must also have some territorial control (bases) in the civil war country and/or the rebels must reside in the civil war country. 

(e) The start year of the war is the first year that the conflict causes at least 500 to 1,000 deaths. If the conflict has not caused 500 deaths or more in the first year, the war is coded as having started in that year only if cumulative deaths in the next 3 years reach 1,000.

(f) Throughout its duration, the conflict must be characterized by sustained violence, at least at the minor or intermediate level. There should be no 3-year period during which the conflict causes fewer than 500 deaths.

(g) Throughout the war, the weaker party must be able to mount effective resistance. Effective resistance is measured by at least 100 deaths inflicted on the stronger party. A substantial number of these deaths must occur in the first year of the war. But if the violence becomes effectively one-sided, even if the aggregate effective-resistance threshold of 100 deaths has already been met, the civil war must be coded as having ended, and a politicide or other form of one-sided violence must be coded as having started.

(h) A peace treaty that produces at least 6 months of peace marks an end to the war.

(i) A decisive military victory by the rebels that produces a new regime should mark the end of the war. Because civil war is understood as an armed conflict against the government, continuing armed conflict against a new government implies a new civil war. If the government wins the war, a period of peace longer than 6 months must persist before we code a new war (see also criterion k).

(j) A cease-fire, truce, or simply an end to fighting can also mark the end of a civil war if they result in at least 2 years of peace. The period of peace must be longer than what is required in the case of a peace agreement because we do not have clear signals of the parties’ intent to negotiate an agreement in the case of a truce/cease-fire.

(k) If new parties enter the war over new issues, a new war onset should be coded, subject to the same operational criteria.48 If the same parties return to war over the same issues, we generally code the continuation of the old war, unless any of the above criteria for coding a war’s end apply for the period before the resurgence of fighting.

xvi This view stands in stark contrast to the belief that the RPF stopped mass political violence as they came into the country (e.g., De Waal).

xvii It should be noted that there is no intent or casualty threshold (i.e., widespread and systematic) criteria that need to be met with regard to this legal concept. Also note that although the targets are from a different ethnic group, this is different from genocide because it is exclusively focused on the armed conflict.

xviii The reasons for the lack of exploration regarding alternative classifications are clear. The victors of the conflict (The RPF) had a major hand in defining the terms (Lemarchand, 8; also see Eltringham and Van Hoyweghen; Pottier). Perhaps the most notable instance was when the RPF-led Rwandan government following the genocide had Chief UN prosecutor Carla Del Ponte removed after she expressed interest in investigating alleged RPF abuses during 1994 (see http://www.globalpolicy.org/intljustice/tribunals/rwanda/2003/0918ponte.htm). As a result of these and other efforts, the RPF-led government pushed attention to the extremist Hutu government and occasionally to all Hutu. Raising the topic itself is something of a controversial matter. When the co-Directors of the Rwanda research project attempted to raise this issue in 2004 (at the 10th anniversary of the events in question), when some preliminary results of our research were presented, we were identified in the national and international press as “genocide deniers” (see http://web.mac.com/christiandavenport/iWeb/Site%207/GenoDynamics.html). It turns out however that this was not a rare occurrence. Researchers are now beginning to understand exactly how the RPF attempts to deflect/block inquiries into exactly what took place, manipulating scholars, journalists, funding organizations and even international criminal tribunals toward this end (e.g., Pottier; Reyntjens). Regarding this point, Pottier (128) notes that

Tutsi elites [tend] to substitute collective guilt for individual responsibility, and to affix the label “genocidaire” to the Hutu community as a group. [In certain respects] to be a Hutu was to be presumed a killer (Mamdani 1996: 22-3).
This context essentially eliminated or severely curtailed discussion of any violent activities the RPF engaged in either as part of their war effort or in the form of reprisal killings. Such an approach also tended to diminish discussion of the randomness of the killing.

As they state,

African Rights is an organization dedicated to working on issues of human rights, conflict, famine, and civil reconstruction in Africa. The urgent motivation for setting up African Rights is that we have become acutely aware of the limitations upon existing human rights, humanitarian and conflict-resolution approaches to Africa’s most pressing problems… (African Rights, inside cover page).

They continue,

Any solutions to Africa’s problems – the emergency humanitarian needs just as much as the long-term political reconstruction of the continent – must be sought primarily among Africans. International organizations should see their role as primarily facilitating and supporting attempts by Africans to address their own problems. It is Africa’s tragedy that the existing institutions for addressing these problems have not looked to the African people for answers. African Rights tries to give a voice to those concerned with these issues, and to press for more accountability from the international community in its various operations in Africa (African Rights, inside cover page).

One researcher (Omar Rakiya) was responsible for the work.

Although detailed in terms of the individual stories covered, from available information we are not sure what proportion of the country the enumerators covered and how thoroughly they covered the areas where they conducted their interviews. Additionally, we are not sure how the projects leaders selected the interviewees and we do not know how comprehensive the access was to available materials from government officials as well as eyewitnesses.

We believe that there are several thousand more but these were the only ones released by the Prosecutor’s office to the court and for our analysis that we were doing for them at the time.

See: http://69.94.11.53/default.htm. The focus of attention has been to genocide.

GenoDynamics was contacted to analyze this database and compare it to the other information that we had collected. We were never given the records, however, we only saw some examples as well as the database filing system. Mid-trial the prosecution no longer expressed an interest in this analysis and GenoDynamics was contacted by the defense for exactly the same service. Through the defense, we petitioned to have the eyewitness database made available, which after about a year we did obtain. For the record, we also requested access to the convicted prisoners, a military map that identified military forces on the eve of the political violence of 1994. After several months, we obtained the map.

The questionable nature of this finding is obvious. One scholar who reviewed the IBUKA project identified that most of the respondents were Hutu (Verwimp, 113). Given the identity of the interviewers and their organizational affiliation, it is possible that respondents provided the information that was desired or that testimony given about different forms of killing were ignored. When the authors of this paper were working with IBUKA in an effort to replicate the Kibuye effort throughout the country (between 1999-2003), it was clearly stated that there interest was exclusively focused on noting Tutsi deaths.

Kibuye province is particularly important for it represents one of the locales with the largest pre-genocide Tutsi population. This area also contained one of the most sustained resistance efforts against the genocide (which took place in Bisesero).

We aware of two databases but have not been able to acquire and do not believe that anyone will ever be able to acquire them. The Rwandan Ministry of Justice associated with the Gacaca process collected one. According to a
now-deposed Minister, we were told that this source maintains a listing of dates, times, locales and perpetrators of violent activity throughout the country, by name. Another was compiled by the organization Aegis Trust. According to an informant, we were told that this source attempted to collect the names, date and method of death for all people killed in Kigali-Ville during the 1994 Genocide. Undertaken between December 2003 and April 2004, this study involved a door-to-door survey, conducted by University students, of all neighborhoods of Kigali Ville and parts of Kigali-Rural. The survey included questions regarding the date and method of death of victims in that area.


Other problems were noted by Strauss (249):

- First, in general, the commission focused on and reported massacre sites and the dates of those massacres, not when the genocide began in a commune.
- Second, the report does not appear to have a methodology for specifying onset.


According to the report issued by the organization (MINALOC, 16):

- On the national level, 60 prefectural supervisors, from each province 4 and 16 from the prefecture of the City/Town of Kigali (PVK) were recruited as trainers and have contributed so much to the enriching discussions and have improved the content and questions of the survey and have defined the conditions of recruitment for the staff in charge of leading the activities on the communal level: controller (quality, number and strategy for covering the entire district);
- On the prefectural level, the 60 supervisors were deployed in their prefectures in order to recruit the controllers with the managerial staff in the national technical committee. At this level, 724 controllers were recruited and have trained during 3 days with the support of the members of the technical coordination committee. This phase was deciding for the finalization of the survey.
- At the communal level, 1825 census agents were recruited and trained. Their training took also 3 days.

Actually, there is a certain degree of confusion with this research because the survey that was conducted appears to conflate genocide and civil war-related deaths. In addition to this, the author uses a wide variety of labels to apply to seemingly the same types of behavior: e.g., genocide, killings and massacres.

ACLED stands for the Armed Conflict Location and Events Dataset.

In many respects, this newer work is not new at all: researchers of protest/protest policing in the United States largely based in sociology (e.g., Davenport; McAdam; McCarthy et al.; Soule and Earl) have been considering the influence of spatial variation within nation-states for quite some time. Rarely, however, do the insights from the different fields cross-over to the other.

At the time of the conflict, Rwanda was divided into prefectures, which were in turn subdivided into communes and, further yet, into cellules or cells.

We were also interested in start-dates (i.e., when violence began in a particular commune). For the estimates of start-dates we used information from an expert witness in the ICTR, African Rights, Human Rights Watch, IBUKA
as well as The Ministries of Youth, Culture and Sport and Education. We also used the larger compilation of eye-

witness testimony to cross-validate the estimations.

The data were basically used as is from each source (the IBUKA dated was modified by Verwimp). The casualty figures were computed for each commune-day and for the more comprehensive sources - Ministry of Youth Culture and Sport and the Ministry of Education – the days with no values were assumed to have no events. However, the less comprehensive sources – namely Africa Rights, Human Rights Watch and IBUKA – were taken to have counts where there were explicit counts, but were treated as missing where no counts existed. This is because there was no particular reason to assume that because it was not mentioned in the data that nothing happened there on a particular day. It was necessary to assume this of at least one source, and it was done for two sources here, simply to identify the places where nothing was likely to have happened.

Our lead-graduate student on the project, David Armstrong, developed the approach. A few points about this effort are worth mentioning at the outset:

1) The results of the estimation procedure are, not surprisingly, estimates. That is, they provide a “best guess” as to what might have happened given the available data. The estimates tend to be largely reasonable, but tend not to be tightly bound in the statistical sense - reasonable credible (confidence) intervals suggest a wide range of plausible values.

2) Given the considerable amount of uncertainty in the estimated figures, if these will be used in a predictive model either as dependent or independent variables, it should be done with caution to account for this uncertainty. A Bayesian predictive model is an obvious choice here.

See the following authors (Congdon; Gelman et al.; Gill) for in-depth explanations of Bayesian models.

The only reason that we did not adopt Ball’s methodology is that across sources we lacked the degree of detail that his approach requires (the precise names of perpetrators and victims).

Armstrong previously tried more complicated models that used spatial random effects, but found them not to add anything substantively interesting to the model and had roughly similar predictions. Further, models that had somewhat more complicated random slopes were also tried, but they were also unstable. This model is the most stable and reasonable model estimated.

Given the highly volatile nature of the Rwandan conflict, it is unclear if it is reasonable to assume that these two zones actually existed. Given the pace of the invasion as well as the extensive amount of forced migration (both within [approximately 1,300,000 according to some scholars] and outside the country [approximately 2-3,000,000]), the likelihood of having the stability noted in Kalyvas’ work is limited.

In the future, we plan on utilizing recently obtained satellite images that were originally taken by the Canadian the National Defense Department in order to affix the locations of FAR military locations before the relevant conflict started (these are 25 meter resolution images of Rwanda). This will allow us to gauge whether the initial positions and movements were reasonable.

Ruzibiza was responsible for coordinating troop movements throughout Rwanda.

Please contact the authors if you are interested in understanding the technology in more detail.


We only report the high-end estimations within this article. Others will be discussed in the larger project.

Obviously the large-scale events would not fit within the last category.
Far fewer killings are reported within the jurisdiction of the French, but there are some: 1,310. As the jurisdiction here is different from the others, we would have to do additional research before any attempt at classification could be made. It is more likely the case that the French failed to protect individuals than they directly participated in their demise. Finally, the front between the French and the RPF accounted for another 302 killings.

Part of the explanation regarding the limited amount of deaths here is that individuals had largely moved out of these areas prior to the 100 days of interest because of earlier FAR-RPF confrontations.

For example, see [http://allafrica.com/stories/200802150146.html](http://allafrica.com/stories/200802150146.html).