Peacekeeping Without Helmets: The Impact of Civilian Personnel Deployments on Protection*

Hannah M. Smidt
Assistant Professor of Political Science and International Organization and Governance
& Associated Researcher at University of Zurich
School of Economics and Political Science
University of St. Gallen
Email: hannah.smidt[at]unisg.ch

Abstract

Can civilian personnel of UN peacekeeping operations (PKOs) help protect civilians in conflict-affected countries? Existing studies on peacekeepers' effectiveness in protecting civilians are limited to uniformed personnel. This manuscript shifts the research focus to the civilian dimension of protection. It argues that civilian personnel reduce noncombatant targeting through manipulating its perceived efficiency. First, through their presence and monitoring activity, civilian peacekeepers raise reputational costs for one-sided violence. Second, through facilitating local resistance to armed groups, civilian peacekeepers increase domestic costs of one-sided violence. Third, through supporting peaceful settlements, civilian peacekeepers increase the benefits of refraining from one-sided violence. Finally, through their information support to UN military operations, civilian peacekeepers augment the military costs for one-sided violence. All four mechanisms likely apply more to non-state armed groups than government-sponsored armed groups, because the former are most susceptible to international detection, domestic consequences, local conflict settlement and military costs. Using original data on local deployments of civilian personnel in 12 peacekeeping operations in Sub-Saharan Africa (1998-2021) together with existing data on local military deployments, spatial models test these arguments. The argument receives partial support. In the 2000-2011 period, civilian peacekeepers in greater numbers are negative associated with atrocities committed by non-state armed groups. The results have important implications for the composition and activity of PKOs with protection mandates.

PRELIMINARY DRAFT – PLEASE DO NOT CITE

Acknowledgements: I thank the participants of the "Peace & Conflict Section" of the 2023 Swiss Political Science Conference for helpful comments on the data. Moreover, I am grateful for funding from the Folke Bernadotte Academy. Finally, I also like to thank Emma Broggini, Nadine Stalder, Annina Hess and Fabian Marugg for excellent research assistance.

Introduction

In many conflict-affected host countries of UN peacekeeping operations (PKOs), civilians face wide-spread and substantial risks of becoming victims of violence. In response, almost all PKOs are tasked with the protection of civilians (Hultman, 2013; Salvatore et al., 2022). Contrary to conventional wisdom about PKOs, protection of civilians is not only a task for UN military and police. As explained by the UN Department of Peace Operations' guidelines, the protection of civilians requires the "integrated and coordinated activities by all civilian and uniformed mission components" (United Nations, 2019). At the local level, civilian peacekeepers from the "Human Rights" section engage in "monitoring and investigation of abuse, sensitization to international humanitarian law (IHL), and the fight against impunity, all of which [shall] contribute to preventing and responding to threats of physical violence against civilians" (Razza and Sherman, 2020). Moreover, civilian peacekeepers in the "Civil Affairs" section help "to identify, plan for and take concrete steps to protect local communities from risk", "support reconciliation and conflict management at the local level" and "relay information on potential risks and threats to civilians to other civilian elements of the mission and uniformed components" (United Nations, 2012). But are these efforts effective? Do locally deployed civilian personnel in PKOs help protect civilians in conflict-affected countries?

The existing research literature fails to answer this question, because its theories of protection primarily focus on the uniformed parts of peacekeeping personnel (Carnegie and Mikulaschek, 2020; Fjelde, Hultman, and Nilsson, 2019; Hultman, Kathman, and Shannon, 2013). Researchers started investigating the impact of some civilian activities (Blair, 2021; Duursma, 2021; Smidt, 2020a,b) and broader civilian peacekeeping mechanisms such as inducement and persuasion (e.g. Howard, 2019). However, none of these works explore how civilian activities or personnel in PKOs matter for the protection of civilians.

Furthermore, existing findings on whether peacekeeping helps protect civilians are decidedly mixed. Some cross-national analyses show that PKOs help reduce civilian killings (Bove and Ruggeri, 2015; Haass and Ansorg, 2018; Hultman, Kathman, and Shannon, 2013), at least when non-state armed groups are the perpetrators (Carnegie and Mikulaschek, 2020; Fjelde, Hultman, and Nilsson, 2019). Other studies find that PKOs have no effect on civilian targeting (e.g., Costalli, 2014; Nomikos, Sener, and Williams, 2023, on Bosnia and Mali) or even incentivize civilian victimization by rebels (Karlsrud, 2015; Salvatore, Ruggeri, and Polo, 2022; Wood, Kathman, and Gent, 2012). This lack of scholarly consensus on whether peacekeepers fulfill one of their primary goals—the protection of civilians—warrants more research.

Finally, empirical investigations of protection efforts by PKOs miss some of the arguably most important and challenging cases for safeguarding noncombatants.[1] We know little about protection effects in the modern operating environments of peacekeeping, such Mali or the Central African Republic, that are characterized by a surge in non-state armed violence (Duursma, 2022) and where PKOs have "stabilization mandates" for supporting counter-insurgency (Karlsrud, 2015; Paddon-Rhoads, 2016). As such, we actually do not know whether the above findings on more or less effective civilian protection hold in the modern era of peacekeeping.

This manuscript helps fill these knowledge gaps. First, it provides a theoretical argument on the civilian dimension of PKOs' involvement in civilian protection that centers on how local presence of civilian peacekeepers reduces the efficiency of one-sided targeting by non-state armed groups. Second, through considering the impact civilian and military deployments both separately and jointly, it sheds light onto the conditions under which peacekeepers effectively protect the host population. In so doing, it might help reconcile divergent findings in the literature. Finally, the manuscript offers original spatially and temporally disaggregated data on local deployments of civilian peacekeepers in African countries in the 1998-2021 period. These data is used for the first comprehensive analysis of the effects of civilian peacekeeping personnel on the protection of noncombatants. By extending the time frame of analysis, it also sheds light onto whether existing accounts of local civilian protection through UN peacekeeping hold in new operating theaters.

Synthesizing insights on one-sided violence, communal conflict, and civilian resistance, this manuscript starts from the premise that attacks against civilians are driven by their perceived efficiency to reach political or military goals. Armed groups target civilians when they associated with it (i) few international political costs , (ii) limited domestic political costs, (iii) limited benefits from exercising restraint, and (iv) minimal military costs. This manuscript argues that civilian peacekeepers can address each of these sources of the perceived efficiency of one-sided violence. First, civilian peacekeepers monitor non-state armed groups and local security developments, thereby helping to impose reputational costs for noncompliance with international standards of non-combatant immunity. Second, civilian personnel facilitate coordination on non-violent resistance among domestic populations, thereby increasing domestic costs for armed groups perpetrating violence against civilians. Third, civilian peacekeepers assist local leaders with managing political conflicts and locating peaceful settlements, thereby increasing the benefits of exercising restraint. Finally,

[1]The only cross-national local-level analyses of civilian protection effectiveness stops in 2011 (Fjelde, Hultman, and Nilsson, 2019).

civilian peacekeepers offer valuable intelligence to UN military troops, thereby augmenting military costs of one-sided targeting and strengthening deterrence. Non-state armed groups are more susceptible to all these mechanisms than government-sponsored armed groups, since governments are likely able to prevent civilian peacekeepers' presence and activity when and where they order atrocities. Overall, the main expectation is that civilian peacekeepers' local presence reduces violence against civilians perpetrated by non-state armed groups.

The manuscript tests this argument using original data on civilian personnel in 11 PKOs in ten African countries in the period 1998-2020. Africa is the locus of peacekeeping, especially since the turn of the century, and the time period captures all PKOs with civilian protection mandate deployed on the continent so far. The units of analyses are spatial grid-cells (of roughly 55 km squared) and months. The degree of spatial disaggregation is suitable, since "civilian protection is to a great extent a story of local dynamics, and necessitates an analysis that explicitly recognizes the local deployment patterns of peacekeeping" (Fjelde, Hultman, and Nilsson, 2019, 107). As violence against civilians can escalate fast and may vary widely within a year, monthly units seem more appropriate than yearly ones. As a first step, two-way fixed effects linear regression models estimate grid-cell specific relationships between civilian personnel numbers and the level of one-sided violence in the 2000-2011 by replicating and extending the analyses of Fjelde, Hultman, and Nilsson (2019). The regression models include a variety of time-varying confounders to controls for potential alternative explanations. Moreover, matching and instrumental variable analyses help exclude the endogeneity due non-random deployment of peacekeepers to subnational locations as an alternative explanation for peacekeepers' effects on one-sided violence.

The findings are three-fold. First, they suggest that civilian personnel deployments help reduce violence against civilians perpetrated by non-state armed groups. This result hold when we considerthat civilian personnel are deployed randomly. Second, contrary to the expectations, civilian and military peacekeepers' effects on one-sided violence do not seem to reinforce each other. Yet, civilian peacekeepers' presence partially relies on prior deployment of PKO troops. Finally, the results hold in the 2000-2011 period. However, they have not been tested for the extended time frame. This will be the second and next step.

If these findings hold after further robustness tests, then they have profound implications for research and practice. For example, the results suggest that existing studies have tended to under-estimate the local effectiveness of PKOs in protecting civilians by neglecting the civilian peacekeepers' presence. For practice, the findings suggest that the Department of Peace Operations should prioritize co-deployment of civilian and

military peacekeepers and motivate them to coordinate to strengthen civilian protection effectiveness.

Previous research

The peacekeeping literature has provided important insights on the military dimension of civilian protection by UN PKOs (Bove and Ruggeri, 2015; Carnegie and Mikulaschek, 2020; Fjelde, Hultman, and Nilsson, 2019; Haass and Ansorg, 2018; Hultman, Kathman, and Shannon, 2013). We learn that the blue-helmeted soldiers may prevent atrocities i.a. through providing a visible deterrent, controlling and restricting the movement of armed groups, or retaliating against perpetrators of violence (Carnegie and Mikulaschek, 2020). In so doing, uniformed peacekeepers raise armed groups' costs of targeting civilians (Hultman, Kathman, and Shannon, 2013), especially in the sub-national localities, in which they are deployed (Fjelde, Hultman, and Nilsson, 2019).

Yet, the actual practice of civilian protection efforts in peacekeeping goes beyond beyond military presence and activity. In fact, as described by UN doctrine for the protection of civilians in peacekeeping, the first pillar of protection is "dialogue and engagement" by civilian peacekeeping components, including "mediation between parties to the conflict, local conflict resolution and social cohesion activities, investigation, advocacy with non-state armed groups and governments forces, or reporting on human rights and protection concerns" (United Nations, 2019, 10). Moreover, even the second pillar of PKOs' protection strategy, the "provision of physical protection", views "civilian mission components as a protective presence through their regular, visible, direct engagement with civilian populations at risk." It requires "coordination between civilian and uniformed components, to jointly determine priority areas for deployment, presence and actions" (United Nations, 2019, 12). An investigation of the effectiveness of this civilian dimension of protection by PKOs is long overdue.

To be sure, there is a small and growing body of research on the local-level impact of the civilian activities in United Nations PKOs. But none of these works examine civilian protection. That is, we know that UN mediation effors following armed clashes significantly prolonged local lulls in fighting in Sudanese Darfur (Duursma, 2021) and that reconciliation activities (i.e., inter-community meetings) mitigated intergroup communal violence in Côte d'Ivoire (Smidt, 2020b).[2] Moreover, civilian peacekeepers' election-

[2]Similarly, Krause (2019b) mentions that in South Sudan, civilian peacekeepers from the Civil Affairs section repeatedly brokered peace deals between communities in conflict. A lab-in-the field experiment in Mali shows that the deployment of (uni-

education activities helped foster peaceful electoral participation in Liberia and Côte d'Ivoire (Mvukiyehe, 2017; Smidt, 2020a). Thus, civilian peacekeepers have been shown to mitigate violence, i.e., communal and non-state armed conflict and electoral coercion, that also threatens civilians.[3] However, theory and analysis are limited to single countries and, more importantly, have stopped short of examining civilian peacekeepers' effects on one-sided violence.

Considering the civilian dimension of PKOs' protection efforts is also interesting in the light of decidedly mixed findings regarding whether peacekeeping actually helps protect civilians. On the one hand, cross-national quantitative analyses show that PKOs reduce civilian killings, especially if they deploy troops in greater numbers (Carnegie and Mikulaschek, 2020; Hultman, Kathman, and Shannon, 2013), from more diverse countries (Bove and Ruggeri, 2015) and higher-quality military staff (Haass and Ansorg, 2018). On the other hand, other works suggest the exact opposite. A comprehensive policy-oriented analyses commissioned by the United Nations Department of Peacekeeping Operations (now Department of Peace Operations) found "dramatic gaps that undermine the ability of peacekeeping missions to protect civilians" (Holt, Taylor, and Kelly, 2009, 1-2). Several cross-national analysis show that civilian killings even increase in the presence of peacekeepers, because contemporary PKOs' support to counter-insurgency efforts incentivizes rebel groups to compensate battlefield setbacks by targeting civilians (Salvatore, Ruggeri, and Polo, 2022; Wood, Kathman, and Gent, 2012). Moreover, if government forces commit atrocities against civilians, PKOs' support to counter-insurgency leads to violent self-protection by victimized groups (Nomikos, 2022b).[4] Finally, the deployment of unarmed military observers rather than troops—which could be interpreted as a lack of international commitment to stop atrocities—is associated with more civilian killings (Hultman, Kathman, and Shannon, 2013).[5] This latter finding implies the possibility that the presence of civilian peacekeepers augment civilian targeting, especially in locations where the UN does *not* deploy military troops. Considering civilian peacekeepers' effects on whether peacekeepers can fulfil one of their primary tasks—the protection

formed) peacekeepers locally can mitigate communal violence because of their impartiality in punishing non-cooperative behaviour (Nomikos, 2022a).

[3]Indeed, theory on power in peacekeeping suggest that peacekeeping *primarily* works through civilian mechanisms, i.e., inducement and persuasion (cf. Howard, 2019).

[4]RElated, Nomikos (2022a) also finds that the perception of unbiasedness of the PKO is crucial for reducing intergroup communal conflict.

[5]For instance, limited UN troop deployments with limited "observer" mandates proved ineffective in preventing civilian targeting in Bosnia (Costalli, 2014).

of civilians—may therefore also explain some of the mixed findings.

Finally, empirical investigations of civilian protection efforts by PKOs are cut short by their narrow periods of analyses that miss some of the arguably most important and challenging cases for civilian protection. Specifically, the only cross-national local-level analyses of civilian protection effectiveness stops in 2011 (Fjelde, Hultman, and Nilsson, 2019). Therefore, it cannot help us assess whether peacekeepers are effective in protecting civilians in the evolving operating environments of PKOs, especially considering the deployment of new PKOs in South Sudan, Mali and Central African Republic. Specifically, the modern operating environments of PKOs are characterized by a surge in non-state and communal violence (Duursma, 2022) and PKOs with stabilization mandates that participate in counter-insurgency in ongoing state-based armed conflicts (Karlsrud, 2015; Paddon-Rhoads, 2016). As such, these environments pose new and particularly thorny challenges to PKOs' ability to protect civilians. Using original spatially and temporally disaggregated data on local deployments of civilian peacekeepers in African countries in the 1998-2021 period, this manuscript examines the local protection challenges and dynamics in the understudied cases.

Theory

The targeting of civilian is neither tragic and irrational nor unavoidable collateral damage but "primarily, if not exclusively, instrumental and coordinated by powerful actors seeking tangible political and military objectives" (Valentino, 2014, 89). Therefore, it is possible that international actors such as United Nations PKOs can influence the decision-making rational of powerful actors—political elites that order or orchestrate one-sided violence and armed groups that perpetrate it—in ways that make targeting of civilians a less efficient strategy to reach military or political objectives (for a similar reasoning, see Fjelde, Hultman, and Nilsson, 2019). Specifically, synthesizing insights from studies on violence against civilians, communal violence and civilian resistance, this manuscript argues that civilian peacekeepers can manipulate four broad sources of the perceived efficiency of violence: international political costs, domestic political costs and benefits of exercising restraint, as well as military costs.

Why civilians are targeted with violence

First, violence against civilians can be perceived as efficient strategy because of its low reputational or political costs. In war-torn countries, monitoring of human rights violations is likely to be spotty. Security sector

institutions like police may be biased or incapable. Civil society's watch-dog organizations suffer from capacity problems and security deficits. As such, violence against civilians may go unnoticed, especially by the broader domestic and international public (Fjelde and Smidt, 2021). Moreover, if atrocities against civilians receive some attention, accountability institutions (e.g., domestic courts) are often too weak (or biased) to punish the perpetrators (Blair, 2021). By consequence, it seems even more unlikely if the principals who ordered the violence (e.g., local or national political elites) are held to account (Valentino, 2014).

Second, violence against civilians may appear to be an efficient strategy because it organizers and perpetrators do not fear any domestic costs. Research shows that political elites foment inter-group violence to mobilize co-ethnic voters (Lake and Rothchild, 1996; Posen, 2019; Snyder, 2000; Wilkinson, 2004) or deter the turnout of moderates (Gagnon, 2004). To do so, elites collude with or pay armed groups (Brass, 1997; Human Rights Watch, 1995). Although seldom investigated, this strand of research assumes that political elites consider violence against civilians an efficient strategy because they do not fear any resistance from their core constituency (Valentino, 2014, 97). Indeed, other researchers have shown that if citizens can coordinate to punish violence entrepreneurs, then violence against civilians is lower (Kalyvas, 2006; Kaplan, 2013, 2017; Krause, 2017, 2019a; Masullo, 2021a,b).

Third, violence against civilians may seem like an efficient strategy to achieve private economic or political objectives due to the absence of incentives to exercise restraint. When conflict are fought between identity-based groups over the distribution of local resources, violence killing and displacing large numbers of civilians might be seen as only available strategy to enforce their preferred division of resources (Boone, 2011; Klaus and Mitchell, 2015). When conflicts are fought between armed groups without links to a local community, then one-sided violence serve as a strategy to make profits (e.g., extortion and kidnapping) or maintain control over lucrative resources (e.g., forced labor for mining) (Danish Institute For International Studies, 2018; Duursma, 2021, 141). In both cases, a powerful antecedent of conflict-related violence against civilians is the weakness of state and traditional institutions, that could enforce more efficient peaceful divisions of local resources and thus provide incentives to exercise restraint to not endanger this settlement (Fearon and Laitin, 1996; Wig and Kromrey, 2018; Wig and Tollefsen, 2016).

Fourth, violence against civilians can be perceived as efficient strategy because armed groups gain an edge without military costs (Balcells, 2010; Bulutgil, 2017; Kalyvas, 2006). In war-affected countries, insurgent (and counter-insurgent) forces use violence against civilians to break their adversaries' resistance and weaken their war-supporting productive capacity (Bulutgil, 2017; Valentino, 2000, 30ff.), coerce civil-

ians into supporting them (e.g., with intelligence, material goods, and potentially recruits) or, at least, deter civilians from supporting their enemies (Balcells, 2010, 2011; Kalyvas, 2006; Valentino, Huth, and Balch-Lindsay, 2004, 87ff.). Whatever the military objectives, many scholars agree that armed groups see one-sided violence as a low-cost strategy, because civilians are unarmed and cannot militarily retaliate. This is also why militarily weak groups (that are unable to directly confront enemy forces) are likely perpetrators of one-sided violence (Valentino, 2014).[6]

How civilian personnel in PKO can protect noncombatants

Considering the four sources for the perceived efficiency of one-sided violence, civilian peacekeepers can help reduce one-sided violence through (i) triggering international political costs, e.g. shaming with material consequences, (ii) assisting with domestic resistance against violent actors, (iii) facilitating peaceful conflict settlements that augment the benefits of exercising restraint and (iv) together with uniformed counterparts, facilitating military deterrence.

First, the presence of civilian peacekeepers signals to armed groups that one-sided targeting will not remain undetected by the international community (Fjelde, Hultman, and Nilsson, 2019; Hultman, Kathman, and Shannon, 2013). Therefore, armed groups and their political principals have to fear for international political costs. Compared to military components of PKOs, civilian peacekeepers may be in a superior position to monitor one-sided violence and uncover who is responsible. They spend a significant amount of time on forming partnerships with local elites and communities and can gather information through their regular exchanges with the local population. For example, an independent evaluation of the PKO in South Sudan (UNMISS) describes how the civilian staff in the "Civil Affairs Division (the type of division in a PKO that is deployed in almost all field office in African countries) effectively served as the 'eyes and ears' of UNMISS and was recognized as a primary contributor of early warning and 'ground truth.' (United Nations Office of Internal Oversight Services, 2019).

Civilian peacekeepers' detection of violence against civilians is not without consequences but can lead to public condemnation by international audience (e.g., non-governmental organizations, donor governments

[6]Although only indirectly related to military confrontations, it is worth mentioning that commanders may allow rank and file fighters to target civilians (e.g., to loot and pillage them), because it seen as cheaper than providing positive incentives (e.g., salary or convincing ideology). The lack of military costs is one reason for the perceived efficiency of this compensation strategy (Reno, 2011; Wood, 2006).

and international organizations). International shaming may not only bring reputational costs on perpetrators, but also material ones: Public condemnation can trigger greater UN military deployments (Fortna, 2008, 99-101), especially since the introduction of the responsibility to protect principle (Hultman, 2013), and lead to material sanctions (e.g., the freezing of bank accounts and aid cuts) (for similar arguments, see Fjelde, Hultman, and Nilsson, 2019; Fjelde and Smidt, 2021). Armed groups are likely aware of these costs of perpetrating violence in front of civilian peacekeepers. For instance, a field officer of the United Nations Assistance Mission in East Timor (UNAMET), "they [the Indonesian military] had always had the luxury of going unobserved. No monitoring. No reporting. Now [with the arrival of UNAMET field officers] everything was different – everything would be known. It could get them into trouble. Some were genuinely worried" (Mahony, 2006, 22).

Second, civilian peacekeepers help increase domestic costs for one-sided violence by facilitating resistance against violent and violence-inciting behavior. Locally deployed civilian staff often organize face-to-face voter education campaigns, helping citizens to recognize the importance of non-violent elections or de-incentivizing their participation in violent campaigns (Mvukiyehe, 2017; Smidt, 2020a). Civilian peacekeepers may also help build community-level resistance against armed groups by persuading civilians of the possibility and effectiveness of non-cooperation and non-violence (Smidt, 2020b). Furthermore, civilian staff can bring together pro-peace community leaders from different groups to help them find solutions to inter-group tensions. Finally, civilians peacekeepers—especially personnel from the Civil Affairs—facilitate the establishment early-warning-systems by connecting community leaders to the UN force components, thereby allowing communities to resist threats from external armed groups.

Third, civilian peacekeepers likely reduce the perceived efficiency of one-sided violence by facilitating peaceful settlements of conflicts and, thus, raising incentives to exercise restraint. To do so, civilian components often assist negotiations among non-state actors by coordinating meetings, providing mediation, facilitating material inducement for agreement (e.g. quick impact programs or donor funding), exerting moral pressure to stop violence (Duursma, 2021; Smidt, 2020b). Civilian peacekeepers can even help mitigate problems to credibly commit to negotiations and agreements by promising to monitor their implementation (Duursma and Smidt, 2023). In so doing, civilian peacekeepers may partially fill the gaps in local state presence and traditional authority that led to inefficient violent escalations of non-state conflicts over local resources.

Taken together, the three mechanisms imply that we should observe the following empirical regularity

across localities and over time.

> **Hypothesis 1:** If a locality hosts more civilian peacekeepers, then the level of one-sided violence decreases.

Beyond purely civilian mechanisms, civilian peacekeepers likely help raise the military costs of one-sided violence through collaboration with military counterparts. Existing research suggests that UN military can reduce one-sided violence through the threat of a military response and the constraints on violent activities (Fjelde, Hultman, and Nilsson, 2019; Ruggeri, Dorussen, and Gizelis, 2017). Civilian peacekeepers may facilitate these protection efforts by the UN military through providing troop commanders with relevant intelligence. Through their local presence and connections, civilian peacekeepers likely have information on the most recent presence of armed groups, which allows for more proactive military deployments. Civilian peacekeepers may also strengthen the UN military operations through preventing hostility from the local civilian population. Civilian peacekeepers usually invest in public outreach, organizing community-based information sessions and distributing materials on the UN peace mission the area where they are stationed (Smidt, 2020a). While UN military components also engage in outreach, survey research shows that civilian peacekeepers' activities (i.e., their relief efforts) had most consistent effects on cooperation and information-sharing with PKOs (Gordon and Young, 2017).

At the same time, UN troops may also enable the protection efforts by civilian staff. Specifically, military peacekeepers can provide escorts to civilian staff, which allows them to observe conflict situation, train and persuade local communities, and provide mediation and conflict resolution support in fragile and violent settings. Furthermore, military units also collect intelligence, which may be useful for civilian personnel to conduct effective monitoring and outreach operations. Finally, when civilian staff has mediated a settlement, UN troops can provide the necessary deterrent to rekindle conflict for opportunistic reasons. Of course, all of the above-mentioned complementaries are ideal-type scenarios. In fact, cooperation between military and civilian parts in PKOs is often fraught and fragile. Therefore, we deduce two observable implications and put them to an empirical test

> **Hypothesis 2a:** If a locality hosts civilian peacekeepers, then the negative effect of military peacekeepers on the level of one-sided violence is greater.
>
> **Hypothesis 2b:** If a locality hosts military peacekeepers, then the negative effect of civilian peacekeepers on the level of one-sided violence is greater.

Finally, civilian peacekeepers may not affect all perpetrators of one-sided violence equally. All else equal, non-state actors are likely more susceptible to any of the above mentioned mechanisms of protection than state actors. One reason is that peacekeeping deployment relies on host state consent. As such, the government has the power to prevent the establishment of civilian staff offices and military bases in hotspots of government-sponsored one-sided targeting. In so doing, governments can circumscribe accountability for atrocities and related costs (for a similar argument see Fjelde, Hultman, and Nilsson, 2019). Yet even if civilian peacekeepers are present where government groups commit atrocities against civilians, in the name of maintaining host state consent, civilians peacekeepers may act more cautiously to call them out and military peacekeepers may be (or feel) hindered to pursue government-sponsored perpetrators.

Among the non-state perpetrators of one-sided violence, formally organized armed groups (i.e., major rebel groups) fighting the government might be most susceptible to the first mechanism, whereby civilian peacekeepers deter one-sided violence through triggering international reputational costs and material sanctions for its use. Formally organized armed groups are often tied to important opposition politicians and parties. They tend to rely on their international reputation (e.g., as pro-democracy reformers) and support (e.g., military aid). As such, formally organized armed groups might be especially reluctant to be detected and called out for atrocities. By contrast, more informally organized armed groups likely possess fewer little international ties that they would fear losing in the event of detection of their atrocities committed against civilians

Informally organized armed groups (i.e., community-based identity militias) might be most susceptible to the third and fourth mechanism. Regarding the third mechanism, existing research shows that domestic resistance against one-sided violence by armed groups only bears fruits if local leaders and communities have leverage over the violence-perpetrating armed groups (Kaplan, 2017; Krause, 2017, 279). This precondition for effective domestic resistance to one-sided violence is more likely to be fulfilled, when perpetrators are community-based identity groups rather than formally organized armed groups with a nation-wide control and command structure. As such, civilian peacekeepers' assistance with domestic resistance likely works on one-sided violence perpetrated by community-based identity groups. Regarding the fourth mechanism, we know that locally deployed civilian peacekeepers usually establish a network with locally based organizations, politicians, armed groups, and community leaders. As such, civilian peacekeepers can intervene in and settle conflicts between local actors involving community-based identity militias. By contrast, it is the civilian personnel at the mission headquarters, United Nations Special envoys, and other prominent repre-

sentatives of the international community who are predominantly responsible for managing conflict between major armed groups with a national agenda that fight the government (Menkhaus, 1996).

Taken together, civilian peacekeepers are likely more effective in preventing one-sided violence by non-state actors rather than state actors. Among the former, they influence *informally* organized armed groups through more and potentially stronger mechanisms than formally organized armed groups. This is because assisting domestic resistance and conflict resolution can have a direct effect on ending one-sided violence, while monitoring and reporting one-sided violence only indirectly deters civilian targeting. Therefore, the manuscript expects to observe the following regularities.

> **Hypothesis 3:** The unconditional and conditional negative associations between UN civilian personnel and one-sided violence will be stronger and more consistent for one-sided violence perpetrated by non-state armed actors rather than government-affiliated actors.

> **Hypothesis 4:** The unconditional and conditional negative associations between civilian peacekeepers and one-sided violence are larger and more consistent for one-sided violence perpetrated by informally organized armed groups than for one-sided violence perpetrated by formally organized armed groups.

Research design

The argument is examined using large-N analysis of 12 multidimensional PKOs deployed in Sub-Saharan Africa in the period 2000-2020. Currently, the N deploys four multidimensional PKOs on the continent, i.e., MONUSCO in the Democratic Republic of the Congo, MINUSMA in Mali (until 31 December 2023), UNMISS in South Sudan and MINUSCA in the Central African Republic. Together with the PKOs that were previously deployed in Sub-Saharan Africa after the turn of the century—i.e., the PKOs in Liberia, Sierra Leone, Côte d'Ivoire, Burundi, Chad, Central African Republic, and Sudan—ten out of 40 Sub-Saharan countries have hosted peacekeepers. Compared to other world regions in the post-Cold War period, Sub-Saharan Africa is the locus of UN peacekeeping. Moreover, since the turn of the century (starting with UNAMSIL in Sierra Leone) all multidimensional PKOs have been given civilian protection mandates that explicitly task military and civilian mission personnel to prevent one-sided violence.

The units of analysis are months and grid cells of 0.5 × 0.5 decimal degrees, which at the equator covers an area of roughly 55 × 55 km. The degree of spatial disaggregation is important because locally

deployed civilian peacekeepers likely conduct most activities, including monitoring, mediation support and education events, in the vicinity of their field locations. Grid cells are also a good approximation of the area of deployment of UN military troops, for which we control in our analysis (Fjelde, Hultman, and Nilsson, 2019, 9). We use monthly units of analyses, because we expect that civilian personnel deployments have timely effects on protection outcomes and our dependent variables—violence against civilians by different perpetrators—and vary widely within a given year.

New data on civilian peacekeepers

The manuscript draws on the Geolocated Civilian PKO Personnel dataset (GeoCivPKO) for 11 PKOs in ten host countries in Sub-Saharan Africa in the period 2000-2021. GeoCivPKO records the location of an office with civilian peacekeepers, the start and end date of the office, and several other characteristics of the office and the civilian peacekeepers assigned to it.[7] The office location and year of operation is used as coding unit.

The source data primarily come from (i) yearly budget performance reports of the Advisory Committee on Administrative and Budgetary Questions for each PKO[8] and (ii) Secretary-General (SG) progress reports that are published on average four times a year for each PKO.[9] Budget performance reports record the location of the offices with civilian staff, the name of the office, and the sections that have civilian personnel at the office (e.g., Civil Affairs) . Since budget cycles tend to run from 1 July of one year to 30 June of the next year (e.g., from 1 July 2013 to 30 June 2014), the civilian personnel-related information from a budget performance report are recorded for the former year (e.g. 2013).

SG progress reports provide information on when an office was established and became operational, thereby often confirming the location and other information on the office. However, in some instances, both sources are incomplete. In these cases, the data collection is augmented with information from (iii) the websites of each PKO and (iv) their outreach materials, including weekly newsletters (e.g. ONUCI bulletin) and social media accounts (e.g., UNAMID documented the date and the process of the closure of all field sites in the 2017-2021 period on Facebook). Moreover, part of the data was verified through interviews with

[7] ONUB in Burundi, MINURCAT and MINUSCA in Central African Republic, MINURCAT in Chad, MONUC and MONUSCO in DR Congo, UNOCI in Côte d'Ivoire, UNMIL in Liberia, MINUSMA in Mali, UNAMSIL in Sierra Leone, UNMISS in South Sudan, UNAMID in Darfur, Sudan. Due to missing values in early years, UNMIS in Sudan is excluded.

[8] See https://www.un.org/ga/acabq/

[9] See https://www.un.org/securitycouncil/content/reports-secretary-general

former UN PKO staff. All sources are carefully documented in the dataset.

GeoCivPKO was collected by four research assistants (with each being responsible for coding a particular set of missions to make use of their PKO-specific expertise). I verified and discussed *each* of the coding decisions with the research assistants to avoid coding errors. Moreover, the data only include hard facts rather than judgements or interpretations, which should also minimize coding errors and inconsistencies. Finally, over 80% of the coding decisions are triangulate with multiple sources. Taken together, these features should increase confidence of the high reliability and validity of the data set.

In terms of variables, GeoCivPKO records the dates of operations of an office, i.e., the start date and the closing date of that office. If the office has already been operational in the year(s) prior to the coding year, then January 1 of the coding year is recorded as start date. If the office is not closed in the coding year, then the closing date is left blank. Moreover, the data set also includes the name(s) of the office as recorded in the budget performance report (e.g., sector headquarter, field office, antenna office, or team site). Moreover, it provides information on the estimated number of civilian personnel deployed to an office (see below for estimation rules). Finally, the data record the presence whether personnel from the Civil Affairs and Human Rights sections are present at an office.[10].

Since the budget reports do not consistently record locally deployed civilian personnel numbers at different offices, I use a simple procedure—that resembles the estimation of troop numbers at UN military bases in the Geo-PKO dataset V2 (Cil et al., 2020; Fjelde, Hultman, and Nilsson, 2019; Sundberg, 2020)—to estimate these numbers. Specifically, the number of civilian peacekeepers at an office is the weighted fraction of the overall number of civilian personnel in a given year and host country. The weights are based on the size of office. Four broad office size categories are used: (i) mission headquarters of size 20, (ii) sector headquarters and regional offices of size 5, (iii) regional offices of specific sections and field offices of size 2, and (iv) field team sites, county support bases, antenna offices, and liaison offices of size 1. The relative sizes are based on known personnel numbers at offices of MINUSCA in the Central African Republic, MONUSCO in the DR Congo, ONUB in Burundi, and UNMIS in Sudan. The weights for an office in a given year are its size divided by the sum of the sizes of all offices of a PKO in a given year. The weights are multiplied with the

[10]Initially, the aim was to also record the presence of other sections, e.g., Public Information, Political Affairs, Disarmament and Demobilization, and Support. However, missing information in budget performance reports and SG reports made this endeavour infeasible

number of actually deployed personnel in a PKO in a given year.[11]

Across host countries in Sub-Saharan Africa in the 2020-2021 period, there are 187 unique office locations with civilian peacekeepers. Figure 1 shows the geographical distribution of these civilian personnel deployments, while Figure 2 add the base locations of UN military troops for the years 2000 to 2020 (i.e., the period of the Geo-PKO dataset). Interestingly, there are only 14 locations where UN military troops are absent during the entire civilian deployment phase. Examples include Gagnoa in Côte d'Ivoire (located in the center near a military base in Divo and known as the home town of former president Laurent Gbagbo) and Bozoum in Central African Republic (located in between the military bases of Bouar and Bossangoa). There are 109 locations where civilian peacekeepers are *at least temporarily* deployed without UN military troops.

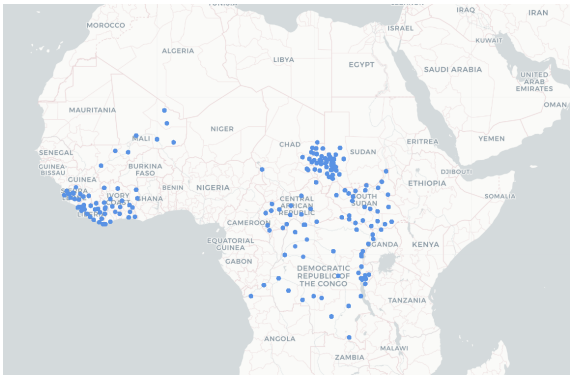

Figure 1: Deployments of civilian personnel (blue) in 2000-2020 period

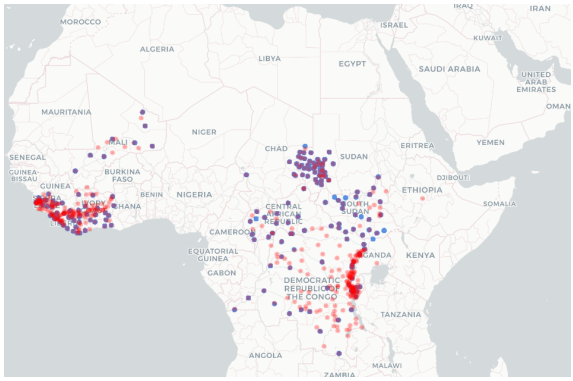

Figure 2: Deployments of civilian personnel (blue) and military personnel (red) in 2000-2020 period

[11]Note that the number of civilian personnel in any location can still vary within a given year, because an office may open or close during that year.

Moreover, Figure 3 shows all grid cell locations that hosted a civilian office during the period of analysis. What is noteworthy is that once an office with civilian staff has been established, it tends to persist for a long period of time. To be exact, offices stay in any given location for on average 92 months, a minimum of 9 months and a maximum of 243 months during the 2000-2020 period.

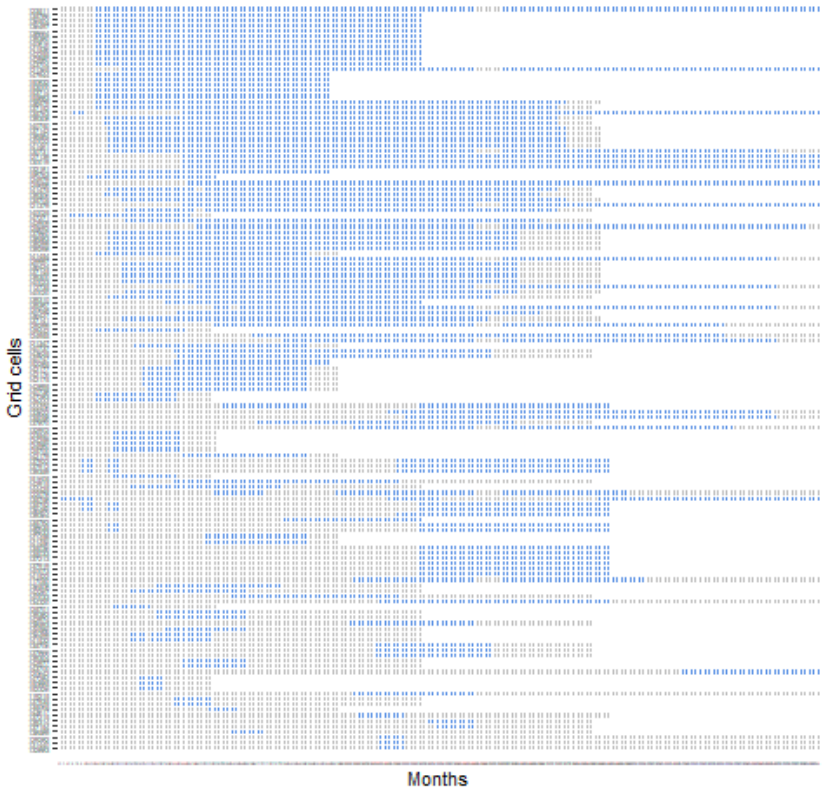

Figure 3: Distribution of civilian offices (blue) over time

Measuring numbers of civilian and military peacekeepers

Based on the GeoCivPKO data set, all analyses include the estimated number of civilian peacekeepers in a given grid-cell and months. Sometimes a grid cell includes more than one office with civilian peacekeepers. In that case, the numbers at the offices are added. The variable *THE NUMBER OF CIVILIAN PEACEKEEPRS* is lagged by one months to mitigate reverse causation.

All analyses also include the estimated *NUMBER OF TROOPS* (in multiples of a hundred) deployed by a PKO in a given grid-cell and month. In the first step of the analyses, which extends the analyses by (Fjelde, Hultman, and Nilsson, 2019), data on UN troops comes from the replication dataset of these analyses. In the

second step of the analyses, which includes data points beyond 2011, data comes from from the Geo-PKO data set 2.1 (Cil et al., 2020).

Finally, in order to evaluate hypotheses 2a and 2b, the numbers of UN military troops and and civilian peacekeepers are interacted. The effect of the interaction term *TROOPS*CIVILIAN PEACEKEEPERS* is also expected to be negative.

Measuring one-sided violence

The manuscript hypothesizes that the number of civilian peacekeepers should negatively correlate with the prevalence of one-sided violence. In a first step, following Fjelde, Hultman, and Nilsson (2019, 9-10), one-sided violence is measured using the UCDP Geo-referenced Event Data (GED) version 5.0. The data set ends in 2011 and,therefore, shortens the period of analyses. Importantly, GED includes one-sided violence by armed actors who are responsible for 25 or more fatalities annually. However, each even may have a lower fatality number. Since PKOs likely do not eliminate each and every instance of one-sided violence, the manuscript uses dichotomous indicators for whether a locality and months experiences such an event with five or more civilian deaths. One indicator pools one-sided violence by all perpetrators, another one captures one-sided violence perpetrated by rebel groups (to evaluate Hypothesis 1), and a final one captures one-sided violence by government actors (to evaluate Hypothesis 3).

[NOT IMPLEMENTED YET] In a second step, the analyses will be extended to the years beyond 2011 using the UCDP Geo-referenced Event Data set (GED) version 22.1. The same indicators of one-sided violence are coded based on this newer version of GED. Finally, in a third step, one-sided violence is measured using the Armed Conflict Location and Events Data set (ACLED) (Raleigh et al., 2010). This data set does not have a fatality threshold for the inclusion of events. Moreover, it allows the distinction between formally organized armed groups (i.e., major rebels) and informally organized armed groups (i.e., communal identity militias). Based on ACLED, four indicators are created for the occurrence of five of more civilian deaths from one-sided violence by any perpetrator group, by government-affiliated perpetrators (i.e., official state security agencies and pro-government militias), by formally organized non-state armed groups (i.e., rebel groups and opposition-affiliated militias), and by informally organized armed groups (i.e., communal identity militias).

Estimation and identification

The hypothesis tests proceed in three steps. In the first step, the manuscript replicates the analyses of (Fjelde, Hultman, and Nilsson, 2019) and then extends it by adding the the number of civilian peacekeepers. Specifically, it first estimates whether the timing and location UN troop bases and UN civilian peacekeepers' offices is a function of one-sided violence. Then it runs logit models of the indicators of one-sided violence using the number of UN troops, the number of civilian peacekeepers and the interaction of the two variables as predictors. Finally, it pre-processes the data using matching on influential pre-treatment covariates and an instrumental variable approach to show the robustness of the results.

[NOT IMPLEMENTED YET] In the second step, the manuscript extends the analyses of (Fjelde, Hultman, and Nilsson, 2019) beyond 2011. In so doing, employs the above-elaborated model specifications and robustness tests for examining the establishment of UN troop bases and UN civilian peacekeepers' offices and for analysing the effects of these variables on one-sided violence. In the third and final step, the analyses are extended to the measures of one-sided violence based on the ACLED data set. Again, the same model specifications and robustness tests as mentioned above are used.

All models control for the several potentially influential covariates as specified in Fjelde, Hultman, and Nilsson (2019). "Both civilian targeting and peacekeeping deployment may be affected by population density, type of terrain, and degree of accessibility. To account for these dynamics, we include three control variables at the cell level: POPULATION, the percentage of MOUNTAINOUS TERRAIN, and DISTANCE TO CITY. Violence against civilians is often related to military dynamics and these may also influence peacekeeping presence. We therefore include a count variable of BATTLE DEATHS in the grid cell the previous month. The disaggregated unit of analysis makes it important to control for both temporal and spatial dependence. We include decay functions for time since past recorded one-sided violence in the cell, using a half-life parameter of four months. To account for spatial dependence we include SPATIAL LAG OSV, which takes the value of 1 if acts of civilian targeting occurred in the first-order neighboring cells the previous month. Finally, to account for potential diffusion effects from peacekeeping presence, we include TROOPS IN NEIGH. CELLS, which is a count of the total number of peacekeeping troops in the first-order neighboring grid" (Fjelde, Hultman, and Nilsson, 2019, 11-12). [NOT YET IMPLEMENTED] In the robustness section we introduce a number of additional control variables, for example, related to PKO country-level characteristics, alongside alternative operationalizations of our independent and dependent variables.

Results

The results of the first step of the analyses are summarized in tables and figures below. The first model always replicates the analysis by Fjelde, Hultman, and Nilsson (2019), while the other models extent this analysis by adding the relevant variables for UN civilian peacekeepers. We note that in contrast to the analysis by Fjelde, Hultman, and Nilsson (2019), the models exclude all observations for Sudan because of a high number of missing values on civilian peacekeepers in one of the missions (UNMIS) in that country.

First, Table 1 presents the results of the models of the timing and location UN peacekeeping troops or civilian peacekeepers' presence. In a nutshell, the table replicates prior findings showing that PKO troop deployment is affected by one-sided violence over the previous three months-long period, especially if perpetrated by rebel groups. By contrast, the models 2a-2d show that civilian peacekeepers' presence is not influenced by the level of one-sided violence. However, there is a large and significant correlation between the presence of PKO troops and the presence of civilian peacekeepers, indicating that civilian peacekeepers do not eschew the most violence-prone places but tend to condition their presence on the provision of security by UN military.

Second, table 2 presents the results for hypotheses 1 and 2. Neither the number of PKO troops nor the number of civilian peacekeepers correlates with the pooled measure of one-sided violence by any perpetrator. We note that this null result on PKO troops is in line with Fjelde, Hultman, and Nilsson (2019). Moreover, the interaction term between PKO troops and civilian peacekeepers is not significant at conventional levels. As such, for pooled one-sided violence against civilians, we can reject hypotheses 1 and 2.

Third, table 3 suggests support hypothesis 3. Civilian peacekeepers seem to have a differential effect on non-state armed actors and government-sponsored armed actors. Before detailing the results for civilian peacekeepers, it is worth noting that Model 3a replicates the negative correlation between PKO troops and one-sided violence perpetrated by non-state armed actors, as found by Fjelde, Hultman, and Nilsson (2019). However, when we add the number of civilian peacekeepers to the model, the negative coefficient on the number of PKO troops turns insignificant. By contrast, and in line with this manuscript's expectation, the coefficient on civilian peacekeepers is negative and highly significant. We cannot rule out that multicollinearity is responsible for the null finding for PKO troops. Yet, the correlation between PKO troops and civilian peacekeepers is only 0.450 (p-value 0.000).

Fourth, these results remain robust for a variety of tests. First, table 4 suggests that civilian peacekeepers

are still negative correlated with one-sided violence committed by non-state armed actors if the sample is preprocessed using propensity score matching (with Mahalanobis distance). Importantly, in Model 6c of one-sided violence by non-state actors including both civilian peacekeepers and PKO troops as well as their interaction term, the negative coefficient on PKO troops is again significant.

Moreover, the model in Table 5 replicates the results of the bivariate probit model as reported in Fjelde, Hultman, and Nilsson (2019). The instrumental variable for the selection model of PKO presence in a grid-cell is the interaction between UN troops in Africa and the distance between the centroid of a grid-cell and capital of the relevant host country. The outcome model is for the presence of one-sided violence perpetrated by non-state armed actors. Table 6 then extends this initial bivariate probit model to include the number of civilian peacekeepers in the outcome equation and remodel the selection equation of PKO presence (now both troops and civilian peacekeepers) by adding the number of civilian peacekeepers in Africa and their interaction with the distance to the capital of the relevant host country. As expected, not only is the latter instrument a significant predictor of peacekeeping presence, the coefficient on the number of civilian peacekeepers in the outcome model of one-sided violence by non-state armed actors is also negative and significant.

Table 1: Replication and Extension: Determinants of peacekeeping deployment, logit models

	TROOP BASE ONSET		CIVILIAN OFFICE ONSET		CIVILIAN OFFICE ONSET	
	Model 1a	Model 1b	Model 2a	Model 2b	Model 2c	Model 2d
OSV 3 MONTHS	0.003**		0.001		0.002	
	(0.001)		(0.002)		(0.002)	
OSV GOV 3 MONTHS		−0.006		−0.011*		−0.215
		(0.012)		(0.007)		(0.147)
OSV REB 3 MONTHS		0.003**		0.002		0.002
		(0.001)		(0.002)		(0.002)
TROOP BASE ONSET					3.460***	3.483***
					(0.338)	(0.335)
POPULATION (log)	−0.003	−0.006	0.777***	0.776***	1.055***	1.049***
	(0.140)	(0.141)	(0.220)	(0.220)	(0.202)	(0.201)
MOUNTAINOUS TERRAIN	0.431	0.430	−0.369	−0.381	0.686	0.692
	(0.365)	(0.365)	(0.627)	(0.628)	(0.769)	(0.768)
DISTANCE TO CITY (log)	−1.821***	−1.820***	−1.420***	−1.416***	−1.287**	−1.285**
	(0.256)	(0.256)	(0.451)	(0.451)	(0.545)	(0.546)
BATTLE DEATHS (t-1)	−0.025	−0.024	−0.00002	0.00004	0.004***	0.004***
	(0.025)	(0.025)	(0.003)	(0.003)	(0.001)	(0.001)
SPATIAL LAG OSV (t-1)	−0.504	−0.494	−0.674***	−0.675***	−0.300	−0.286
	(0.386)	(0.384)	(0.238)	(0.238)	(0.333)	(0.323)
TROOPS IN NEIGH CELLS (t-1)	0.052***	0.052***	0.025***	0.025***	−0.001	−0.001
	(0.006)	(0.006)	(0.009)	(0.009)	(0.019)	(0.019)
DECAY FUNCTION PK ONSET	2.226***	2.285***	1.548***	1.673***	1.656**	2.306***
	(0.455)	(0.482)	(0.440)	(0.455)	(0.649)	(0.824)
Constant	3.876	3.898	−4.000	−4.015	−9.553**	−9.504**
	(2.807)	(2.808)	(4.617)	(4.616)	(4.444)	(4.437)
$Numberofobservations$	152633	152633	152633			

Note: Cluster-robust standard errors; *p<0.1; **p<0.05; ***p<0.01

Table 2: Replication and Extension: Effect of peacekeeping troops on the risk of one-sided violence, logit models

	ONE-SIDED VIOLENCE		
	Model 2a	Model 2b	Model 2a
NUMBER OF TROOPS (t-1)	−0.004	0.001	−0.003
	(0.014)	(0.015)	(0.014)
NUMBER OF CIVILIAN PEACEKEEPERS (t-1)		−0.001	−0.001
		(0.001)	(0.001)
TROOPS*CIVILIAN PEACEKEEPERS (t-1)			0.00004
			(0.00004)
POPULATION (log)	−0.064	−0.059	−0.056
	(0.087)	(0.088)	(0.089)
MOUNTAINOUS TERRAIN	1.272***	1.271***	1.278***
	(0.292)	(0.295)	(0.293)
DISTANCE TO CITY (log)	−0.702***	−0.723***	−0.729***
	(0.189)	(0.189)	(0.187)
BATTLE DEATHS (t-1)	−0.001	−0.0005	−0.001
	(0.002)	(0.002)	(0.002)
SPATIAL LAG OSV (t-1)	1.437***	1.432***	1.428***
	(0.182)	(0.181)	(0.181)
TROOPS IN NEIGH CELLS (t-1)	−0.006	−0.007	−0.006
	(0.006)	(0.006)	(0.006)
DECAY FUNCTION OSV	3.948***	3.964***	3.974***
	(0.212)	(0.212)	(0.211)
Constant	−2.341	−2.278	−2.269
	(1.828)	(1.832)	(1.823)
$Numberofobservations$	152633	152633	152633
Note:	Cluster-robust standard errors; *p<0.1; **p<0.05; ***p<0.01		

Table 3: Replication and Extension: Effect of peacekeeping troops on the risk of one-sided violence disaggregated by non-state and government-sponsored armed actors, logit models

	ONE-SIDED VIOLENCE BY NON-STATE ARMED ACTORS			ONE-SIDED VIOLENCE BY STATE-SP. ARMED ACTORS		
	Model 3a	Model 3b	Model 3c	Model 4a	Model 4b	Model 4c
NUMBER OF TROOPS (t-1)	-0.023^{**}	-0.008	-0.009	-0.004	-0.005	-0.014
	(0.011)	(0.009)	(0.009)	(0.037)	(0.039)	(0.042)
NUMBER OF CIVILIAN PEACEKEEPERS (t-1)		-0.002^{***}	-0.002		0.0001	-0.002
		(0.001)	(0.002)		(0.002)	(0.003)
TROOPS*CIVILIAN PEACEKEEPERS (t-1)			0.00001			0.0001
			(0.0001)			(0.0001)
POPULATION (log)	-0.139	-0.134	-0.134	0.531^{**}	0.549^{**}	0.565^{**}
	(0.090)	(0.090)	(0.090)	(0.252)	(0.251)	(0.255)
MOUNTAINOUS TERRAIN	1.456^{***}	1.456^{***}	1.458^{***}	0.706	0.721	0.753
	(0.280)	(0.277)	(0.278)	(0.821)	(0.825)	(0.841)
DISTANCE TO CITY (log)	-0.832^{***}	-0.877^{***}	-0.878^{***}	-0.149	-0.140	-0.172
	(0.212)	(0.213)	(0.212)	(0.382)	(0.394)	(0.392)
BATTLE DEATHS (t-1)	-0.001	-0.001	-0.001	-0.007	-0.008	-0.009
	(0.003)	(0.003)	(0.003)	(0.018)	(0.017)	(0.018)
SPATIAL LAG OSV (t-1)	1.488^{***}	1.480^{***}	1.480^{***}	0.489	0.491	0.473
	(0.224)	(0.224)	(0.224)	(0.394)	(0.391)	(0.386)
TROOPS IN NEIGH CELLS (t-1)	-0.009	-0.011^{*}	-0.011^{*}	-0.002	-0.002	-0.002
	(0.006)	(0.006)	(0.006)	(0.014)	(0.014)	(0.014)
DECAY FUNCTION OSV	0.164	0.223	0.226	2.880^{***}	2.871^{***}	2.940^{***}
	(0.257)	(0.251)	(0.254)	(0.654)	(0.647)	(0.648)
FHN_osv_reb_decay	4.185^{***}	4.193^{***}	4.194^{***}	2.052^{***}	2.055^{***}	2.042^{***}
	(0.248)	(0.248)	(0.248)	(0.705)	(0.710)	(0.721)
Constant	-0.996	-0.770	-0.766	-13.397^{***}	-13.680^{***}	-13.671^{***}
	(1.965)	(1.954)	(1.952)	(4.636)	(4.759)	(4.734)
$Number of observations$	152633	152633	152633	152633	152633	152633

Note: Cluster-robust standard errors; *p<0.1; **p<0.05; ***p<0.01

Table 4: Replication and Extension: Effect of peacekeeping troops on the risk of one-sided violence disaggregated by non-state and government-sponsored armed actors, logit models, matched sample

	ONE-SIDED VIOLENCE BY NON-STATE ARMED ACTORS			ONE-SIDED VIOLENCE BY STATE-SP. ARMED ACTORS		
	Model 5a	Model 5b	Model 5c	Model 6a	Model 6b	Model 6c
NUMBER OF TROOPS (t-1)	−0.020*	−0.009	−0.014*	0.005	0.004	−0.005
	(0.010)	(0.009)	(0.008)	(0.032)	(0.036)	(0.038)
NUMBER OF CIVILIAN PEACEKEEPERS (t-1)		−0.002**	−0.003*		0.0001	−0.002
		(0.001)	(0.002)		(0.002)	(0.002)
TROOPS*CIVILIAN PEACEKEEPERS (t-1)			0.0001			0.0001
			(0.0001)			(0.0001)
POPULATION (log)	−0.115	−0.095	−0.095	0.653*	0.648*	0.698*
	(0.115)	(0.121)	(0.121)	(0.334)	(0.332)	(0.369)
MOUNTAINOUS TERRAIN	1.575***	1.557***	1.564***	−0.507	−0.502	−0.508
	(0.386)	(0.385)	(0.381)	(0.946)	(0.943)	(0.965)
DISTANCE TO CITY (log)	−0.271	−0.427	−0.442*	0.765	0.772	0.706
	(0.280)	(0.271)	(0.267)	(0.491)	(0.485)	(0.489)
BATTLE DEATHS (t-1)	−0.0004	−0.00003	−0.0004	−0.004	−0.004	−0.004
	(0.003)	(0.003)	(0.003)	(0.011)	(0.011)	(0.011)
SPATIAL LAG OSV (t-1)	1.098***	1.068***	1.067***	0.593	0.596	0.575
	(0.212)	(0.210)	(0.211)	(0.394)	(0.391)	(0.383)
TROOPS IN NEIGH CELLS (t-1)	−0.012*	−0.014**	−0.014**	−0.007	−0.007	−0.007
	(0.006)	(0.006)	(0.006)	(0.013)	(0.013)	(0.013)
DECAY FUNCTION OSV	0.420	0.508*	0.532*	2.835***	2.833***	2.907***
	(0.288)	(0.278)	(0.282)	(0.549)	(0.549)	(0.549)
FHN_osv_reb_decay	3.329***	3.328***	3.327***	2.035***	2.034***	1.990***
	(0.333)	(0.333)	(0.334)	(0.760)	(0.760)	(0.767)
Constant	−3.428	−2.740	−2.629	−18.913***	−18.893***	−19.065***
	(2.310)	(2.275)	(2.246)	(6.071)	(6.062)	(6.276)
Numberofobservations	15470	15470	15470	15470	15470	15470

Note: Cluster-robust standard errors; *p<0.1; **p<0.05; ***p<0.01

Table 5: Replication and Extension: Effect of peacekeeping troops on the risk of one-sided violence disaggregated by non-state and government-sponsored armed actors, bivariate probit models

Variable	Coef.	SE	Significance
Dependent variable: Troop presence in grid-cell			
INTERCEPT (SELECT)	1.91	0.23	
TROOPS AFRICA*CAP DIST	0.04	0.00	***
TROOPS IN AFRICA (t-1)	-0.14	0.03	**
CAPITAL DIST	-0.37	0.03	**
POPULATION (log)	0.16	0.01	***
MOUNTAINOUS TERRAIN	-0.01	0.04	**
DISTANCE TO CITY (log)	-0.65	0.02	**
BATTLE DEATHS (t-1)	-0.01	0.00	***
SPATIAL LAG OSV (t-1)	-0.23	0.04	**
TROOPS IN NEIGH CELLS (t-1)	0.04	0.00	***
DECAY FUNCTION OSV REB	1.09	0.07	*
DECAY FUNCTION OSV GOV	0.56	0.06	*
Dependent variable: OSV by non-state actors			
INTERCEPT (OUTCOME)	-1.30	0.60	
NUMBER OF TROOPS (t-1)	-0.01	0.01	***
POPULATION (log)	-0.04	0.03	**
MOUNTAINOUS TERRAIN	0.56	0.09	*
DISTANCE TO CITY (log)	-0.28	0.06	*
BATTLE DEATHS (t-1)	-0.00	0.00	***
SPATIAL LAG OSV (t-1)	0.62	0.06	*
TROOPS IN NEIGH CELLS (t-1)	-0.00	0.00	***
DECAY FUNCTION OSV REB	0.10	0.13	
DECAY FUNCTION OSV GOV	1.71	0.08	*
THETA	0.14	0.05	**
Note:	Cluster-robust standard errors; *p<0.1; **p<0.05; ***p<0.01		

Table 6: Replication and Extension: Effect of peacekeeping troops on the risk of one-sided violence disaggregated by non-state and government-sponsored armed actors, bivariate probit models

Variable	Coef.	SE	Significance
Dependent variable: Troop or Civilian presence in grid-cell			
INTERCEPT (SELECT)	3.06	0.30	***
TROOPS AFRICA*CAP DIST	0.05	0.01	***
TROOPS IN AFRICA (t-1)	-0.28	0.03	***
Civil. PK AFRICA*CAP DIST	0.00	0.00	***
Civilian PK IN AFRICA (t-1)	0.06	1.60	
CAPITAL DIST	-0.43	0.03	***
POPULATION (log)	0.05	0.01	***
MOUNTAINOUS TERRAIN	0.20	0.04	***
DISTANCE TO CITY (log)	-0.59	0.02	***
BATTLE DEATHS (t-1)	-0.00	0.00	
SPATIAL LAG OSV (t-1)	-0.08	0.04	*
TROOPS IN NEIGH CELLS (t-1)	0.05	0.00	***
DECAY FUNCTION OSV REB	0.73	0.09	***
DECAY FUNCTION OSV GOV	0.53	0.07	***
Dependent variable: OSV by non-state actors			
INTERCEPT (OUTCOME)	-1.17	0.61	*
NUMBER OF TROOPS (t-1)	-0.00	0.01	
NUMBER OF CIVILIAN PEACEKEEPERS (t-1)	-0.00	0.00	*
POPULATION (log)	-0.04	0.03	
MOUNTAINOUS TERRAIN	0.56	0.09	***
DISTANCE TO CITY (log)	-0.29	0.06	***
BATTLE DEATHS (t-1)	-0.00	0.00	
SPATIAL LAG OSV (t-1)	0.63	0.06	***
TROOPS IN NEIGH CELLS (t-1)	-0.00	0.00	
DECAY FUNCTION OSV REB	0.09	0.13	
DECAY FUNCTION OSV GOV	1.71	0.08	***
THETA	0.14	0.06	**
Note:	Cluster-robust standard errors; *p<0.1; **p<0.05; ***p<0.01		

Conclusion

Taken together, the results indicate that both military and civilian peacekeepers, if deployed in higher numbers to a subnational location, may help mitigate one-sided violence perpetrated by non-state actors in that location. By contrast, neither military nor civilian peacekeepers have an effect on one-sided violence perpetrated by government-sponsored armed groups. Moreover, in contrast to the expectation, the insignificant coefficient on the interaction term of civilian and military peacekeepers suggest that civilian peacekeepers do not augment the effectiveness of their military counterparts, or vice-versa. By implication, the result also shows more support for a direct effect of civilian peacekeepers on reducing atrocities, e.g., through assisting with detection and shaming, social cohesion and domestic resistance, and conflict resolution and restraint (see mechanisms 1 - 3 in the theory section).

The results are for an early phase of multidimensional peacekeeping with civilian protection mandates, namely, from 2000 to 2011. Further analyses need to be conducted to assess whether the results hold for the most recent period and in the new operating theatres of peacekeeping intervention. This will be the future second step of the analysis. Furthermore, hypothesis 4 requires testing. Unfortunately, UCDP GED does not allow the manuscript to distinguish between formally organized and informally organized armed groups. As such, the third step of the analysis in this paper will reproduce all analyses using one-sided violence measures based on ACLED.

If the results hold, then this is both good and bad news news for civilian protection. On the negative side, neither civilian nor military peacekeepers seem to be able to counteract state-sponsored atrocities. As such, maintaining host state consent and commitment to human rights and the peace process in different—probably more political ways at the national level— should remain a priority to protect civilians from harm on conflict-affected host countries. On the positive side, both civilian and military peacekeepers seem to reduce non-state violence against civilians. The results also suggest that while civilian peacekeepers do not reinforce military peacekeepers' effectiveness, their deployment depends on military troop provision. As such, in the context of peacekeeping, both uniformed and civilian personnel components together help buttress the security of civilians.

References

ACLED (2012). "Introducing the UCDP Non-State Conflict Dataset". *Introducing the UCDP Non-State Conflict Dataset* 49 (2).

— (2021). "Armed Conflict Location & Event Data Project (ACLED) Codebook". *Available at https://acleddata.com/resources/*.

— (2023). "Organized violence 1989-2022 and the return of conflicts between states?" *Journal of Peace Research* 60 (4).

Balcells, Laia (2010). "Rivalry and revenge: Violence against civilians in conventional civil wars". *International Studies Quarterly* 54 (2), pp. 291–313.

— (2011). "Continuation of Politics by Two Means: Direct and Indirect Violence". *Journal of Conflict Resolution* 55 (3), pp. 397–422.

Blair, Robert (2021). "UN Peacekeeping and the Rule of Law After Civil War". *American Political Science Review* 115 (1), pp. 51–68.

Boone, Catherine (2011). "Politically Allocated Land Rights and the Geography of Electoral Violence: The Case of Kenya in the 1990s". *Comparative Political Studies* 44 (10), pp. 1311–1342.

Bove, Vincenzo and Andrea Ruggeri (2015). "Kinds of Blue. Diversity in U.N. Peacekeeping Missions and Civilian Protection". *British Journal of Political Science* 46 (3), pp. 681–700.

Brass, Paul (1997). *Theft of an Idol: Text and Context in the Representation of Collective Violence*. Princeton: Princeton University Press.

Bulutgil, H. Zeynep (2017). "Ethnic Cleansing and Its Alternatives in Wartime". *International Security* 41 (4), pp. 169–201.

Carnegie, Allison and Christoph Mikulaschek (2020). "The Promise Of Peacekeeping: Protecting Civilians In Civil Wars". *International Organization* 74 (4), pp. 810–832.

Cil, Deniz, Hanne Fjelde, Lisa Hultman, and Desirée Nilsson (2020). "Mapping blue helmets: Introducing the Geocoded Peacekeeping Operations (Geo-PKO) dataset". *Journal of Peace Research* 57 (2), pp. 360–370.

Costalli, Stefano (2014). "Does Peacekeeping Work? A Disaggregated Analysis of Deployment and Violence Reduction in the Bosnian War". *British Journal of Political Science* 44 (2), pp. 357–380.

Danish Institute For International Studies (2018). “Central African Republic: A Conflict Mapping”. *D/2018/4320/05*, pp. 1–109.

Davies, Shawn, Therese Pettersson, and Magnus Öberg (2022). “Organized violence 1989-2021 and drone warfare”. *Journal of Peace Research* 59 (4), pp. 615–637.

Duursma, Allard (2021). “Making Disorder More Manageable: The Short-Term Effectiveness of Local Mediation in Darfur”. *Journal of Peace Research* 58 (3), pp. 554–567.

— (2022). “Non-state conflicts, peacekeeping, and the conclusion of local agreements”. *Peacebuilding* 10, pp. 138–155.

Duursma, Allard and Hannah Smidt (2023). “Greater than the sum of their parts: How cooperation between UN peacekeepers and local mediators leads to local conflict resolution”. *Working Paper available from the authors*.

Fearon, James D and David D Laitin (1996). “Explaining Interethnic Cooperation”. 90 (4), pp. 715–735.

Fjelde, Hanne, Lisa Hultman, and Desirée Nilsson (2019). “Protection Through Presence: UN Peacekeeping and the Costs of Targeting Civilians”. *International Organization* 73 (1), pp. 103–131.

Fjelde, Hanne and Hannah M. Smidt (2021). “Protecting the Vote? Peacekeeping Presence and the Risk of Electoral Violence”. *British Journal of Political Science*.

Fortna, Virginia Page (2008). *Does Peacekeeping Work? Shaping Belligerents’ Choices After Civil War*. Princeton University Press.

Gagnon, V.P. (2004). *The Myth of Ethnic War: Serbia and Croatia in the 1990s*. Cornell University Press.

Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Havard Strand (2002). “Armed Conflict 1946–2001: A New Dataset”. *Journal of Peace Research* 39 (5), pp. 615–637.

Gordon, Grant M. and Lauren E. Young (2017). “Cooperation, information, and keeping the peace: Civilian engagement with peacekeepers in Haiti”. *Journal of Peace Research* 54 (1), pp. 64–79.

Haass, Felix and Nadine Ansorg (2018). “Better Peacekeepers, Better Protection? Troop Quality of United Nations Peace Operations and Violence Against Civilians”. *Journal of Peace Research* 55 (6), pp. 742–758.

Holt, Victoria, Glyn Taylor, and Max Kelly (2009). “Protecting Civilians in the Context of UN Peacekeeping Operations. Successes, Setbacks and Remaining Challenges”. *Independent study jointly commissioned by the Department of Peacekeeping Operations and the Office for the Coordination of Humanitarian Affairs*, pp. 1–402.

Howard, Lise Morje (2019). *Power in Peacekeeping*. Cambridge University Press.

Hultman, Lisa (2013). "UN Peace Operations and Protection of Civilians: Cheap Talk or Norm Implementation?" *Journal of Peace Research* 50 (1), pp. 59–73.

Hultman, Lisa, Jacob D Kathman, and Megan Shannon (2013). "United Nations Peacekeeping and Civilian Protection in Civil War". *American Journal of Political Science* 57 (4), pp. 875–891.

Human Rights Watch (1995). *Slaughter among Neighbors: the Political Origins of Communal Violence*. Yale University Press.

Imai, Kosuke and In Song Kim (2019). "When Should We Use Unit Fixed Effects Regression Models for Causal Inference with Longitudinal Data?" *American Journal of Political Science* 63 (2), pp. 467–490.

Kalyvas, Stathis (2006). *The Logic of Violence in Civil War*. Cambridge University Press.

Kaplan, Oliver (2013). "Nudging armed groups: How civilians transmit norms of protection". *Stability* 2 (3), pp. 1–18.

— (2017). *Resisting War: How Communities Protect Themselves*. Cambridge University Press.

Karlsrud, John (2015). "The UN at war: Examining the consequences of peace-enforcement mandates for the UN peacekeeping operations in the CAR, the DRC and Mali". *Third World Quarterly* 36 (1), pp. 40–54.

Klaus, Kathleen and Matthew I Mitchell (2015). "Land Grievances and the Mobilization of Electoral Violence: Evidence from Côte d'Ivoire and Kenya". *Journal of Peace Research* 52 (5), pp. 622–635.

Krause, Jana (2017). "Non-violence and civilian agency in communal war: Evidence from Jos, Nigeria." *African Affairs* 116 (463), pp. 261–283.

— (2019a). *Resilient Communities: Non-Violence and Civilian Agency in Communal War*. Cambridge University Press.

— (2019b). "Stabilization and Local Conflicts: Communal and Civil War in South Sudan". *Ethnopolitics* 18 (5), pp. 478–493.

Lake, David A. and D Rothchild (1996). "Containing fear: the origins and management of ethnic conflict". *International security* 21 (2), pp. 41–75.

Mahony, Liam (2006). *Proactive Presence. Field Strategies for Civilian Protection*. Geneva: Henry Dunant Centre for Humanitarian Dialogue.

Masullo, Juan (2021a). "Civilian Contention in Civil War: How Ideational Factors Shape Community Responses to Armed Groups". *Comparative Political Studies* 54 (10), pp. 1849–1884.

Masullo, Juan (2021b). "Refusing to cooperate with armed groups civilian agency and civilian noncooperation in armed conflicts". *International Studies Review* 23 (3), pp. 887–913.

Menkhaus, Ken (1996). "International Peacebuilding And The Dynamics Of Local And National Reconciliation In Somalia". *International Peacekeeping* 3 (1), pp. 37–41.

Mvukiyehe, Eric (2017). "Promoting Political Participation in War-torn Countries: Microlevel Evidence from Postwar Liberia". *Journal of Conflict Resolution* 62 (8), pp. 1686–1726.

Nomikos, William G. (2022a). "Peacekeeping and the Enforcement of Intergroup Cooperation: Evidence from Mali". *Journal of Politics* 84 (1), pp. 194–209.

— (2022b). "Unintended Consequences: Reconsidering the Effects of UN Peacekeeping on State-sponsored Violence". *International Peacekeeping* 29 (4), pp. 566–572.

Nomikos, William G., Ipek Ece Sener, and Rob Williams (2023). "Does UN Peacekeeping Protect Civilians? Evidence from the Border between Burkina Faso and Mali". *Manuscript available at* https://www.williamgnomikos.com/research.php, pp. 1–50.

Paddon-Rhoads, Emily (2016). *Taking Sides in Peacekeeping: Impartiality and the Future of the United Nations*. Oxford University Press.

Posen, Berry (2019). "The security dilemma and ethnic conflict". *Survival* 35, pp. 27–47.

Raleigh, Clionadh, Andrew Linke, Håvard Hegre, and Joakim Karlsen (2010). "Introducing ACLED–Armed Conflict Location and Event Data". *Journal of Peace Research* 47 (5), pp. 651–660.

Razza, Namie Di and Jake Sherman (2020). "Human Rights in UN Peacekeeping". *International Peace Institute*, pp. 1–254.

Reno, William (2011). *Warfare in Independent Africa*. Cambridge University Press.

Ruggeri, Andrea, Han Dorussen, and Theodora Ismene Gizelis (2017). "Winning the Peace Locally: UN Peacekeeping and Local Conflict". *International Organization* 71 (1), pp. 163–185.

Salvatore, Jessica Di, Magnus Lundgren, Kseniya Oksamytna, and Hannah M. Smidt (2022). "Introducing the Peacekeeping Mandates (PEMA) Dataset". *Journal of Conflict Resolution* 66 (4-5).

Salvatore, Jessica Di, Andrea Ruggeri, and Sara Polo (2022). "Better Peacekeepers, Better Protection? Troop Quality of United Nations Peace Operations and Violence Against Civilians". *European Journal of International Relations* 28 (2), pp. 361–385.

Schon, Justin and Ore Koren (2022). "Introducing AfroGrid, a unified framework for environmental conflict research in Africa". *Nature: Scientific Data* 9 (116), pp. 1–16.

Smidt, Hannah M (2020a). "Mitigating election violence locally: UN peacekeepers' election-education campaigns in Côte d'Ivoire". *Journal of Peace Research* 57 (1), pp. 199–216.

— (2020b). "United Nations Peacekeeping Locally: Enabling Conflict Resolution, Reducing Communal Violence". *Journal of Conflict Resolution* 64 (2-3), pp. 344–372.

Snyder, Jack (2000). *From Voting to Violence: Democratization and Nationalist Conflict*. Norton.

Sundberg, Ralph (2020). "UN Peacekeeping and Forced Displacement in South Sudan". *International Peacekeeping* 27 (2), pp. 2010–237.

Sundberg, Ralph and Erik Melander (2013). "Introducing the UCDP Georeferenced Event Dataset". *Journal of Peace Research* 50 (4), pp. 523–532.

United Nations (2012). "Civil Affairs Handbook". *Department of Peace Operations and Department of Field Support*, pp. 1–254.

— (2019). "Policy: The Protection of Civilians in United Nations Peacekeeping". *Department of Peace Operations, Ref. 2019.17*, pp. 1–35.

United Nations Office of Internal Oversight Services (2019). "Evaluation of the contribution of the UNMISS Civil Affairs Division to the reduction of local conflict in South Sudan". *Inspection and Evaluation Division, Ref. IED-19-007*, pp. 1–38.

Valentino, Benjamin A. (2000). "Final Solutions: The Causes of Mass Killing and Genocide". *Security Studies* 9 (3), pp. 1–59.

— (2014). "Why We Kill: The Political Science of Political Violence Against Civilians". *Annual Review of Political Science* 17, pp. 89–103.

Valentino, Benjamin A., Paul Huth, and Dylan Balch-Lindsay (2004). ""Draining the Sea": Mass Killing and Guerrilla Warfare". *International Organization* 58 (2), pp. 375–407.

Wig, Tore and Daniela Kromrey (2018). "Which groups fight? Customary institutions and communal conflicts in Africa". *Journal of Peace Research* 55 (4), pp. 415–429.

Wig, Tore and Andreas Forø Tollefsen (2016). "Local institutional quality and conflict violence in Africa". *Political Geography* 53, pp. 30–42.

Wilkinson, Steven I (2004). *Votes and Violence. Electoral Competition and Ethnic Riots in India*. Cambridge: Cambridge University Press.

Wood, E. J. (Sept. 2006). *Variation in Sexual Violence during War*. Vol. 34, pp. 307–342.

Wood, Reed M., Jacob D. Kathman, and Stephen E. Gent (2012). “Why We Kill: The Political Science of Political Violence Against Civilians”. *Journal of Peace Research* 49 (5), pp. 647–660.

UN Peacekeeping Without Helmets

Appendix

Hannah M. Smidt

A Appendix A